

ALASKA PERMANENT FUND CORPORATION
QUARTERLY MEETING OF THE BOARD OF TRUSTEES

February 27-28, 2019
8:30 a.m.
Volumes 1&2 of 2

Location of Meeting:
Michael J. Burns Building
State Board Room, First Floor
801 West 10th Street
Juneau, Alaska 99801

SUMMARY MINUTES

Trustees Present:

Craig Richards, Chair
Carl Brady, Vice Chair
William G. Moran
Marty Rutherford
Bruce Tangeman
Corri A. Feige

Investment Advisor:

Jerrold Mitchell

Staff Present:

Angela Rodell, CEO	Marcus Frampton, CIO
Valerie Mertz, CFO	Chris Poag, General Counsel
Danielle Graham	Maggie Meiners
Paulyn Swanson	Valeria Martinez
Rose Duran	Tim Andreyka
Jarred Brimberry	Ross Alexander
Stephen Moseley	Samantha LaPierre
Fawad Razzaque	Youlian Ninkov
Moctar Diouf	Jim Parise
Tom O'Day	Chris Cummins
Masha Skuratovskaya	Matt Olmsted
Robin Mason	Sebastian Vadakumcherry
Katie Smith	Rafael Ramirez

Other participants:

Steven Center, Callan Associates
Adrian F. Lee, Adrian Lee & Partners
Philip Lawson, Adrian Lee & Partners
Gregory Yess, NISA Investment Advisors
Ann-Marie Gehring, NISA Investment Advisors
Richard Ratkowski, NISA Investment Advisors
Kevin Schuman, NISA Investment Advisors
Bryan Belton, PanAgora
Philip Lawson, PanAgora
Doug Woodby, Public Comment
Suzanne Cohen, Public Comment

Other participants (continued): Heather Evoy, Public Comment
Bradley Monton, Public Comment

PROCEEDINGS

CALL TO ORDER

CHAIR RICHARDS called the meeting to order and asked for a roll call. There was a quorum, and he moved to approval of the agenda.

APPROVAL OF AGENDA

MOTION: A motion to approve the agenda was made by TRUSTEE FEIGE and seconded by VICE CHAIR BRADY.

The MOTION WAS APPROVED with UNANIMOUS CONSENT.

APPROVAL OF MINUTES (December 11-12, 2018)

MOTION: A motion to approve the minutes of December 11-12, 2018, was made by VICE CHAIR BRADY and seconded by TRUSTEE TANGEMAN.

The MOTION WAS APPROVED with UNANIMOUS CONSENT.

SCHEDULED APPEARANCES AND PUBLIC PARTICIPATION

PUBLIC COMMENT

CHAIR RICHARDS recognized Mr. Woodby.

MR. WOODBY stated that he was Doug Woodby, co-chair of a local affiliate of 350.org, an international climate action organization. The number 350 refers to the concentration of carbon dioxide in the atmosphere that scientists say is an upper limit above which life as known is not sustainable. The atmospheric level of CO2 is now over that limit, at about 409 parts per million and rising. He thanked the board for working to realize the highest investment returns for the benefit of all Alaskan residents. He noted that the Fund's portfolio management will be judged, in part, based on the ability of the Fund to measure and control risk in line with State and board tolerances and peer group norms. Those peer groups and others have concluded that divestment from fossil fuels is a prudent exercise of fiduciary duty. He continued that his organization appreciated the communication received from former Chairman Moran and Ms. Rodell last May, but we have yet to receive a response to the submitted requests at last December's trustee meetings. He submitted two public-record requests to Chris Poag, general counsel; one is for information on whether the Permanent Fund Corporation trustees and staff are taking climate change risk into account; and the other is for a list of fossil-fuel-related holdings.

CHAIR RICHARDS recognized Suzanne Cohen.

MS. COHEN stated that she is a member of 350 Juneau and a beneficiary of the Alaska

Permanent Fund. She continued that she was the proud parent of two young men; one a junior in college, and the other just graduated with a chemistry degree, and is eyeing a Ph.D. She added that those PFD checks every year made college affordable. She stated that it is clear that the Fund must take into account the risks that climate change poses to the Fund's investments and the importance of divesting from the fossil fuel sector. This is important for the benefit of current and future Alaskans. She added that she is here also as an indigenous Alaska Native woman, a lifelong Alaskan and a lifelong Alaska Permanent Fund beneficiary. It is in her best interest to want the Fund to have the greatest value possible. She thanked all for the opportunity to testify.

CHAIR RICHARDS recognized Bradley Monton.

MR. MONTON stated that he is from Juneau and does not support divestment in that it is hypocritical. He continued that at the last quarterly meeting Chairman Richards raised the question of how to involve the trustees more in discussing and engaging with what the Fund is doing. For the record, he admired the work that the investment is doing, but thought that there is a mistake being made when it comes to public equity investing. He also went through a simple proposal to consider how to engage and move to his recommended 100-percent index. He thanked all.

CHAIR RICHARDS ended public participation, and moved to the CEO report.

