ALASKA PERMANENT FUND CORPORATION

QUARTERLY MEETING OF THE BOARD OF TRUSTEES

December 12-13, 2017

Location of Meeting:
Alaska Permanent Fund Corporation
Atwood Building
Anchorage Alaska

SUMMARY MINUTES

Trustees Present: William G. Moran, Chair
Carl Brady, Vice Chair
Larry Cash
Sheldon Fisher
Marty Rutherford
Andrew Mack

Investment Advisor: George Zinn

Staff Present:

Angela Rodell, CEO	Russell Read, CIO	
Valerie Mertz	Chris Poag	Paulyn Swanson
Valeria Martinez	Marcus Frampton	Steve Moseley
Fawad Razzaque	Jim Parise	Jacob Vandervest
Tim Andreyka	Robin Mason	Chad Brown
Rose Duran	Laura Achee	

Invited Participants and Others Present:

Rick Steiner, Public Comment
Ceal Smith, Public Comment
Scott Gruhn, Public Comment
Gregory Allen, Callan Associates
Steven Center, Callan Associates
Julie Lucky, Senator McKinnon
Brandon Brefczynski, Representative Thompson
Paul Saylor, CS Capital Management
Michael L. McHarge, CS Capital Management
Anthony T. Case, Davis Wright Tremaine
Brain Lawlor, Bridgewater
Phil Dobrin, Bridgewater
Chris Ward, Bridgewater
Mark Wiseman, BlackRock (former CEO of CPPIB)
Daniel Adamson, Wafra

PROCEEDINGS

CALL TO ORDER

CHAIR MORAN called the meeting to order.

ROLL CALL

CHAIR MORAN, VICE CHAIR BRADY, TRUSTEES CASH, RUTHERFORD, MACK and FISHER were present to form a quorum.

APPROVAL OF AGENDA

CHAIR MORAN stated that if there are no suggestions or changes from the board, the agenda is considered approved.

APPROVAL OF MINUTES (September 27-28, 2017)

There being no objections raised, the minutes from September 27-28, 2017, were approved as presented

SCHEDULED APPEARANCES AND PUBLIC PARTICIPATION

CHAIR MORAN stated that there are some people that have some concerns that they would like to express to the board. He continued that the testimony will be held to three minutes. He asked Mr. Steiner to address the board.

MR. STEINER stated that he began asking the Permanent Fund, over a quarter century ago, to establish a socially responsible investment screening process and to divest certain problematic stocks, including Exxon and some other oil stocks. He continued that, he understood at the time, maximum return on investment was the Board's fiduciary responsibility. He added that times have changed and the maximum return on investment can no longer be realized through fossil fuels. He stated that he is here to ask for the Fund to divest the nearly $5 billion in fossil fuel holdings, a substantial chunk of the Fund. He explained that there is great progress being made on the low-carbon energy economy in the future and that fossil fuel values, as investments, will decline.

CHAIR MORAN recognized Ceal Smith for public comment, and stated that the Board received the petition.

MS. SMITH presented the Board of Trustees with a petition from the Alaska Climate Action Network containing over 200 Alaskans' signatures that she stated were gathered in just one week. She explained that today, the rapid rise of renewable energy markets, unstable and down-trending oil and natural gas prices, and the Paris Accord commitments to reach zero carbon emissions by mid-century are clear indicators that maximum return on investment is no longer possible with fossil fuel holdings. She stated that emissions from fossil fuels are a major driver of global climate change that threatens Alaska's coastal villages, statewide infrastructure, our entire way of life, and it is projected to cost the state billions of dollars over the coming decades; and that the Fund's continued heavy fossil fuel investments are very likely already costing Alaskans hundreds of millions of dollars in realized losses and unrealized potential gains. She noted that, put simply, fossil fuel holdings are a bad investment. She mentioned that the APFC has a clear social, ethical, and fiduciary obligation to divest, and she urged the Board to immediately divest from these holdings. She stated that they are quite proud of the fact that there is support for this divestment campaign from all over Alaska.

CHAIR MORAN recognized Scott Gruhn for public comment.

MR. GRUHN stated that both of his parents were schoolteachers in Anchorage. His father was a science teacher and taught physics, chemistry, calculus, and was his physics teacher at Service High School. He took up his father's mantle and talked a bit about the science of why fossil fuel investments would be a bit risky at this point in time. He continued that geothermal energy is the cheapest wherever it is readily available; second is wind; and third is natural gas advanced cycle, but solar is very close. Solar is plummeting so quickly that in many places it is cheaper than natural gas. He added that soon there will not be much of a market for natural gas electricity. He moved on to oil products and stated that, currently, oil is the cheapest way to power cars. There are electric cars available, which are expensive. Scientists anticipate that an electric power car would beat a gasoline-powered car on price alone by the year 2026. He stated that there are a lot of reasons to be concerned about the profitability of fossil fuels in the long run.

CHAIR MORAN asked for any other public comment. There being none, he moved on to the Chief Executive Officer's report.

CHIEF EXECUTIVE OFFICER'S REPORT

CEO RODELL stated that there are routine questions asked that revolve around the budget and how the operations are managed. She continued that there are four reports that are always in the board packets that have information with regard to the budget giving more clarification and detail. She noted that included within the statement of revenues and expenditures is the line operating expenditure, which gives a view of how much money has been spent on all corporation operations, including external management fees from a financial accounting perspective over this time period. She congratulated staff on the arduous work done on this project. The accounting system was put in place about a year ago and has a budget module that is now fully activated. She moved to her action item and requested that, in anticipation of additional growth, the board authorize requesting an additional $5 million for external management fees for the balance of fiscal year '18.

> **MOTION:** TRUSTEE RUTHERFORD made a motion that the Board of Trustees direct staff to carry forward a $5-million supplemental budget for the fiscal year 2018 investment management fee allocation to fund external management fees. The Board also authorizes that to adjust a supplemental request as needed as the fiscal year progresses.
> VICE CHAIR BRADY seconded.
>
> Following the roll call vote, the MOTION WAS APPROVED by the Trustees (RUTHERFORD, CASH, FISHER, MORAN, MACK, BRADY).

CEO RODELL reminded the Board that the Callan conference is coming up at the end of January and is always a good Trustee education opportunity. She asked any Trustee interested in attending to let Jacob know.

CHIEF INVESTMENT OFFICER'S REPORT

CIO READ stated that he was happy to report that the strong investment returns that the Alaska Permanent Fund enjoyed during the past year ending June 30th have continued into and beyond the first quarter of the current year. Specifically, the three-month overall investment return for the Permanent Fund was 4.2 percent, driven by a 7.7 percent return in private equity and special growth opportunities and a 5.9 percent return in publicly traded stocks, as well as positive returns in APFC's fixed income plus, infrastructure, private credit, and absolute return portfolios. Total assets of the Permanent Fund grew commensurately to $61.5 billion as of September 30th, even after accounting for the annual distribution stated for the Permanent Fund Dividend. Moreover, continuing strength since September 30th has propelled total assets of the Permanent Fund to exceed $63 billion, with an estimated fiscal year-to-date return through November of nearly 7 percent, exclusive of the roughly $530 million managed on behalf of the Alaska Mental Health Trust. On a longer-term basis, investment returns for the Permanent Fund have also proven strong with one-, three-, five-year annualized returns of 12.8 percent, 7.9 percent, and 8.8 percent, respectively, as of September 30th. He continued that, in terms of context of the Permanent Fund performance scorecard, that was discussed at the last meeting, the one-year 12.8 percent return outperformed the short-term passive index benchmark by 2.3 percent; the three-year 7.9 percent return outperformed a medium-term public plus private market benchmark (which is a proxy for our peers) by1.4 percent; and the five-year 8.8 percent return outperformed APFC's long-term CIP-plus-5-percent benchmark by 2.5 percent. He added that the difference between excellent top-quartile plans and a medium plan is roughly 1 to 2 percent annually so that the value-added target in that context is $600 million to $1.2 billion annually. He stated that, despite paying out this year's PFD, the earnings reserve has remained roughly stable since fiscal year-end at $13.4 billion as of September 30th. He added that, overall, he is confident that investment program returns reflect resilience during this critical time as the State of Alaska evaluates its future fiscal course. He continued, stating that there is the anticipation allocating much of the recent stock market gains and devote income opportunities (in fixed-income-plus, infrastructure, real estate, private credit) as well as the private equity over the coming months. In terms of where prospective investment returns can be improved compared to what was experienced in past years, two asset classes stand out: APFC's absolute return and real estate portfolios. He noted that the value-added contributions and asset allocation, as well as the overall investment efficiency, will be looked at to expand and improve. He moved on, stating that 18 months ago, APFC began an overhaul of its absolute return program terminating its fund of hedge funds mandates and focusing on a diversified portfolio of specific hedge fund investments, each with little overall sensitivity to U.S. stock market returns. The results have been dramatic and can be appreciated in a difference between APFC's short-term and long-term performance in the absolute return asset class. However, over the past 12 months, this underperformance has reversed. The program's 7.8 percent return has exceeded both the hedge fund index and APFC's CPI-plus-5-percent benchmark, all while positioned in the Permanent Fund overall to better weather potential future downdrafts in U.S. stocks. Real estate has been a long-term success story for the Permanent Fund with five-year annualized returns of 10 percent. He stated, that the future strategy for real estate investing will be revised and enhanced over the coming months. The focus will be on lowering costs, increasing the efficiency of owning core U.S. real estate while securing compelling returns, and continuing to limit the risks in development and international real estate opportunities. APFC's development work and asset allocations and investment efficiency has led to a more diversified portfolio than most of the peers, while seeking compelling long-term returns from the full range of international investments across asset classes. He continued that each APFC investment team will discuss its investment strategy for achieving best-in-class investment performance in the future and the investment risks that are being undertaken within and across asset classes.