CHIEF EXECUTIVE OFFICER'S REPORT

CEO RODELL reminded all that trustee education is an important part of the ongoing responsibilities of trustees, and staff tries to present opportunities in a number of different places. She stated that the Governor's office has asked all the departments and agencies to look at and cut travel for the FY 2020 budgets. She added that a travel policy was put together in 2017, and is being reviewed by the Governor's office. She mentioned that Kimberly McGinnis, a finance instructor who oversees the University of Alaska Fairbanks student investment fund, as well as 16 students, are here from the University of Alaska Anchorage and the University of Alaska Fairbanks. This will help make for a successful internship program when it is launched. She highlighted the financial report for December 31st because the statutory net income and accounting net income look very different. She explained that it went to the heart of how statutory net income was calculated. It is not an accounting principal, but is a legislative construct in order to move realized income into the earnings reserve account. She then touched on the investment management fee report and gave a sense of how those fees changed fiscal year to date. These have been made available quarterly to the board and the Legislature for ten years or more.

LEGISLATIVE UPDATE

CHAIR RICHARDS moved to the legislative update, and recognized Pauly Swanson.

MS. SWANSON stated that she is the communications manager for APFC. She noted that APFC is pursuing two legislative initiatives as approved by the board, inflation-proofing of the Fund with resolutions 1701, 1081, and 1804 passed by the board, all affirming the importance of inflation-proofing the principal in order to preserve its purchasing power for future generations. This directive is affirmed in the presentations and discussions with the Legislature. The other

initiative is procurement streamlining. A bill sponsor has not yet been identified to pursue this exemption from the State Procurement Code for APFC's investment-related activity such as the due diligence that is associated with the direct investments. She explained that APFC is currently exempt from the Procurement Code only when making an investment using Fund assets and exercising the investment power of the assets. She added that one of the main issues before the Legislature this year is passing a balanced budget. The recently established formulaic POMV draw from the Fund offers clarity with regard to the amount that is available for expenditure from the earnings reserve account under the rules-based structure. She explained that the board did approve an FY20 budget request at the annual meeting. The request to merge APFC's two allocations is designed to allow for a comprehensive approach to resource planning and a more nimble structure given the blending of resources to support both the internal and external management of assets. She stated that there is one bill that provides a special appropriation to the principal of the Fund. It is a transfer of \$5.5 billion from the ERA to the principal and was introduced by Representative Kreiss-Tomkins; and is in the House State Affairs Committee. There are also two legislative proposals that seek to fund a portion of the 2016, 2017, and 2018 Permanent Fund Dividends that were not appropriated at the statutory threshold that are funded with an appropriation from the ERA and is estimated to be about \$2 billion. Senator Wielechowski's proposal provides a back payment as one lump sum. It is in the Senate State Affairs Committee and has not yet had a hearing. She explained that Senate Bill 5 was introduced by Senator Stevens and provides that APFC will manage municipal assets with a \$50 million minimum if directed so by a municipality. A similar bill, Senate Bill 161, was introduced back in 1997. She stated that those bills will continue being monitored, and she will report back to the board as they progress through the process.

VICE CHAIR BRADY commented that SB 5 should be taken seriously, and that a good discussion should be had when there is time.

TRUSTEE RUTHERFORD commented that it would be helpful to have a fiscal note with information available for a complete understanding of how the corporation feels about the costs and implications of some of these bills.

CHIEF INVESTMENT OFFICER REPORT

CHAIR RICHARDS moved to the CIO report, and recognized Mr. Frampton.

MR. FRAMPTON began with a summary of his quarterly letter and commented on the volatility of the market; with a worst end to a year since the Great Depression, with the best in markets in general, and the best start to the year in the last three decades. He highlighted that there is a different format for staff presentations, to emphasize the current environment, current strategic initiatives, touch on a bit on past performance, but focus more on future performance, as well as risks and opportunities being seen in the market. He also highlighted the focus on the asset allocation portfolio, which is the one most investors would label the cash portfolio. He stated that in the past three years the vast majority of the cash was with that overlay program, and now a majority of the asset allocation program, the unencumbered cash, is just regular cash. He continued that professionals who can explain all elements of the asset allocation portfolio will be presenting to the board, as well as the internal Fixed Income team that manages a majority of the unencumbered cash. He added that a big topic for the investment team is recruiting. There are a number of open positions across every asset class, except for public equities, and we are

recruiting at different levels. He talked about the importance of the May board meeting when the private market pacing plan will be done, and we will be laying out the projections for money coming back, going out, and the denominator, which is the value of the Fund.

RISK OVERVIEW

CHAIR RICHARDS moved to risk overview, and recognized Sebastian Vadakumcherry.

MR. VADAKUMCHERRY began comparing the beginning of the year 2018 to the end of the year. He stated that the key point is that while the total Fund size declined from \$64.5 billion to just under \$62 billion, the value at risk in terms of percentage and dollars increased by almost 50 percent. That is primarily because of the markets being more tired during the last quarter of 2019. He continued and highlighted two things: the risk diversification benefit of the portfolio, which actually declined during the year; and a deeper dive into the whole diversification of the portfolio looking at value at risk compared to the contribution of each asset class to the total pie. He pointed out in the fixed-income-plus portfolio and the real estate portfolio, the ratio of contribution VaR to standalone VaR is almost 60 percent for a fixed income portfolio, which reflects the benefit from diversification or the lack of correlation to the public and private equity markets. He continued to tracking error, statistics that measured realized volatility and Sharpe Ratios, asset class and factor contributions to risk and risk scenarios. He also covered Geographic, Currency, and Liquidity risks for the Total Fund.

CHAIR RICHARDS called for break.

(Break.)

CHAIR RICHARDS reconvened back on the record, and recognized Steve Center from Callan.

PERFORMANCE REVIEW

MR. CENTER began his presentation with a discussion about capital markets as a whole and what was seen during the previous quarter. He stated that the capital markets had a difficult ride, and 2018 ended up with a return to volatility. The economy remains strong, and the U.S. job market has had a rapid improvement in the labor force. He spent the bulk of the presentation talking about the performance of the Fund, what drove the performance, and how each of the individual asset classes were positioned. He talked about risk for the Total Fund, explaining that the Sharpe ratio for the Total Fund was quite attractive relative to peers, and had a long-term Sharpe ratio of about .5, which is very good. He finished up with the asset class information, infrastructure, private equity, and the absolute return portfolio. He stated that there is a Callan regional workshop in June; one in Atlanta, and the other in San Francisco.

ASSET CLASS UPDATES

PRIVATE EQUITY & SPECIAL OPPORTUNITIES

MR. MOSELEY stated that he heads alternatives for the Permanent Fund, which include private equity and special opportunities consisting of a little over 13 percent of the portfolio; also the income strategies, private income infrastructure, and absolute return. He continued that the goal

that is conveyed is what is being done and how it is being done. Private equities and special opportunities are two different, but related, portfolios. Special opportunities are about 5 percent of the overall Fund; and private equity represents about 8 percent of the Fund. He added that investments that are defined broadly as private equity are being pursued and being done a bit differently. It works well together, and the Fund commitment activity gets the deserved attention of the overall marketplace, which results in a lot of interesting deal flow; a current goal. He stated that the absolute numbers were attractive and justified the investment of time and effort. He introduced Rafael Ramirez who has more than a week of Fund experience under his belt, and a wealth of previous experience. He joined from Allianz Capital Partners in New York, and had experience in a public fund before that. He also introduced Samantha LaPierre, an experienced senior associate on the private equity team for about a year and a half.

MR. RAMIREZ stated that there was a lot happening in the private equity market and talked about a couple of important key indicators. Actively tracked are the private equity managers holding their assets for longer durations. General returns have compressed because of more market competition. GPs and LPs are taking on more global mandates; and LPs are evolving their investment strategy to include co-investments, secondaries and direct investing capabilities in-house. He stated that a playbook was outlined that should best position the Fund in years to come to an overheated market. He continued that the reporting and monitoring capabilities will be improved so that better informed decisions can be made more quickly. Next, the due diligence processes will be improved with the belief that manager selection creates the lion's share of the investment returns for the Fund.

MS. LaPIERRE noted that the public benchmark is being beat, as well as the private equity industry overall as a whole. She added that over all time periods, both the benchmarks are being outperformed even given the liquidity premium.

MR. MOSELEY explained that the private equity industry is outperforming public markets, which is good news. He moved to the performance page that is meant to capture absolute performance, and stated that there is more growth in venture than most U.S. public funds, though there is less than most endowments and foundations.

CHAIR RICHARDS called a lunch break.

(Lunch break.)

CHAIR RICHARDS reconvened the meeting and moved to private income and absolute returns.

PRIVATE INCOME & ABSOLUTE RETURN

MR. MOSELEY introduced Ross Alexander, the portfolio manager for infrastructure, and Jared Brimberry who covers both private income, income opportunities and absolute returns.

MR. BRIMBERRY stated that the benchmark is being outperformed in every period except for the five-year period; and the private income as a portfolio is outperforming in all five periods shown. He began with the absolute return portfolio and stated that the objectives are to deliver uncorrelated returns to traditional market-term asset classes, stocks, bonds and the Permanent Fund as a whole. He highlighted four things: First was what the current market expectations

were, the outlook for this strategy or asset class; next was the current market environment; the risks and challenges faced in this portfolio; and standard deviation.

MR. MOSELEY underscored that the early evidence is that there is value not just in the manager selection, but in the portfolio composition.

MR. BRIMBERRY moved to performance-orientation, and noted that the quarter was down 90 basis points, or 88 basis points for the portfolio. He explained that this was due to a bad November and a flat October and December. It was a disappointing quarter to a real return basis, but attractive relative to what the public markets did during that period of time. He moved to private income, which is a conglomerate of three different portfolios that were grouped together in December 2016, to group private market assets that had similar characteristics; those were an element of current income, downside protection, and a potential for some capital appreciation alongside the two other pillars. He stated that the majority of this portfolio is infrastructure. Across this portfolio we look to select quality fund managers.

MR. ALEXANDER noted that the private infrastructure objective matches that of private income, which is to achieve that return between fixed income and public equities. The key component is having some element of current income, not just relying solely on capital appreciation. The infrastructure assets are long-life assets with contractual or inflation-linked characteristics providing some level of downside protection. The assets are spread across multiple sectors, including airports, toll roads, wind and solar farms, pipelines, and telecom assets. He continued that the invested assets are around the world: approximately 45 percent of the current portfolio value in the U.K. and Europe; another third in the U.S., primarily focused on developed countries, although there is some exposure to developing emerging markets. He added that the bulk of the portfolio is in the core-plus and value-add where there are double digits and sometimes mid-teens returns. It is the manager taking on some development risk or bringing in an operational team that can really drive improvement in the organization. He explained that the primary way infrastructure is invested in is through private funds of a finite life, typically ten years. The co-investment platform has been expanded, with the benefit of no fees and oftentimes, no carry. He added that having the Permanent Fund size makes it one of the bigger players in the co-investment space and infrastructure. There is a lot of deal flow, and we can be very selective, choosing the best opportunities. He moved to the current market outlook and some of the risks that limit the ability to achieve the program's objectives: First, the downward pressure for market conditions could decrease the value of the current assets; second, excess dry powder is creating additional competition for acquiring assets; and the ability to purchase off market. Overall, the underlying infrastructure market fundamentals remain strong.