MS. MARTINEZ gave a brief overview of the Fund ending September 2017 and covered dollar allocation, risk management and then talked about the liquidity profile of the Fund. She stated that the Fund is allocated by dividing the assets into two main objectives: Income and growth. She explained asset allocation through objective and through strategy. She stated that one thing that changed from the previous quarter is the asset allocation category. At the beginning of the year there was a lot of cash prepared in case there was a call from the State. At that point, we were overweight cash that was not equitized, and a proposal of implementing a liquidity overlay was developed. After the fiscal year ended, that capital was redeployed into equities and fixed income. During the quarter was continued, and we are now closer to target in implementing that liquidity overlay. That was the main change this quarter. She continued to looking at risk at the Fund based on value at risk or how much could be lost under normal conditions, which was compared to the benchmark. Also looked at was tracking error and active risk and how different that is from the benchmarks. The guidelines looked at for these three portfolios are: the overall portfolio, public equities, and fixed-income-plus, which are the tradeable assets.

CIO READ stated that the lion’s share of the regular volatility is going to come from publicly traded stocks. That is a bit more volatile than the benchmark right now because of being a little overallocated to U.S. stocks. About three quarters of the regular volatility is going to come from a 40-percent U.S. stock position.

CHAIR MORAN states that overallocation is primarily because stocks have done well.

MS. MARTINEZ replied that it is not something that was allocated more to equities; but the run-up in equities just increased those overweights and underweights, as well. She continued on to Slide 8 where the Fund’s portfolio was compared to other asset classes, to other portfolios, like endowments or pension portfolios, as well as the benchmarks. She presented a spectrum of risk and where the Fund fell in the spectrum. She explained how the stress test would provide some sensitivity to the portfolio and the benchmarks.

TRUSTEE FISHER asked if there is any concern about any of these risks, or if there is anything that needs adjustment.

CIO READ replied that this is half of the contingent risk equation, and if the event occurs this is what is likely to happen to the benchmark and the portfolio. With respect to overall interest rate changes, this is a period of relatively low interest rates for a protracted period of time. He added that it is unlikely to go to levels that were seen particularly 10 years and in any short period of time. The risk in credit spreads is not being anticipated. Credit widening would be more of a concern rather than anticipating it, but in terms of probabilities, that is a higher risk from our perception than the changes in interest rates. Equities remain and are an ever-present risk.

MS. MARTINEZ moved to the exposure to currency and geography and showed that there is 76.8 percent in dollar currency and 23.2 in non-dollar currency. The non-dollar was divided into developed markets currency and emerging markets currency. There is an underweight to developed market currency, 16.7 versus the benchmark of 18, and there is an overweight in emerging markets. In terms of geography risk, the investments are exposed to the different areas. There is a bias towards the U.S., and there is an underweight to emerging markets. This theme has not changed from previous quarters. She continued on to the liquidity profile of the Fund. She showed the breakdown of the assets into public and private assets, with most of the exposure in public 71 versus 68 of the benchmark; 29 percent of the assets in liquid strategies. She added that there is a guideline on the investment policy for private investment limits, and it is in the green zone of 29 percent. She explained that this capital has been invested, and that committed capital to illiquid strategies have not been invested yet, representing around 8.1 percent of the fund. In terms of performance, it was an excellent quarter and outperformed over all the time periods, all benchmarks, short-term and long-term.

CIO READ stated that the Sharpe ratio is very important and will be especially important once there is a complete cycle or a combination of an up market and a down market. He explained that there is only an up market included if Sharpe ratios are going to look generally very good.

MS. MARTINEZ stated that there will be more measures of efficiency to remind all that Sharpe ratio just measures what the return per unit of risk that is taken. That will be shown for the different areas managed in going forward. She noted a quick overview on some of the strategies that she is responsible for, including the cash and liquidity, the currency management, and the multi-asset strategies. She highlighted some of the expertise of some of the leading experts in the industry: Goldman Sachs Asset Management, AQR, and Bridgewater. They worked in terms of asset allocation, risk management, and strategic advice; and when the new asset classes were being implemented, they provided the research. She continued that there is a lot of beta to the market. She mentioned that a currency management program was started on September 1st. Adrian & Lee Partners, an active currency manager, was hired. They manage over $13 billion, and have offices in Dublin and London. They are a quantatative research-type of shop, and their philosophy relies on three main premises: fundamental economic factors, research, and an active management. She stated that the asset allocation portfolio was divided into a liquidity portfolio that includes cash, and fixed income, liquid securities.

CHAIR MORAN called a 15-minute break.

(Break.)

CHAIR MORAN stated that Callan will present next.

PERFORMANCE REVIEW

MR. ALLEN reiterated the invitation to the Trustees and all to Callan's conference on January 29-31 in San Francisco. He mentioned a few of the highlights, and asked Mr. Center to continue.

MR. CENTER began by covering recent events within the capital market space and then moved into some more details about the Permanent Fund as a whole and various asset class performance. He added this would feed into this afternoon's presentation from the individual asset class professionals from staff. He went through the Broad Capital Market Performance and then the Public Equity Capital Market Performance. Some of the strong areas of the equity market included biotechnology and healthcare. Then, the tax reform news did drive some stronger performance in small caps, as well. The non-U.S. equity markets saw developed markets outperform the U.S. market for the third consecutive quarter with continued improvement out of Europe. He added that emerging markets performed strongly for the quarter, well ahead of developed markets. He stated that in fixed income, bonds had a positive return and really benefited in that rally from investors looking for anything that can add value or have a yield. High-yield was a very strong performer during the quarter. He continued that real estate had a positive quarter with the NCREIF benchmark advancing 1.7 percent. All sectors were positive. Industrials drove performance for the quarter. The West is the strongest performing region for the fourth straight quarter, but, overall, the U.S. as a whole has seen positive performance from real estate. Global REITs bested their U.S. counterparts, rising 1.8%. U.S. REITs started with a strong July, but then surrendered most of the gains with poor showings in August and September. He stated that hedge funds had a very positive quarter. In Callan's Hedge Fund-of-Funds Database, the quarterly return came in at a positive 2.0 percent. The Credit Suisse Hedge Fund benchmark came in at 1.8 percent. Near-term performance has been driven by more equity-sensitive strategies, and emerging market strategy is performing well. He continued on to private equity which has been the continued success in fundraising that private equity managers have seen. Year-to-date through September 30, private equity managers have raised almost $250 billion. He added that private-equity returns versus public-market equities in the near term can only be described as competitive. He pointed out that longer-term is what should be looked at for private equity. These are varied, long-dated investments. He also pointed out that the Permanent Fund has been in private equity for a very long time, and that has been a benefit to the Fund as a whole. He then moved on to a brief comparison of the implementation of the one-quarter lag on the private market investments for performance reporting. He stated that this was discussed last September and approved by the Board. But, as of the third quarter 2017, the first quarter of fiscal year 2018, there will be reporting on some of the private-market assets with a one-quarter lag. That process has been gone through and implemented within the system.

CIO READ stated that staff is happy with and liked the end result of the implementation, and really appreciated the work that Callan did. It gives the ability to have more complete results in a timely fashion going forward.

MR. CENTER stated that the goal is to be able to report on performance in a more timely and accurate fashion. All the investments within private equity and growth opportunities, real estate and infrastructure, private credit and income opportunities are now going to be reported on a one-quarter lag. The benchmarks for those portfolios are also going to be reported using the same methodology. He continued that the total fund returns have been revised under this new methodology. He noted that the goal here is being able to report results that are not ultimately subject to revision.

MR. ALLEN stated that the revisions were becoming an increasingly large percentage of the portfolio and getting larger as that data came in. This is a way of dealing with not having that big variance between the preliminary and the revised numbers.