MR. BRIMBERRY moved to private credit and stated that it has a similar story to hedge funds in that we have been able to develop co-investment deal flow, which has not been done with many of the peers. Because of the nature of private credit investments, this quarter is the first where fund-of-funds represented less than half of the NAV. He added that the attribution of the managers that have been selected will give a greater say in how this portfolio is performing. Performance in the recent periods have been good. He moved to income opportunities, and stated that this portfolio was created or seeded with American Homes 4 Rent when the private income portfolio started being tracked in December 2016. The reason for this portfolio was to find a home for assets that have similar characteristics to other private income investments that do not fit neatly into infrastructure or private credit. He continued that it remains concentrated

with four investments driving the performance over the last 12-month period, with the expectation of an improvement over the next 12 months.

PUBLIC EQUITIES

MR. RAZZAQUE stated continued that public equities is around 38 percent of the Total Fund. Predominantly externally managed at 90 percent; 10 percent internally managed, with the internal management part to basically have more control over the asset management. He explained that there is a differentiation between private and public that is positively correlated, but different in how the world looks at private. He talked about a differentiation between a bad outcome from trouble from a broken strategy. There is a tendency to make changes at the wrong time. It is when it is not working that allocation towards active should be done. He added that it is a worthwhile effort to put resources in public equities, but there is a need to think long term and not get caught up shifting from where the focus should be. He then moved to overweight and stated that, geographically, the largest overweight is emerging markets. A year ago it was 8 percent, and is now about 4 percent. U.S. dollar and emerging markets have a very strong negative correlation; if the dollar makes a very strong move, it is a big headwind for emerging markets. He continued that last year the dollar started moving up, and our exposure was tactically used, and we still maintain an overweight. He explained the overweight to emerging U.S. equities and talked about the risk factors with a focus on what the Fed will do. He continued with profit growth and earnings growth getting stronger in the U.S., and clarified in greater detail how it all played out.

MR. NINKOV talked about the internal efforts over the last year and stated that asset allocation is one of the more powerful drivers of returns and something that can be taken advantage of given the access to world-class research. He continued that there are periodic discussions about currencies and interest rates that are very relevant for equities held with the fixed income team.

CHAIR RICHARDS moved on to fixed income, and recognized Jim Parise.

FIXED INCOME

MR. PARISE stated that the whole fixed income team is present and then began with an introduction to fixed income, which is bonds that provide a consistent income stream, and most importantly, capital preservation. Because of the fixed income allocation, the team was able to preserve some capital. His example was last quarter when the S&P 500 was down 13.5 percent, the Agg was up 1.5 percent; if there was no fixed income, about \$2 billion would have been lost last quarter just on that.

MR. CENTER stated that, historically, the Permanent Fund also used fixed income because of the mechanical nature of how the dividend was calculated and had more realized income. He continued that the realized income side made a higher allocation to make fixed income make sense, particularly at the beginning of the Permanent Fund's creation.

MR. PARISE noted that it is thought of as the anchor to the portfolio. If there are market crashes, corrects, fixed income is where it comes in to get the liquidity. It is a highly liquid portfolio. He continued that with the fixed income team, there is a total return versus benchmark, and is how the portfolio is managed. He added that the board has given a

benchmark, as a mandate, and the job is to try to beat that benchmark. That is the day-to-day focus. He stated that the return expectation for fixed income is going to be driven by an interest-rate environment. He continued that it is very difficult to call interest rates. The team does not feel that it has the resources or the edge to predict interest rates, and we do not. The focus is on where within that portfolio to allocate funds and what securities to buy.

REAL ESTATE

MS. DURAN began by explaining that the real estate portfolio provides diversification to the overall portfolio and returns between equity and fixed income. The final object is to meet the long-term return objectives of CPI plus 5 percent. That last objective is very difficult to do given where they stand today with the very rich and late-cycle type of investing in real estate. The benchmark is NCREIF NPI, which is basically all of the core real estate assets that are held in the United States by institutional investors. She continued that the office retail, industrial, multifamily, plus hotel, are included in the benchmark; and all properties must be income-producing. There are no development properties and no land deals. She added that all of the APFC real estate investments must meet this benchmark whether they are U.S. or overseas investments. She stated that the strategic plan is predicated on a mix of core and noncore assets. She explained the portfolio's composition, and then explained about how the targets were set. She added that the plan is formulated based on what is seen in the market and is theme-driven, a lot of demographic drivers, and a lot of cycle drivers. She continued that there is a significant overweight to retail and multifamily, which is a result of the big sale last year.

MR. ANDREYKA talked about core investments and their characteristics; mainly they are in dominant locations, and need to be in primary markets: Fully leased properties, credit tenancy, long leases, diversified rent roll, and durable income stream. He continued that noncore are more dependent on depreciation. Typical are lease-up risks, construction, some financing and credit risk. There is also counterparty risk with developers and joint venture partners. He explained that building to core is done by acquiring quality products through development when acquisition cap rates are below return on cost. The niche investments that are being targeted are self-storage, medical office, senior housing and student housing. There was an ability to pick up nontraditional assets at favorable pricing in comparison to conventional core real estate debt.

MS. DURAN explained the transaction levels and the high activity in the third and fourth quarters. She stated that they are still on the same levels. She continued that the last quarter was tough and showed the impacts.