MR. CENTER moved on to discussing the total Fund's performance for the most recent quarter and trailing periods. He looked at asset allocation and stated that the Permanent Fund remains well diversified across all major asset classes: approximately 45 percent allocated to equities; 20 percent to fixed income; and the remainder allocated to alternatives. Compared to the previous quarter, that is a slight increase in both equity and fixed income, and a slight decrease to alternatives. As far as performance, the total Fund came in at a 4.15 percent return over the last quarter, and over the last 12 months, 12.84 percent. This is ahead of all benchmarks and include the CPI-plus-5 benchmark hurdles. Overall performance has been quite strong, driven by some strong equity performance. He moved to attribution and stated that the Fund came in positive relative to the benchmark; approximately 60 basis points ahead. This was driven by a combination of strong performance from managers and some benefit from asset allocation. Manager impact was primarily driven by strong public equity and fixed-income performance, and a little bit of a lag from real estate.

MR. ALLEN commented on the real estate performance, which is actually the real estate performance from last quarter, which was negative. This is because private markets were lagged.

MR. CENTER noted that the same exact influences caused this return figure, making this clear. He continued that asset allocation was also a positive contributor to performance, which is due to a slight overweight to equities and a slight underweight to public fixed income. He moved on, comparing performance versus some peers. The first is public fund peers which are public retirement funds. Overall performance over the last quarter came in at the 16th percentile. Longer-term performance also compared fairly well versus these peers. Over the last three years, the Permanent Fund comes in the top quartile; longer-term performance very close to medium.

MR. ALLEN explained that the biggest explanatory factors for this outperformance recently are higher emerging markets exposure, outstanding performance in the private growth part of the portfolio, and outstanding performance in the public equities. It is pretty unusual to have this much outperformance in a public equity portfolio.

MR. CENTER moved to risk and risk-adjusted return measures. The first is a risk return comparison over the last 10 years versus other public funds. There is a higher return with lower risk over the last 10 years. He moved to a comparison of standard deviation versus other large public funds, which showed a very low risk relative to peers. The Sharpe ratio is a measure of basically return efficiency, so alpha versus unit of risk taken. The Permanent Fund compares very favorably over all time periods versus Callan's public-fund-sponsored database. He then moved on to some of the asset class information. The Permanent Fund's public equity investments are weighted approximately 47 percent to U.S. and 53 percent to non-U.S., which is a mirror image of the benchmarks allocations. He stated that the total equity performance compares very favorably versus peers and are ranking above the benchmark and above median over all time periods. He looked at some characteristics for the total equity portfolio and discovered that the equity portfolio has begun to use ETFs a bit more than it has in the past. Callan's system does not calculate characteristics well with ETFs, and we are trying to remedy that situation. He moved outside the U.S. and looked at the non-U.S. equity portfolio structure. The portfolio was divided between global, non-U.S., and emerging markets. Both global and non-U.S. equity managers invest in the emerging market space, as well. He continued to global equity and stated that it has a slight underweight to emerging markets and a slight overweight to Europe. He moved on, touching on the fixed-income-plus structure stating that 66 percent of the overall fixed-income-plus portfolio is managed internally. There are external mandates here in non-U.S. fixed income, global high-yield, emerging markets, REITs, and listed infrastructure. The overall performance of the fixed-income-plus portfolio has been strong in the near-term, well ahead of its custom benchmark, approximately 70 basis points. The Permanent Fund emerging market debt strategy performed fairly well over the last quarter, ahead by over a full percent. It is also ahead of the benchmark by 2.4 percent over the last year. Longer-term does trail the Bloomberg emerging market hard currency benchmark. This strategy did also recently get slightly diversified. It was a single-manager strategy, and an additional ETF was added during the last quarter.

CHAIR MORAN asked if the differences on global high-yield are attributed to just not taking as much risk as the standard deal there.

MR. CENTER replied that it is possibly a bit of a currency issue, and there is a bit of a higher quality bias to the portfolio versus both the benchmark and many of the peers. That resulted in a bit of a lag during that time period when lower quality, high-yield rallied. He moved on to REITs and listed infrastructure for fixed income. REITs have performed quite well over the last quarter and last year; well ahead of the benchmark. Listed infrastructure has been phenomenal the last year, in the ninth percentile; up 16.8 percent versus the benchmark. Longer-term performance was also strong; never falling below the top quartile. He continued to the real estate portfolio which is approximately three quarters direct and one quarter real estate operating companies. He reminded all that this is the performance that was seen last quarter, as well.

MR. ALLEN pointed out that the Permanent Fund's portfolio is different from the peers in terms of its structure. He noted that three quarters of the portfolio is operating companies, the kind of things that are owned individually. Being ranked in the top or bottom quartile would not be too unusual given the large differences between the structure of the Permanent Fund and real estate portfolio, which has historically been a long-term, buy-and-hold, high-quality, income-generating portfolio.

MR. CENTER continued that the absolute return composite ranks in the top quartile relative to peers over the last 12 months and falls slightly below median over the last three years and into the bottom quartile over the last five. He pointed out that, over the last year, performance has been quite strong, and things look like they are improving. He stated that the private-equity portfolio remains well diversified by strategy, geography, and industry. The largest non-U.S. exposure is in Europe, and the largest industry is software and the Internet. Overall, there is a good allocation to all areas of private equity, including venture capital, buyout, and special situations, much like what has been seen within the overall private equity marketplace. Buyout has grown to be the largest portion of the private equity portfolio at the Permanent Fund, as well. In the structure of the multi-strategy portfolio, there is 33 percent allocated to Bridgewater, AQR, and Goldman Sachs. The multi-asset class portfolio is up 5.4 percent, trailing the CPI-plus-5 target and trailing the total fund's benchmark. Longer-term performance has improved, in particular, due to strong performance recently from Goldman Sachs and Bridgewater. He stated that, overall, the total Fund's return in the quarter was strong and provided very positive gains to the Fund as a whole.

ASSET CLASS UPDATES

CIO READ introduced Marcus Frampton who runs the infrastructure, special income opportunities, private credit, and absolute return strategies.

INFRASTRUCTURE, SPECIAL INCOME OPPORTUNITIES AND ABSOLUTE RETURN

MR. FRAMPTON stated that special opportunities today is over 90 percent. American Homes 4 Rent II is considered a direct investment done under Jay Willoughby with a joint venture with Americans Homes 4 Rent for higher-end homes. The House and Senate bills today have a provision that disallows deductibility of interest beyond 30 percent of EBITDA for companies. In a leveraged buyout, when one of the private credit managers might be lending, it would not be uncommon to have a bit more than 30 percent EBITDA in interest expense. He continued that he does not view it as a harrowing prospect because there are opportunities for people to restructure the deals and defer some of the interest, or to put it in pay-in-kind-type structures. Private credit remains an area that is constructive. He added that in private income, infrastructure has been the top-performing area with mid-teens returns against mid-single-digit returns for public infrastructure stocks. He noted that in private income we are executing against a $750 million target deployment for this fiscal year. The $100 million co-investment with Equis Energy is a deal that GIP, one of the infrastructure funds managers, led and co-invested; and we are getting access there without fees. He added that there is a significant new investment to be made with a company called Generate that owns smaller infrastructure assets. This is in special-income opportunities. In that deal, $100 million out of $200 million was invested in a preferred stock instrument, and we took a board seat at that company. He stated that he is tracking the correlation with S&P 500. The idea is to not only be earning a return in excess of the CPI-plus-5, but also to do it in a way that is uncorrelated with the S&P. He moved to infrastructure and stated that it is another way of looking at returns that is helpful, since inception IRR, as opposed to looking at a time-weighted methodology. He continued with income opportunities and stated that exposure is almost all American Homes 4 Rent II. As of the date of this report, the investment had not been funded here. This portfolio is one that some distribution has been received, and we are getting about 5 percent current income from it now, but it is still a very illiquid exposure.

CIO READ underscored that it became common among the international plan and sovereign wealth fund peers to have board participation. He stated that Generate is the first time that a board seat has been taken, and it will only be for direct investments where fund participation is viewed as a big value-added contributor. He continued that there is an important and very positive policy change that is reflected in Generate Capital. We helped to drive that opportunity, and we are participating actively in its success.

CEO RODELL stated that a lot of cash out of private credit is being generated because of the way that portfolio is operating. She asked Mr. Frampton to talk about some of the opportunities he is seeing and the strategies that he hopes to accomplish over the next 12 months.

MR. FRAMPTON stated that it has been difficult to steer the battleship of the exposures against the targeting. A pacing analysis was done last May and concluded that they would target $750 million of deployment this fiscal year; which was in line with the prior fiscal year. He continued that they are on track right now to do a bit more than that this year. The exposure to that direct investment line is mostly co-investments; about 13 percent of the portfolio right now. He added that he would like to stay in the middle more than the upper market in terms of size of assets, and we are focused more on the U.S. to move away from an unintentional overweight that we have toward Europe right now. The bigger challenge has been predicting the denominator of the equation for the target allocation than predicting the numerator.

CIO READ introduced Steve Mosely, who leads APFC's private equity and special growth opportunities.

PRIVATE EQUITY & SPECIAL GROWTH OPPORTUNITIES

MR. MOSELY began with the unusual history of private equity in that it started in 2004 with a completely outsourced private equity program. Along the way, there were a lot of fees and we ended up with a portfolio composed of high-quality managers. A great job was done with manager selection, but with a very large number of fairly small commitments with limited access to those GPs. The program migrated with the strategies and the tactics towards a more direct approach. He stated that there are a few numbers that the Permanent Fund should be proud of; in particular, the comparative outperformance of the in-house private equity decision-making, and then special opportunities together. He highlighted that when public equities are compared to the private equity industry, to the Permanent Fund's performance, the answer is to say that the private equity industry, the middle bar in each of the grouping, which represent a different time period, has outperformed public equities. More relevant to Alaska is that the private equity program has significantly outperformed the private equity industry. He stated that the absolute dollars that have been captured or created in the portfolio also shows the timing. He pointed out that there is a lot of risk recognized in this portfolio, and we are trying to respond constructively by not putting on the brakes completely or stopping the process of committing to funds. He continued that one of the peculiar and frustrating realities of private equities is that the good funds will come back to market after their money is spent. He looked ahead to the second half of this fiscal year, the struggle with the fact of having small teams will continue; and with the right configuration of consultants, advisors, managers, and others, it can continue to work.

CIO READ thanked Mr. Mosely and introduced Rose Duran, who leads APFC's real estate investment programs and will be joined by her colleague, Tim Andreyka.

REAL ESTATE

MS. DURAN stated that there is some improvement in the 9/30 numbers, and then moved on to the current information. She explained industrial is the strongest property type, which is due to eCommerce. Investment transactions are at highs with rent growth in the mid-single digits. There is a lot of emphasis on retail, and is, unfortunately, the property type that is the most avoided. It happens to be overweight at this time.

CHAIR MORAN asked if the vacancy deal covers all of the retail stuff, or is there a difference between, say, the Tysons and Northbridge versus some of the different properties.

MS. DURAN replied that there has actually been a change in the use of the spaces. For example, anything that today is a huge competitor for online space, like electronics, is being seen. In terms of the centers themselves, there is a difference seen. The strong centers capitalize on those kind of departures; the investor notes and reports and look at 70 percent positive leasing. When a tenant exits, they are able to capture higher rents for that space. She stated that what was interesting is that the format of retail centers has changed. There is a lot more food, beverage and experience. There is no set offering and the brands that are carried change all the time. The consumer enjoys the experience of going in and rummaging through stuff, seeing what is new, and then coming back the following week to see what has changed.

VICE CHAIR BRADY asked if the industry has come to any conclusion or direction as far as the run-in in the future of the Amazon-type of business. He asked what the percentage of that would be.

MS. DURAN replied that looking at eCommerce and the total retail pie is actually 9 percent in the U.S. and closer to 15 percent in the U.K. She continued that 9 percent is low and will grow. The question on how big is unknown.

VICE CHAIR BRADY asked how much are the best malls in America losing as a percent of sales to online, and where is that going.

MS. DURAN replied that staff will work on bringing some material to the next board meeting that shows the total retail sales and the piece of the eCommerce. That will show what types of products are channeled through for a better idea. She went through the current initiatives that are in progress. The build-to-core is moving forward with the large U.S. partner for development; and we are currently working on getting the JV fully negotiated and ready for execution. She added that, in terms of industrial opportunities, we continue to look for a large portfolio acquisition or some kind of large asset purchase. She moved to the real estate consultant search, which is being worked on, and we are targeting a first-quarter RFP, which is integral in moving forward. She went through some of the highlights of Sand Lake West, which is a Phase VI development. She added that a long-term lease was signed with CHEP, a supply chain logistics firm. It is a subsidiary of Brambles, an industrial publicly traded company. There is a 100-percent preleased building there. She continues to a repeat of last quarter's debt overview, which is unchanged and within policy limits. She stated that there are three pending transactions in terms of the pipeline: there are two apartment deals, and one small industrial deal. The industrial deal should close before the end of the year. All three should total about $230 million in proceeds at closing. She went through a recap of transaction volumes for Asia Pacific, with the average ticket price higher than usual. Occupancy is currently at a 16-year high and holding steady. Industrial continues to lead property performance and is the actual property type that shows the most investment sales and activity. Transactions are trending down globally, and it looks like 2015 was a peak year for real estate transactions in most markets. Cap rates continue to trend down, and, at this point, modest cap rate movements are going forward, if at all.

CHAIR MORAN asked about the status of Tyson's development project, and if the hotel is completed.

MS. DURAN replied that it is completely done. It is performing the way it was anticipated. We are starting to see a bit of softening in multifamily because there is a lot of supply in that marketplace.

CIO READ introduced Fawad Razzaque, APFC's head of global public equities investment.

PUBLIC EQUITIES

MR. RAZZAQUE stated that global public markets delivered strong positive returns for the quarter, driven by positive investment sentiments surrounding global economic growth and strong corporate earnings that were seen throughout 2017 in a very difficult environment. He continued that overheating in any of the global economies, including the U.S., in terms of low inflation that is reflected in low yields and weak dollars was not solved. He added that all of those things are very positive for public equity markets, growth without inflation, showed all the positive without any potential negative. International markets outperformed because growth was stronger internationally relative to the U.S., starting off low-based and cheap on valuation. There was a 30-percent return from emerging markets, which came from earnings growth without any multiple expansion.

CHAIR MORAN asked if there was any currency exchange captured in that.

MR. RAZZAQUE replied that they are all in U.S. dollars, which was used as base currency, and everything is reflected here. He stated that gap was compelling enough to take an overt position in EM. He pointed out that the overweight to emerging markets is not forever. The valuation spread is very favorable to the EM, resulting in an overweight position. Within public equities, the long-term expected return for EM would be higher than long-term expected return for the S&P 500. That is where the long-term investor wants to be, marginally overweight. This positioning geographically reflects the overweights and underweights with emerging markets. The things that we like, financials, industrials, energy, healthcare, real estate, are cheap and also benefiting from global growth. He stated that there are three ways that those overweights and underweights show up: one is the managers that are hired; deciding to allocate among managers; and influence on this allocation through an internally managed equity, which is about 10 percent right now. He continued that fund managers are the primary drivers behind the overall excess returns and were a positive influence. He moved to international and stated that there is strong performance from active managers across the board with an international overweight to emerging markets, which was beneficial. In global equities there was a mixed performance from the active managers and a strong performance from AQR and McKinley; it outperformed by 5 basis points. Tactical tilts also underperformed. There is an underweight to emerging markets which was another factor behind the performance. Overall, it was a strong, solid performance. Internal equity underperformed by 11 basis points and was primarily driven by the tactical view that value is a better place going forward. Value underperformed growth in the first quarter, and that was the main reason why internal equity underperformed by 11 basis points. It was a pretty solid contribution. He stated that global equity allocation is the most concentrated segment in terms of the managers. Four of the managers make up almost $5 billion. This is in the process of being addressed, adding seven managers in the global equities lineup to mitigate manager-specific concentration risk. These are all good managers, and all have conviction over the long-term excess return proposition.

He then moved on to energy, which is another sector with continued poor performance. There is a lot of pessimism being priced into the factor, and maybe the long-term story is that fossil fuels are on a decline. In terms of the drag, it is basically the value. He stated that he has not seen any data that showed any slowdown in the second-degree acceleration anywhere. Corporate earnings have been strong, and we have not seen any data that reflects that the next quarter or the quarter after will slow down. He added that there is very little reason to change the sector positioning from pro cyclicals to neutral or international positioning. However, there are risks out there. We are paying attention to that yield curve, and if it flattens, it would inform the decision to change the allocations. He continued that the other risk to the emerging market overweight is if the dollar starts to go higher in response to expectations of more Fed rate hikes which would be a drag, and which would not be good for emerging-market equities.

CIO READ introduced Mr. Jim Parise who will be giving his strategy, overview and summary on the fixed-income-plus.

FIXED INCOME

MR. PARISE stated that the presentation is broken into two sections: the first section is the internal managed portfolio; and the second section is the fixed-income-plus or the external managers, as well as the listed infrastructure and REIT portfolios. He looked at the one-year numbers and stated that the index has been beaten in all the internally managed portfolios. It has been a good year, and the numbers have gotten even better over the fourth quarter.

CHAIR MORAN asked about the costs to manage it.

MR. PARISE replied that analysis has been done in the past, and it is somewhere around 2 basis points.