MR. FRAMPTON stated that the fundamentals of the portfolio are really strong; and then there is appraisal noise which he does not dismiss, but it is not realized activity. It is a long-term asset class. He added that he does not think there is a problem.

CHAIR RICHARDS called a break.

(Break.)

CHAIR RICHARDS moved to asset allocation.

ASSET ALLOCATION STRATEGIES

MR. FRAMPTON introduced Valeria Martinez, the director of asset allocation. This portfolio has three different strategies within it: unencumbered cash; cash benchmark toward Total Fund; and a currency management piece.

MS. MARTINEZ stated that the asset allocation portfolio is the Fund's first source of liquidity for all cash needs, including funding general operations, POMV transfers to the State, and funding private markets' capital calls. She described the three pieces that compose the asset allocation portfolio: the liquidity strategies which include unencumbered cash, short-term fixed-income securities managed internally, and liquid equity and bond futures portfolio managed by NISA; risk parity strategies; and currency management. She continued that the objectives are: long term CPI plus 3%; short-term blended benchmark of multiple asset classes; providing liquidity for the Fund; and managing currency risks.

MR. FRAMPTON explained that previous to 2016 there was just a cash allocation and the ECIOs were in hedge funds. The ECIOs were moved and solidified in that 2016 investment policy, and there was a basic investment common risk. He stated that one of the biggest challenges in managing this portfolio for outperformance is how much cash versus risk assets.

MS. MARTINEZ stated that it is not her decision to be overweight or underweight, but it is a derivative of the obligations. She explained that the overlay is a very important tool that the board decided on, and staff recommended to have, and it needs to be used correctly. When we began, all the cash was overlay, which did not give the opportunity to make decisions to hold cash. Now there are two options: either holding cash or to overlay. She moved on to a few highlights from the different programs since the last presentation. She stated that liquidity has remained around the same levels as of December 2018, basically because the obligations have stayed the same. She continued that the biggest obligation is the State transfer and, from quarter to quarter, the amount that needs to be sent is about the same.

MR. FRAMPTON summarized that risk parity is a slightly different way of managing institutional portfolios to a similar return objective.

MS. MARTINEZ stated that the new risk parity manager is PanAgora. She introduced Bryan Belton and Michael Anderson. Mr. Belton is the director of the multi-asset group and responsible for the daily management of the firm's risk parity, multi-asset, global fixed income, currency and commodity portfolios. He is also a member of the operating and directors committee. Mr. Anders is also a director and head of global sales and responsible for business development and client relationships for PanAgora.

RISK PARITY STRATEGIES

MR. ANDERSON began with a short background on PanAgora which originated in 1989. It is a strictly 100 percent quantitative asset management firm serving institutional clients around the globe. He stated that the strategy that he is talking about launched in 2006, and commands approximately \$11 billion of the \$46 billion of assets that PanAgora manages. He continued that there is a total of 160 employees with approximately 12 of those in the global business development area. They are all highly skilled professionals with many years of experience and

are out in the marketplace talking to clients and consultants on a very consultative level. That is how they engage in a partnership relationship with clients. He described risk parity and how it is viewed; why to adopt the strategy and consider it as an investment option; and the differentiating features and why PanAgora for this particular mandate.

MR. BELTON stated that risk parity started with the two universal investment objectives: grow assets through investment returns at a rate that is consistent with what the required prorate is, the actual assumption; second is caring about that path to wealth accumulation -- the more stable the better. He moved to the plan objectives and the sources of return: capture long-term risk premiums in equity risk, interest rate risk, and inflation risk; many hybrid asset classes, credit, private equity, real estates, are combinations of the three primaries. Risk parity is designed to achieve a dual investment objective. It invests in primary colors of market premia to achieve returns, and employs an alternative weighting scheme to generate a stable path to wealth creation across different environments. It will typically outperform a traditional allocation when a plan needs the most help, and provides downside protection in periods with negative economic surprises. It also provides upside participation in periods with positive economic surprises, but will typically lag equity-centric portfolios. He also talked about how the exposures are built.

CHAIR RICHARDS called a five-minute break.

(Break.)

CHAIR RICHARDS called the meeting back to order and moved to foreign currency hedge strategies with Adrian Lee & Partners.

FOREIGN CURRENCY HEDGE STRATEGIES

MS. MARTINEZ introduced Adrian Lee, President and Chief Investment Officer of Adrian Lee & Partners, and also Philip Lawson, head of portfolio management.

MR. LEE stated that his firm is a 100% employee-owned asset manager specializing in quantitative research-proven currency and international fixed-income management. He explained that the founding partners pioneered active currency management in 1989 at J. P. Morgan Investments and founded Adrian Lee & Partners in 1999 to focus exclusively on active currency management. He added that they are a team of 30, with an average of 15 years' experience in currency management, and the majority of employees are equity owners. He talked about currency and how currency overlay works, and then moved to their investment philosophy, explaining that they are fundamental investors, relying on three premises: fundamental economic factors determine currency equilibrium over time; research-driven valuation analysis identifies departures from this equilibrium; and experienced investment management can exploit these deviations to add return over time. He asked Mr. Lawson to talk about the portfolio.