MR. ALLEN stated that the bigger issue is that this strategy hones closely to the benchmark, and most of the peer groups are folks that are really taking big bets from the benchmark. He continued that being able to consistently add value, as Mr. Parise's group has done, by taking relatively small bets is a job well done.

MR. PARISE went over the internal aggregate portfolio, its performance, which outperformed in all time periods. The quarterly attribution shows that most of the performance is from asset allocation or overweight corporates or overweight other spread product. He stated that spread product has come in over the last quarter, and because of the overweight, basis points were gained on that. The right bonds were chosen in the security selection, which added 4 basis points to the quarterly attribution. The predicted tracking error shows where the tracking error is coming from, and 75 percent of the tracking error comes from sector. He continued that on index comparisons, the duration is neutral. There is a little more spread and the rating is about the same. He added that unless there is a very strong opinion on rates, the durations will not move. He stated that in the internal corporate bond portfolio all time periods were outperformed.

The duration on corporate bond portfolio is always kept neutral, and that is done through futures contracts. The internal TIPS portfolio is beating in all sectors. He moved to the internal global government, which is outperforming our index, and the three-year is getting very close. One of the issues with this portfolio is the fact of FX and forwards for the currency hedging because it is a hedging portfolio. He then moved to the fixed-income-plus portion. The total excess return since the beginning of the year is 59 basis points, which is for the whole fixed-income-plus allocation portfolio. Within the sector allocation, the managers have outperformed, and that adds one basis point to outperformance. He stated that the remaining slides are just the different managers. He continued that the way to beat the index, which is the mandate, is through asset allocation, not manager selection. The desire is to be able to do overweight and underweight with the different sectors.

CHAIR MORAN asks about TIPS

MR. PARISE explained that they are not doing well lately. There is an underweight, and that will continue to be an underweight. They are just an inflation hedge. Right now, inflation expectations are low and are expected to remain low for a while.

CHAIR MORAN asked if that is needed, given the other things known.

MR. PARISE explained that there is always a place for it in the portfolio. They don't necessarily just have high inflation expectations, which are now low and expected to remain low for a while. He stated that there is a place for TIPS in a portfolio; the benchmark does have an allocation to them.

CHAIR MORAN called a break.

(Break.)

CHAIR MORAN moved to the Bridgewater presentation. He asked CEO Rodell for some background.

CEO RODELL stated that there is an ability to tap into Bridgewater as a resource to do special projects. One of the projects, which will be presented, is to get an understanding of what a liability draw would be and what the stress that would create on the Fund going forward. They were asked to model a scenario on 5.25 percent of five out of the previous six years of the market value. Five out of the previous six years would be drawn for two years; and then in years three through ten, 5 percent would be drawn thereafter. We want to see what it looks like in terms of the viability of the Fund going forward, and what impact that has under a variety of different economic stress scenarios. She asked Valeria Martinez to introduce the Bridgewater team.

MS. MARTINEZ introduced the speakers, beginning with Phil Dobrin, portfolio strategist and senior member of the research group with expertise in credit, interest rates, and equity markets. He is responsible for leading research projects with the goal of impacting Bridgewater's investment views in the main areas of research being on understanding credit markets and financial institutions in the U.S. and Europe. Next is Brian Lawlor, who is responsible for

Bridgewater's client service in North America and in Australia. She also recognized Chris Ward, and asked Mr. Lawlor to continue.

MR. LAWLOR stated that Chris Ward is a senior member of the client service analytics group and is the one who understands all of the numbers that are deep in the stack. He continued that the APFC Risk and Asset Allocation team worked with Bridgewater to create a scenario analysis to project the sustainability of the Fund with a proposed State of Alaska draw. In addition, the Bridgewater analysis stress-tested economic environment and historical time periods to gain further clarity on the impact of such a draw on the Fund and Earning Reserve values over time. He added that a key part of client relationships is the ability to partner with people on issues that extend well beyond just the investment that is managed. He stated that the approach in doing this, the remarks or analysis, is not a recommendation of any kind. There is no opinion on which way the Permanent Fund should go. The opinion is on thinking through stress-testing the portfolio; having a rigorous stress test around the assumptions formed in thinking about the different options to pursue. He explained that stress-testing is both an expected range of outcomes and a guide that uses history to see what the range of outcomes would be for the portfolio under different distribution scenarios. This will give a sense for the long-term impact on whatever the decision made might have on the overall portfolio. He added that the conversation needs to be guided by the interest and questions from the Board.

MR. DOBRIN began with the methodology used, what the analysis actually is, and how the numbers are put together. This effectively introduced a draw or a distribution; basically, a liability to the Fund. He stated that the main model is a draw, a 5.25 percent of the trailing five-year Fund value. He continued that there are certain limitations to the stress-test methodology: there is no ability on anyone's part to be able to predict the realization of investment gains. Given the Fund's policy, there is a bit of sensitivity when gains are realized versus not. APFC's realization of gains in any precise way could be modeled, so two scenarios were stress-tested, distinguished by whether the current stock of unrealized gains are used as an additional lever to support the balance in the Earnings Reserve: make payments according to distribution plan (5.25%/5%) until Earnings Reserve is exhausted (~$13B starting buffer); make payments until overall plan surplus (Earnings Reserve + Current Unrealized Gains) is exhausted (~$20B starting buffer). He stated that staff worked to get the asset allocation that was used as a basis for both the historical and the forward-looking estimates. He explained the chart of the expected evolution of the total value of the Fund in the event there is a 6.3 percent return, and the evolution of the Fund assets.

TRUSTEE FISHER asked if there is any volatility assumed in the numbers.

MR. DOBRIN replied that everything to the point is a probability. There is an expectation, which has a range around it.

CEO RODELL asked for clarification on what is embedded in this draw. Is there a lower effective rate than the 5-percent draw? This is being done on a five-year average, not on the annual expected balance. She asked if this is based on lower effective rates.

MR. DOBRIN replied that, because it is based on the five-year trailing number, it is 6.3. He continued that the next phase is going back and taking the Permanent Fund portfolio's asset allocation and running the returns of that portfolio for every 10-year period going back almost 100 years.

MR. ZINN asked about changing the asset allocation.

MR. DOBIN replied that it could have been changed, but it was not. The fiscal year 2018 asset allocation was used for the purpose of this analysis.

MR. ALLEN asked if the asset allocation actually mattered.

MR. DOBIN replied for the forward-looking, those were the exact numbers that were there, 6.5 percent with a 12.4 percent standard deviation. The historical stress-testing of the portfolio was the actual realized results of the literal asset allocation, which would have an effect. There were proxies for all of the asset classes, including the liquid ones. Liquid proxies were for the illiquid assets. He moved on and went to the "spaghetti chart" and explained that each of the gray lines represents one distinct 10-year period for the returns of the Permanent Fund’s asset allocation. There was one adjustment to the cash rates, the starting risk-free rate today, and for the next 10 years is a lot lower than what it was historically. Based on history, there is about a 50/50 chance with the 1.3 percent cash rate that the 6.3 percent or greater could be achieved. He continued that the history is not that different from the forward-looking assumption. He moved on and stated that it became a bit more complex, and he walked through some of the perspectives that were found somewhat useful in order to understand the results. He reiterated that there is no Bridgewater recommendation because only the Board can decide how to weigh what a more aggressive distribution policy would mean for the size of the Fund going forward. He added that only the board can effectively trade off the benefit of more money getting distributed in a more aggressive plan relative to a world where there is less aggression in the distribution policy and there are more guardrails in place to ensure that the fund grows through time.

CIO READ asked if all the probabilities shown so far assume inflation-proofing.

MR. WARD replied yes, if the money is there, the inflation-proofing happens. Also prioritized are the distributions over the inflation-proofing, but if there is money left over, they are proofed.

MR. ALLEN asked how the earnings reserve is recharged. If there are more bonds, more income is generated, which will generate a greater percentage of the return going into the earnings reserve. He added that if there was a higher turnover, there would be more private equity with less turnover, and we have private equity with a lot of good outcomes.

MR. DOBRIN replied that the main assumption was made in a somewhat conservative sense. The assumption was that the net unrealized gain stays at $7 billion. Those unrealized gains are neither being drawn down nor are they being built up. They are not actually using either strategic realized gain realization as a way of creating earnings reserve to make distributions.

MR. ALLEN stated that he thinks the earnings reserve is a little subtler in terms of responses to markets; and asked if there was any room in interpreting the analysis for that subtlety to come into play.

MR. DOBRIN explained by looking at the plan's financials through the financial crisis. He walked through the total Fund size, what happened in terms of the investment performance, and how that flowed through to the earnings reserve and to this concept of economic surplus, which is the earnings reserve plus the $7 billion unrealized.