MR. LAWSON began by looking at the guidelines for the portfolio which will help to understand what they are mandated to do and not do within the portfolio. He stated that the objective is to add 1 percent of return, targeting a risk level of about 1.75 to 2 percent annually; and make 1 percent annually over a three- to five-year period. The index tracked is the MSCI EAFE. That gives about 11 developed currencies that are being looked at. He explained the

graphs that showed how currency returns work with the index and how the active positioning works around that. He stated that the performance has been challenging because of cross-hedging into things like the Australian dollar, the Norwegian Krone. He continued that those are commodity currencies, and commodities have been performing quite well. He added that, unfortunately, these currencies are susceptible to the volatility in commodities as well. He stated that China is still the biggest consumer of global commodities, and one of the fears was how the trade talks were going between the United States and China. The tariffs that had been put on the Chinese economy had slowed the growth in China more than the market was expecting. He added that some of the commodity currencies could actually do quite well against the dollar, even though some of the central banks will probably pause their hiking cycle.

MR. LEE thanked all for putting their confidence in them. He added that this program is designed very well, and commended the Alaska Permanent Fund Corporation for doing it successfully.

CHAIR RICHARDS thanked them for their interesting presentation, and adjourned the meeting.

(Alaska Permanent Fund Corporation Full Board meeting adjourned at 5:15 p.m.)

FEBRUARY 28, 2019

CHAIR RICHARDS reconvened the meeting.

LIQUIDITY OVERLAY STRATEGIES

MS. MARTINEZ stated that this is the NISA overlay program and asked them to begin.

MR. YESS stated that he is the managing director of the client services group with NISA. He introduced Kevin Schuman, a director who has been with NISA for 20 years; Ann-Marie Gehring, senior manager, who has been with NISA about 10 years.; and Rick Ratkowski, a director in the investment strategies group and spends a lot of his time working on implementing, designing and monitoring overlay strategies. He began with a quick overview of the company which has been in business 25 years and has a very straightforward business model with a small number of very focused areas. He stated that they always seek strategic relationships with clients that are all institutional clients. He continued that everything is in a separate account so each situation can be customized to each client. He added that everything done is always to an end-of-risk control, and we are risk managers at heart. He commented on their derivative business and stated that the tools are viewed as tools in a toolkit, and solutions are customized to the client. He explained that their clients fall into one of two genres: either they are risk-reducing, or they are cost/fee reducing. He stated that NISA is 100 percent employee-owned and 100 percent independent. There are no joint ventures with anyone, and no custodians. He asked Mr. Ratkowski to go deeper into the derivative strategies.

MR. RATKOWSKI stated that NISA's overlay engagements can be divided into four categories that encompass a wide spectrum of programs that support the clients. He explained the types of strategies along with the various types of exposures and instruments used for those strategies.

MR. YESS moved to the 30-person senior team at NISA that have been together for a long time

and explained that everyone is part of the ownership programs of NISA. This has been a helpful glue in both recruiting and retaining talent.

MR. SCHUMAN gave a brief overview of the program and began with five bullet points: Reduce tracking error vs. plan policy allocation, which allows assets to be fully exposed to markets while maintaining cash for liquidity needs; reduce cash drag and seek to increase expected returns; lower expected plan transaction costs for a given level of expected policy tracking error; coordinate large movements between physical managers using synthetic positions. He added that the fifth may have greater flexibility to add or remove physical asset managers. He moved to assessing the impact of cash securitization and talked about the return drag reduction and the structure of the strategy as it stands now.

MR. RATKOWSKI commented on the strategic nature of this program because cash earns less than equity, on average. Equities earn a market risk premium. He explained that part of what NISA does is going through and customizing the returns to try to reduce any potential costs. There is a cost consideration, a liquidity consideration, and then a tracking error consideration. He went over the size and composition of the cash securitization pool which has strategic and operational ramifications. He stated that the cash/collateral pool should satisfy and facilitate any margin or collateral requirements to the extent backup sources of collateral or cash liquidity is available. He continued that there is a very risk-controlled process at NISA that ensures agreement on the market value of the current positions, the market value in the NISA account, and the amount that needs to be traded. There are two groups involved in that process: the hedge portfolio management team; and the on-desk hedge portfolio management team. There are four people doing those calculations to ensure accuracy. He added that once it is verified it will be on the portfolio management team to execute those futures contracts currently.

MS. GEHRING stated that risk control is very important, and we know that these programs are at the plan level. There are futures agreements in place for this program, which was able to start very quickly. She continued that those documents contain what is considered for best-in-class terms, minimum threshold and transfer amounts, daily collateralization, valuing the positions every day. She stated that clearing/counterparty risk management is the valuation and management of daily margin and/or collateral inflows and outflows with full teams. The overlay portfolio strategy has proprietary models to monitor the efficacy of the hedge strategy, and there is coordination of the hedge with underlying portfolios. She continued that performance measurement is provided monthly which shows that the strategy is actually tracking the index. This will have very low tracking error.

CHAIR RICHARDS stated appreciation for the great information and moved to the naming of the center.

NAMING OF THE MEETING CENTER

CEO RODELL stated that the renovation of the headquarters was undertaken and will be ready to move in on March 6th. She continued that the renovation resulted in the Hugh Malone Boardroom being repurposed and used for offices and expansion. She explained that the boardroom is designed to be divided into two separate conference rooms, and we are just naming the boardroom itself. A request for nominations was sent out, and it is up to the board as to how to proceed.

VICE CHAIR BRADY suggested using a name of a place, like the Denali Room or the Gastineau Room until it can be replaced later on with something more significant.

TRUSTEE RUTHERFORD stated that she is inclined to rename it the Hugh Malone Room; or for Dave Rose who did a great job of establishing the Fund.

TRUSTEE FEIGE stated that a lot of people contributed to building the Fund and corporation and suggested recognizing the heritage of the region and this part of Alaska with Klukwan; a reflection of the eternal village translation. It is broader and bigger. Name the boardroom Dave Rose, and the conference room Alpha.

VICE CHAIR BRADY explained that Dave Rose was the first executive director, and he has no problem with that.

MOTION: A motion to name the meeting center the Klukwan; name the boardroom the Dave Rose Boardroom, and name the conference room the Alpha Conference Room was made by TRUSTEE FEIGE; seconded by TRUSTEE MORAN.

After a ROLL CALL VOTE the MOTION WAS APPROVED (Moran, Brady, Richards, Feige, Rutherford in favor).

CHAIR RICHARDS called a 15-minute break.

(Break.)

CHAIR RICHARDS called the meeting back on the record and moved to strategic direction.

STRATEGIC DIRECTION

TRUSTEE PAPER

CHAIR RICHARDS stated that the first item on this agenda is the idea of revising the trustee paper program. There was a history for the Fund to have the board of trustees write papers on various high-level topics over the years. The last trustee paper was done in 2008 or 2009 on other sovereign wealth funds that have similar characteristics. His thought is to revive the program and ask staff to coordinate putting together another one, which would probably involve hiring a consultant or two, a copy editor. He suggested that the board take on how other sovereign wealth funds are handling their interaction with the government in terms of their fiscal policies for funding government and the rules around them. His proposal to the board is to ask staff to put together a trustee paper on the subject for the people of Alaska.

TRUSTEE FEIGE asked if that would be looking at these other sovereign wealth funds, to consider similar peers and then examine the Permanent Fund's use of POMV and how the funds and distributions of the funds are managed to get a comparison contrast.

CHAIR RICHARDS replied yes.

VICE CHAIR BRADY stated that it sounds fine except that he is not in the position to support the board taking a political position in any way, whatever it has to do with. He continued that he did not have a problem with trustee papers, but does not want this board to be part of taking a political position on anything that the Governor, the Legislature, or anyone else is advocating.

CEO RODELL asked to understand the resource needs behind the trustee paper and who on staff will participate in terms of how much money the trustees are willing to spend towards this. There will be a need to have an RFP to get the consultants and an RFP for a copywriter. She asked about the logistics of staff time and the timeframe for publication so there is no confusion about the expectations and cost to having this paper.

CHAIR RICHARDS replied that a six-month timeframe would be fine. He continued that he is not sure of the cost, but that the budget for the last trustee paper was \$100,000, which seemed high. It could probably be done for \$70,000.

CEO RODELL stated that some research needed to be done on where this money would be sourced to and where it would come out of.

VICE CHAIR BRADY asked about the purpose of this.

CHAIR RICHARDS replied that the purpose is to explore and analyze what the peers are doing in relation to similar problems and similar issues that the Fund faces, and if anything could be learned from how others have tackled the problems.

TRUSTEE RUTHERFORD stated that she agreed with this and it is worth repeating that there is a difference between informing the public and the Executive and Legislative branches about issues that are about the Permanent Fund and advocating, which is more lobbying for a particular outcome. It behooves the board to provide information to the public of Alaska at this critical time. There is a lack of information about ways that the Fund can be affected by various decisions that are made and will be made over the course of the next year or two.

MOTION: A motion to request the Administration and the Executive Director to look for money for and begin the process of putting together an RFP for the subject matter proposed was made by TRUSTEE RUTHERFORD; seconded by TRUSTEE FEIGE.

After a ROLL CALL VOTE the MOTION WAS APPROVED (Moran, Brady, Richards, Feige, Rutherford in favor).

INVESTOR ADVISOR PROGRAM

CHAIR RICHARDS explained that this item was put on at his request and the genesis of it was the last board meeting which was the first meeting that he had chaired. An observation was made that there is the investor adviser program which is great, but we are not getting everything out of it. His thought was to have a board discussion on a way to get more out of this resource. He asked staff to go first.

MR. FRAMPTON stated that he talked to people on his team and there was a clear consensus that the advisers are viewed as the board's advisers as opposed to the staff's advisers in the

current setup. There has been some interaction, but it is not consistently regular or ongoing and could be improved upon. He suggested encouraging more involvement ahead of meetings as well as having a phone call with the investment team after the board materials are released before the board meeting for interaction and questions.

CEO RODELL suggested taking a step back and to think about why these advisory boards were created. More than 60 percent of public plans in the United States have these advisory boards. She stated that Washington State Advisory Boards were designed to fill the gap between the lay knowledge of voting board members and the technical expertise that staff, consultants and fund managers; to bridge that gap in terms of understanding what is going on with the Fund, the investments, and to help encourage the robustness of that discussion. She continued that the charter for the investment advisers was put together in 2007/2008, along with the whole package of charters which was revisited three years ago, renewed and adopted. She added that there is a formal list that the board adopted in terms of duties for the investment adviser in that charter.

MR. MITCHELL summarized George Zinn's remarks that have been circulated to all the board members about the degree of engagement that he had as an adviser was dependent on the CIO. He then explained that the history of the Permanent Fund's investment advisory committee went back to Bob Store at the Alaska State Pension Investment Board, which became the ARMB. He had advisers there and did the same at the Permanent Fund; three advisers, all meetings, participation with staff, participation during the course of the meeting, as well as remarks at the end. He continued that at some point during another budget crisis it was thought to be too expensive, and to have them instead come one at a time over the course of the year. He added the cost, whether an adviser is paid too little or too much should depend primarily on what is being received from the adviser. He suggested reviewing the charter and the contract, and figuring out what is wanted.