MR. WARD stated that the market return year is 2008, which came in with about a $60 billion Fund with $10 billion in the earnings reserve and $7 billion of unrealized gains. He continued that there is a lot of subtlety in the earnings reserve in terms of how things are going from unrealized to realized that were not captured or modeled out. There is more of an immediate recognition of the performance in ways where there would be a little more smoothing of reality.

TRUSTEE RUTHERFORD asked Trustee Fisher if the bill that was introduced specifically dictated whether or not inflation-proofing is done.

TRUSTEE FISHER replied that the way the bill was structured is that in any period the amount that would be inflation-proofed would be an amount equal to four times the expected draw.

MR. ALLEN stated that regardless of how inflation-proofing is done, it will aggravate the possibility of not being able to pay anything.

TRUSTEE FISHER stated that he is most concerned about how volatility impacts those assumptions.

MR. DOBRIN stated that the range over 10 years would effectively have the asset returns. Within that range there is about a 50/50 chance of being able to make the distributions and maintain the earnings reserve in terms of the volatility. He stated that flexibility around inflation-proofing does preserve or sort of enhances certain degrees of freedom. If it is never done, then it has an effect on the total Fund size and what the distributions look like in 10 years forward.

CEO RODELL stated that this was trying to get at the question of potential impact over a 10-year period based on all of these stressful market conditions. She thanks the presenters for the presentation and information.

(Break.)

> **MOTION:** TRUSTEE BRADY stated that in accordance with the Alaska Open Meetings Act, he made a motion that the Board of Trustees convene in executive session and discuss the possible acquisition or sale of interests in the Simpson Housing investment. Because the immediate knowledge of the parameters under which Alaska Permanent Fund Corporation would acquire or sell interest in this investment would have an adverse effect upon the assets of the Permanent Fund, this discussion should take place in executive session. TRUSTEE FISHER seconded.
>
> Following the roll call vote, the MOTION WAS APPROVED by the Trustees (RUTHERFORD, FISHER, MORAN, BRADY).

(Executive session from 3:34 p.m. until 4:53 p.m.)

CHAIR MORAN announced that while in executive session, the board considered only matters mentioned in the motion and set no action. And unless there are some other concerns to be brought forth, he adjourned the meeting for the day and stated that it would reconvene tomorrow morning at 8:30 a.m.

(Alaska Permanent Fund Corporation Board of Trustees meeting adjourned at 4:55 p.m.)

DECEMBER 13, 2107

CHAIR MORAN reconvened the meeting and recognized CIO Read.

CIO READ stated that the panel discussion this morning will focus on the potential limitations, challenges and opportunities around the management of assets using internal teams. He continued that there are three participants: Daniel Adamson from Wafra, a private equity arm of PIFSS, which is the social security system for the State of Kuwait; Jim Parise, team leader for fixed-income-plus investing and the manager of the team that oversees the most internally managed assets; and Mark Wiseman, senior director, leader of BlackRock and former CEO of the Canadian Pension Plan Investment Board.

MR. ADAMSON stated that he has been fortunate to have been to 20 different countries and talked to sovereign wealth funds and the pensions they run about the kinds of questions that will be addressed on this panel; namely, when it is appropriate to internalize certain capabilities, and when it is appropriate to rely on external managers. He added, that since the financial crisis, there has been a profusion of different models for addressing those issues. There is a broad spectrum of solutions -- some more successful than others -- which will enable a fertile discussion.

MR. PARISE stated that he is the head of fixed income at the Permanent Fund Corporation. He has been at APFC for 17 years. It has transitioned from an all-treasury portfolio, which is what the Permanent Fund was. He was the first internal manager, of just treasuries, then went to gov credit. He continued that there was one very large portfolio of $10 million with Lehman Aggregate. It was a hodgepodge of systems because it had not yet matured. With this ag, a structured projects PM was hired. With structured products is MBS, ABS, and CMBS. This is important because in ’09 a dislocation of the CMBS market was taken advantage of. The other thing was that there was a housing crisis at the same time; and it had a lot of insight into the MBS market. He added that the internal management allowed flexibility, and they were able to trade futures.

MR. WISEMAN thanked all and stated that he has been at BlackRock for about 16 months, but has kind of grown up in the pension business. He started his life as an attorney and then went to the Ontario Teacher’s Pension Plan in 2001. He was there from 2001-2005 and then joined the Canada Pension Plan Investment Board, and was there until he started at BlackRock. He stated that, most importantly, it is not a question about internalization versus external; it is a spectrum. There is a need to really think about where to operate on that spectrum. CPPIB, which is known as one of the most active, most internalized investors in the world, but it still has 25 percent of its assets and 50 percent of its risk managed externally. He talked about understanding where to operate on that spectrum, which is dependent on a lot of factors, including the scale and the governance model. The governance model permits success in terms of internalization of investment activity. He explained that the Canada Pension Plan is Canada's national social security plan. Unlike the U.S., there is actually a reserve fund that backs it up, and there is about $330 billion in that reserve fund. He stated that the CPPIB has 1400 employees today, and all they do is investment; no management of the administration of the pension, which is all done by the government. The infrastructure program is north of $20 billion in infrastructure investments; all in-house with no external managers in that program. There are 48 investment professionals that manage those infrastructure assets globally. The cost of those investment professionals, on average, is a million dollars a person. He continued that there are three structural advantages and three developed advantages. The structural advantages: first is the scale; second was the long-time horizon under which the investment differentiated us from most investors; and third is the certainty of assets. The developed advantages are: first, the governance model allows the attraction of differentiated talent from most other government-like investors; second is the ability to partner without having to compete with them to raise money; and third is the managing of a single portfolio.

CIO READ stated that the points of all three are well taken. He continued that the Canadian plans is considered to be an example of industry best practice for how a plan can successfully internalize assets. He asked, aside from Canada, what organizations or models are viewed as best practice.

MR. ADAMSON replied that there is a lot of admiration for the Canadian plan globally, but there are also examples of strong governance from New Zealand to Singapore and Kuwait. He stated that it is worth stepping back because there is a common set of problems that all are trying to address, which is why so many similarities are seen across geographies. He put out six of those problems, and then suggests a couple of solutions that he has seen. The six challenges are: one, how do the CIOs and boards of sovereign or pension assets increase the net-of-fees returns; second, is seeking alignment between principal and agent; third is access to certain assets; fourth is a common desire among sovereigns and pensions globally for increased bargaining power; fifth, the benefits of new insights across the portfolio that can come by having top investment talent in-house; and last is trying to develop a more responsive portfolio that matches a sovereign liability stream. He stated that they have no reason not to invest in assets that may be illiquid for decades. He continued that going to private managers for those same assets: one, they may just not be available; two, they may be locked in to incentive structures that would be a shorter term in duration; and three, once the investment was made there would be less chance to make changes that reflected the needs of the ultimate owner. He moved on to the three questions, which are: what are the comparative advantages; what is the organization's "governance budget"; and, what is the business plan for bringing investing in-house. He began with the first question and stated that it is not a static question. There can be a business plan that develops the comparative advantage over a period of years. He continued on to the second question and stated that certain organizations are just limited by the nature of how they can incentivize and how it can be overseen. Each organization has to ask themselves how the geography and skill sets can be taken advantage of in the context of the organizational budget. This would be senior people who can oversee what is happening and grow in a measured way that will avoid headlines and create returns. The third question is about the business plan, and for each of the asset classes the following things are asked: is there expertise and talent to pull this off; can the compensation and alignment be delivered to an internal team to pull this off; is there the organizational capacity to manage it; can the deals be originated; and can both headline and financial risks be managed. There will be different answers for different strategies and different asset classes. It will depend on the choice to internalize or externalize a given strategy. It is a spectrum; not a single choice for the whole organization. He stated that four choices are laid out along that spectrum: using external managers exclusively; building capacity through co-investing and learning and nurturing a team internally by partnering in an informal way with the asset managers; then, in some cases, developing formal partnerships with asset owners. Answering all of these questions will lead to a full internalization strategy.

CIO READ stated that the Permanent Fund has $63 billion, approximately, under management, and 45 total professionals in-house; 25 that are front office investment professionals, so it is about $2.5 billion under management per investment professional, or $1.5 billion per employee. He continued that they operate at about a 30-basis-point figure when included is the costs to pay employees, operate APFC, as well as what external managers are paid for management fees.

MR. ADAMSON congratulated those numbers together with the performance numbers, adding that they are outstanding. He suggested, based on the sovereigns and pensions globally, that they are an outlier in terms of the 2 basis points especially, but the 30 basis points together with that is a very strong performer over the history of the Permanent Fund. He stated that the strategies that he would consider most actively are the ones in infrastructure, in large-scale private equity, and to asset development.

MR. WISEMAN stated that he would modify that slightly: in terms of asset development, he would think about it in terms of alpha potential. He continued that it would not be thought about in dollar terms, but how much potential alpha can be generated per FTD.

MR. ADAMSON added that having a blended approach where two questions are asked in tandem: what are we good at, and what is amenable to bringing in-house.

MR. PARISE asked about the equity portfolio and if there is an index that has to be managed that is a good structure. He continued that the net returns will be better and there will be market intelligence with a possibility to expand from there.

MR. WISEMAN stated that there is a McKinsey report that said you have to be at about $100 billion for big internalizations to start making sense from an economies-of-scale perspective. He continued that as big as the Permanent is and its importance to the State of Alaska, the terms of global scale, and because of wanting to be diversified across asset classes, the end is not being that large in any single asset class. Being on the cusp of that $100 billion amount, it makes sense to think about internalizing on as asset-class-by-asset-class basis.

CEO RODELL raised the question about how to unwind the internal strategy that is no longer working or cost effective.

MR. WISEMAN replied that goes back to the point about the importance of making sure the programs that are internalized are scalable and there is a high degree of conviction. They are hard to shut down because there is all the cost, including severance, and also having something that is managed internally. The second point is that all of the reporting was focused on complete transparency, and everyone knows exactly what is being spent. That is a great control. He mentioned that the teams at CPPIB were compensated after all costs, internal and external.

MR. ADAMSON stated that the Canadian model has been talked about and has been a hugely successful model in which the governments effectively continue to maintain transparency. There is a need to treat the organization as a steward for State assets.

MR. WISEMAN stated that there is a whole spectrum of these things that are worth examining on an asset-class-by-asset-class basis. The other thing is doing it on a one-off basis as well.

CEO RODELL asked the Trustees if there were any questions.

TRUSTEE RUTHERFORD stated that the CPPIB was talked about as being very autonomous. The Permanent Fund is not as autonomous. She asked if it is possible to accomplish the kind of in-house investment, sort of fulsome salary structure in a structure that is not quite as autonomous.

MR. WISEMAN replied that he did not think it possible and added that that was why he began with the governance point. The Permanent Fund has to work within the government framework, which has to be considered. He added that there may not be the capabilities of building an entirely in-house infrastructure program for a number of reasons under the governance model in terms of pay for performance, the location and the scale. He continued that looking at some of the hybrid ideas may make more sense.

MR. PARISE stated that one of the biggest risks that the Board needs to think about is stability. This is a lot different than just hiring managers.

MR. WISEMAN advised the Board that the more the conversation can be changed to think about net-risk-adjusted returns as opposed to focusing on cost, the better it will be. He stated that if cost will be talked about, he suggested thinking about it in terms of total cost as opposed to focusing on what the internal budget is. He added, that would be very difficult given the governance structure and the fact that the State has to approve an internal budget and possibly trying to evolve that conversation into thinking about the plan to what the long-term net-risk-adjusted returns are. He added that the other point is to make sure that the team and all never forget who they are working for, which are the citizens of the state. There already is incredible evidence of that here.

TRUSTEE FISHER asked if there were any other recommendations in light of the constraints, and where should this topic be positioned in the Permanent Fund.

MR. WISEMAN reiterates focusing on the comparative advantages where there is scale, permanency, and thinking about those asset classes that have an ability to generate alpha. This will push more towards the alternatives, towards the privates, and then thinking about doing that in some of the hybrid models that have been spoken about, as opposed to trying to build your own.

CHAIR MORAN stated that there is a governance structure that has historically worked for the objectives that were set out, but right now there is a transition of constituencies. Before, the focus was on current and future generations and a modest dividend to the current people here. At the present time, society is trying to wean this one group off of a dividend and redirect the proceeds. At the same time this will put different demands on what the Fund produces. That is being addressed through trying to find out what the capacities are in time. He asked if there is a governance model that works better or if there are adjustments to ours that would better suit that going forward.

MR. ADAMSON stated that a one-size-fits-all solution is not needed. He suggested an approach taken over a multiyear period that involves both potential changes in governance that allows for more internalization of certain strategic business lines in the Permanent Fund where you have a comparative advantage that is cost-effective. It can also involve these kinds of partnerships and getting into the business of being GPs where the groups that are serving are owned. He continued that there are a lot of models for governance, and it is most important that whatever model is chosen empowers you to use your heft in the market as a 62-plus-billion-dollar asset owner.

MR. WISEMAN pointed to the endowment model and the extent that a conversation with the Legislature and the Government be engaged to try and produce some form of schedule in terms of what the draws are going to be. That is incredibly important in allowing leverage of all the advantages of being a fund.

CIO READ thanked the panel for their time and terrific insights.

(Break.)

CHAIR MORAN called the meeting back to order and stated the need to go into executive session.

> **MOTION**: TRUSTEE BRADY stated that in accordance with the Alaska Open Meetings Act, he made a motion that the Board of Trustees convene in executive session and discuss the possible acquisition or sale of interests in the Simpson Housing Investment. Because the immediate knowledge of the parameters under which Alaska Permanent Fund Corporation would acquire or sell interest in this investment would have an adverse effect upon the assets of the Permanent Fund, this discussion should take place in executive session. TRUSTEE CASH seconded.
>
> Following the roll call vote, the MOTION WAS APPROVED by the Trustees (RUTHERFORD, CASH, MACK, MORAN, BRADY).

(Executive Session from 10:28 a.m. until 11:12 a.m.)

CHAIR MORAN reconvened the meeting and announced that while in executive session the Board considered only the matters mentioned in the motion and took no action.

> **MOTION:** TRUSTEE RUTHERFORD made a motion that the Board accept the SHLP Holdings, LLP, December 8, 2017, offer to purchase the Alaska Permanent Fund Corporation's interest in Simpson Housing for $1,404,194,351. TRUSTEE FISHER seconded.
>
> Following the roll call vote, the MOTION WAS APPROVED by the Trustees (RUTHERFORD, CASH, MACK, MORAN, BRADY).

CHAIR MORAN stated, in conjunction with that, a motion is needed to allow staff to operate real estate outside of the asset liability parameters.

> **MOTION:** TRUSTEE RUTHERFORD made a motion that the board recognizes that this lowers the asset allocation to real estate and will be operating in the red zone and would like that to continue until the next board meeting while staff puts a plan together. TRUSTEE FISHER seconded.
>
> Following the roll call vote, the MOTION WAS APPROVED by the Trustees (RUTHERFORD, CASH, MACK, MORAN, BRADY).

PERSONELL MANAGEMENT PROGRAM UPDATE & COMPENSATION REVIEW

CEO RODELL turned the meeting over to Chad Brown, the human resources manager. She reminded the Board that the Personnel Management Plan is looked over annually. She stated that about nine months ago the Board directed staff to undertake a compensation study, and we have been working with McLaughlin Group on it. Part of the update will be to incorporate some of the recommendations.

MR. BROWN began with the PMP updates. Branding, as well as the changes in salary, the positions, and how they aligned with the current structure were updated. He continued that there were no actual changes to the pay bands themselves, which were approved at the September meeting. The data that was provided through McLaughlin was used to ensure that where people were positioned within those bands was accurate. All the building references in the PMP were referred to as the Goldbelt Building and that was changed to the Michael J. Burns Building. He added that the timing of the performance evaluations was changed, and generally that that would be done in the fourth quarter. The legacy timing of the kickoff being December 1st did not allow enough time to complete the performance evaluations and provide the appropriate documentation to payroll if merit increases were to be given. There were also some clarifications in the stock and bond market holidays; and then some section titles were changed. He stated that the action that will be asked to take today will be based on most of that. He moved on to the compensation study which the Board had directed. He talked about the initial data provided based on the partnership with McLaughlin which demonstrates where the current compensation falls within their data and their quartiles. The point of bringing this forward is to verify that the data is correct.

VICE CHAIR BRADY asked if the APFC is independent of the State's payroll system.

CEO RODELL replied that the Alaska Permanent Fund Corporation's Board of Trustees has the right to set salaries for individuals. That has always been limited by the budget decisions made by the Legislature and the Governor.

MR. POAG stated that earnings are essentially the Legislature checkbook, other than the General Fund, but the expenditure of those earnings requires an appropriation. He continued that the idea of income-producing investments of the Permanent Fund, including the costs directly associated with the management of those investments, is an avenue that the Board could consider. He added that income-producing investments, as authorized by law, will require a statute that said income-producing investments would include the costs associated with it.

CEO RODELL stated that personal service request for FY '19 was a simple 3 percent across the board, which is what has been done for years in terms of salary adjustment. She continued that what is being asked for today is to adopt the changes to the Personnel Management Plan, which reallocated some of the bands. It is reconciling data that is with the plan and making sure there is consistency.

CHAIR MORAN stated that, on a fundamental level, the problem is that the existing governance model has been outgrown. The governance model that was talked about this morning was dramatically different than what we have with the politically appointed Board and a defined membership from staff. He added that unless that model and the approach to it is changed, the resources will always be micromanaged by the Legislature. At some point, a dialogue with the Legislature and the Executive Branch will be needed to bring the governance practices up to a more useful structure.

CEO RODELL clarified that this is about how to best structure and deliver the returns that the State is expecting.

MR. BROWN stated that there was one error on this slide. The director of risk management shows a downgrade of two position levels. That is incorrect and should be the addition of a new risk officer position. That has been changed, and that needed to be clarified publicly before the motion.

> **MOTION:** TRUSTEE RUTHERFORD made a motion to approve the proposed Personnel Management Plan with the amendment that Mr. Brown referenced. TRUSTEE MACK seconded.
>
> Following the roll call vote, the MOTION WAS APPROVED by the Trustees (RUTHERFORD, CASH, MACK, MORAN, FISHER, BRADY).

CHAIR MORAN called a lunch break.

(Lunch break.)

CHAIR MORAN reconvened the meeting and moved on to the executive session to do a performance evaluation. He asked for a motion.

> **MOTION:** VICE CHAIR BRADY stated, in accordance with the Alaska Open Meetings Act, he made a motion that the board convene in executive session for the purpose of discussing an annual performance evaluation of the executive director. Because the discussion could be harmful to the executive director's reputation and character under Federal and Alaska law, this discussion should take place in executive session unless the executive director requests a public discussion. TRUSTEE CASH seconded.
>
> Following the roll call vote, the MOTION WAS APPROVED by the Trustees (RUTHERFORD, CASH, MACK, MORAN, BRADY).

(Executive session from 12:50 p.m. until 1:39 p.m.)

CHAIR MORAN reconvened and announced that while in executive session the board considered only the matters mentioned in the motion and took no action. He continued that the board just finished a detailed conversation and performance evaluation, and we have some conclusions.

> **MOTION:** TRUSTEE CASH made a motion that the board agreed to compensate the executive director $361,000 beginning the first of the year. TRUSTEE RUTHERFORD seconded.

TRUSTEE MACK asked to speak to the motion. He stated that it was fairly unanimous that the performance evaluation was very positive, and we should put on the record some of the items to focus on in the coming year.

TRUSTEE RUTHERFORD stated that the board asked the executive director to share information that the Board and the Permanent Fund Corporation has created or reached out to consultants to create an analysis of some of the various impacts to the Fund with certain different drawdowns so that we have information to factor in as we are making decisions, and to also begin some analysis on what would be the optimum structure for the Permanent Fund as we move into this new phase of its evolution as a funding phase for the State's budget, and how we can best optimize the Fund's use for now and into the future.

> Following the roll call vote, the MOTION WAS APPROVED by the Trustees (RUTHERFORD, CASH, MACK, FISHER, MORAN, BRADY).

CHAIR MORAN stated that there are some other matters on the agenda.

CEO RODELL stated that she has two or three things that she forgot to mention during her executive director's comments. First, she congratulated Paulyn and Walsh Shepherd for all the hard work on the website. It is more mobile friendly, much more forward-looking, more intuitive, and is getting a lot of compliments. It is also saving $22,000 a year from what was being paid to administer and update the website. Second, she reminded all that the February meeting will be in Juneau, the 21st and the 22nd. Construction for the capital project will probably begin shortly thereafter. The hope is that all the bids will be wrapped up by mid-March, and construction will start in April or May, depending on how the protest periods go with contracts. The May meeting will be the 23rd and 24th in Anchorage. She added that we will continue to work with the Board to continue to look for the Board to host meetings potentially outside of Anchorage and Juneau.

CHAIR MORAN asked for some words of advice from Mr. Zinn.

MR. ZINN addressed some unaddressed comments in the open session when talking about the best interest of beneficiaries as a fiduciary duty. That is at the exclusive purpose of providing benefits, and it has to be looked at in that light. The Permanent Fund is not subject to ERISA, but it is subject to the statute that says that unless it is a diversifying idea relative to the asset allocation, it requires thinking about prior to Trustees moving into the territory of taking something that might have lower returns as a result of selective bias. The other point that he corrected on the record is that the Norway Fund has not adopted a policy that was discussed. It is under discussion, but is not a fait accompli, and that actually is being discussed under the diversification, not from a fiduciary perspective diversification sort of clause in ERISA versus the people having whatever socially responsible goals in mind, because their source of funds is entirely related. He moved on and stated that it is expensive the way it is charged, but it is the marquee system out there. He continued that it takes some work getting used to, and he encouraged staff to get the maximum benefit out of what is being paid for because it is worth the investment once it is utilized. He moved on to the website which is terrific and renders both great in mobile as well as on a laptop PC. It puts the best foot forward, and is the best vehicle out there, particularly in these times in communicating some of those messages and information upfront. He commented that staff continues to impress across the board, and the investment returns are outstanding. CEO Rodell's leadership over the last couple of years in terms of putting a whole new design on the system, and doing a tremendous job on all fronts; not just in leading the organization. Also, in terms of being realistic in working with the Legislature about what she can get accomplished with them and getting the best definition of what the Fund should look like going forward.

CHAIR MORAN thanked Mr. Zinn and moved to Trustee comments.

VICE CHAIR BRADY stated that it was time that we had the Bridgewater conversation on the stress test. He has taken the position that the role as Trustees is to develop the asset allocation, direct staff, and create returns and results as the benchmarks are set. He continued that these cannot be exceeded, which has happened, and not to focus on the politics and the surrounding smoke. Our job is not to get involved otherwise. He stated that his concerns are: He does not like the process that is being seen in the government surrounding the necessity to use Permanent Fund earnings to supplement or support government. He continued that what sticks out most is that the Trustees have not been engaged in these discussions. He does not think it is something that he wants to feel like participation in trying to accomplish. There will always be pressure on liquidity, which is going to put pressure on results. He feels that the approach is not going well, and we should be in a position to state our views. He stated that he had to say that on the record. He is very concerned and feels that this group has been left out of the process.

TRUSTEE FISHER stated that he believes that something is going to happen this session. The CBR is gone, and the Legislature does not have a choice but to draw out of the earnings reserve in some form. He continued that he believes that there will be a draw on the Permanent Fund, and he thinks that the Governor has been pretty transparent so far that he does not want to see that to be an unstructured draw. He added that if the Board is going to have an opinion, there is just a short window to figure out and crystallize what that might be.

TRUSTEE RUTHERFORD asked if there is an action would it be in some sort of formulaic piece of legislation or a one-time draw.

TRUSTEE FISHER replied that is a big question as to whether they can actually get to legislation or just make a draw in accordance with a set of principles.

TRUSTEE RUTHERFORD stated that it is appropriate for the Permanent Fund Chair or the executive director to share information with the Legislature and the Executive in terms of what is known and what is being learned about various types of impacts to the Fund with various types of draws. She stated that she agrees with Trustee Brady on that. She added appreciation and thanks to the group that provided information, and staff did a really good job of putting together some opportunities for us to learn and discuss with experts in some interesting areas.

TRUSTEE CASH added that these couple of days were excellent. The presentation from yesterday and this morning were compelling, and emphasized that there are possibilities for utilizing the Permanent Fund as the renewable resource if done correctly. He agreed with Trustee Brady on the board being more engaged. He added that he also personally chose to keep his personal opinions with respect to what should happen, and he will continue to do that. As a Board, he thinks that Mr. Brady and Mr. Moran can represent us and take those positions.

CHAIR MORAN stated that he had a couple of closing items. In terms of future agenda items, we had the group that addressed the board here earlier and have been through some of this before. He continued that he does not think that we are in a position to be responsive to their requests at this point in time. He added that the whole social investing thing is not as simple as it looks on the surface. He thinks that some background is needed so meaningful conversations about the issues when they come up in the future, and especially if information is requested by the Legislature or by any number of groups.

VICE CHAIR BRADY stated that the Governor will have a document for an appropriation for so much money from the Permanent Fund Corporation. The Legislature will do its thing and may or may not come with an agreement. He asked about the purpose of this corporation and if the purpose is becoming a source of revenue for State Government, and how much. He asked what that does for the corpus growth for projections. All of the earnings have to be appropriated, as well as the dividend, inflation-proofing it, appropriate the supplement to the State; it all has to be voted on, ratified, and delivered. That will cause different things with the investment strategy. He stated that he does not like not knowing.

CEO RODELL stated that staff will make sure to get an environmental social governance strategy education session put together for a future board meeting.

CHAIR MORAN asked for some thought on how the board can be more proactive between now and then. There are probably 100 ways to do that. He thanked that staff and everyone for a first-class meeting. He knows how much work goes into putting these together, and it is always appreciated. He adjourned the meeting.

(Alaska Permanent Fund Board of Trustees meeting adjourned at 2:05 p.m.)