TRUSTEE FEIGE stated, that being new, it would be helpful to have a bit more interaction with the board advisers. She suggested a possible conference call a few days before the quarterly meeting to review and go over some of the key points. A little feedback would be helpful on all the technical information. She added that it would help in understanding what will be presented, the overall trajectory of the Fund, and how to best protect and guide it.

CHAIR RICHARDS replied that as long as there are not Open Meetings Act issues where no more than three board members are allowed to talk to each other at any given time. He suggested a staff call where the board is allowed to listen in but not participate. He added that it is a great idea. He stated that rotating advisers that show up every third meeting does not have the value of continuity and the value of presence. He would like to see that change. His thought for the next meeting is to offer an amendment to the charter, give staff and the board some time to internalize what that looks like. He asked the trustees for any comments.

VICE CHAIR BRADY stated that Mr. Mitchell has read the charter and is doing what he signed a contract to do. He listens until he is asked to contribute, and the Chair can also always engage

the advisers when he sees fit.

TRUSTEE MORAN stated that a lot is done in these meetings and sometimes the agendas are a bit more ambitious than what is capable. He continued that it would be useful to set the agenda up so that there was a specific amount of time that the advisers knew they had to address the board. They could talk with the chairman or staff ahead of time to decide what would be relevant to the meeting.

TRUSTEE RUTHERFORD stated that the value of the wonderful resource available is not optimized. She would like to see the discussions focused more on particular subject matters. The general comments made at the meetings are important, but it might be that particular specific discussions may be more helpful when trying to make decisions, whether an investment strategy or a particular approach is considered. She continued that she would like to see some changes in how the trustees are interacting.

CHAIR RICHARDS stated, that if it works for all, to synthesize that and someone will come up with a proposal for the board meeting that would involve some change. He added that a lot of this could be done informally without real board action; but if change to the charter is necessary, it will be brought up at the next meeting.

CEO RODELL asked if it is the board's desire to have all three advisers at the meeting going forward starting with the May meeting.

CHAIR RICHARDS replied that his personal preference would be to have the advisers at all meetings. He suggested having the conversations off-line with each of the advisers, and taking action at the next board meeting.

CEO RODELL suggested a compromise to put the invitation out and leave it optional instead of mandatory for the advisers to attend each meeting. She stated that an invitation will be issued that they would be welcome to come to the May meeting; the primary adviser that is needed for the meeting, and the other two may chose to come.

CHAIR RICHARDS agreed and moved to the board agenda structure.

BOARD AGENDA STRUCTURE

CHAIR RICHARDS stated that he heard a comment to move the investment advisers earlier in the agenda, which makes an immense amount of sense. There has also been the suggestion of affirmatively tasking them with something to do for an allotted amount of time. He talked about focusing a little bit less on the past performance of the last quarter and focus the presentations a bit more on where it is going in the future. He asked for other comments.

VICE CHAIR BRADY stated that the purpose of this meeting in Juneau goes back to being here during the Legislative session which he believes will go into the 120-day session. He suggested that the next meeting in May be in Juneau and the September meeting be in Fairbanks. He added that it makes sense to be in Juneau while that session is still going on.

TRUSTEE MORAN stated that, historically, if the Legislature is in session it makes it difficult

for the Commissioners to attend the meetings. Meeting in Juneau would give a better opportunity for the two commissioners to participate.

CEO RODELL clarified, for the record, that the May 22-23, 2019 meeting of the board will occur in Juneau. The September 5th meeting, which is the Audit Committee and the Budget Planning Session, is scheduled for Juneau. The September 25-26, 2019 meeting will be held in Anchorage. The December 3-4, 2019 meeting will be held in Fairbanks.

CHAIR RICHARDS asked for comments.

TRUSTEE RUTHERFORD asked CEO Rodell about the implications of the Governor's budget, which has a significant reduction for the corporation.

CEO RODELL replied that the only area of concern is with personal services, and we want to make sure that the public is aware that the Governor's budget, as transmitted, took out all the incentive comp, the regular 3 percent merit increase for everyone was also taken out. She stated that the entire personal services budget was taken back to the FY19 request. She added that it was important to keep fighting for those resources.

TRUSTEE RUTHERFORD asked if there was an opportunity to talk to the Office of Management and Budget about the reasoning behind the request.

CEO RODELL replied that OMB has changed the budget process considerably for the departments. She asked Trustee Feige to offer a bit of guidance of how OMB is thinking about that.

TRUSTEE FEIGE stated that in the process, the current administration has undertaken budgeting, and the bulk of the work was undertaken on the OMB side. She explained that there was a prioritization process that took place separate from the departments, and there was very little iteration on that prior to the budget coming out. She encouraged reaching out and talking about the things that are concerning.

CEO RODELL reassured the board that there are open lines of communication, and we are navigating through them. She stated that there was a major policy shift in budgeting when it comes to the corporation in that OMB included an authorization amount for the net-of-fee arrangement. They included \$420 million of budget authorization to cover net-of-fee arrangements, something that has traditionally never been reflected in the budget. It is unclear what the intent or how that would work, and we are working through that.

TRUSTEE FEIGE thanked staff and CEO Rodell for all of the input. It was an incredibly informative session. The takeaway this time was protection of risk and really wanting to understand where risk and exposure is and how to mitigate that in some rather uncertain market times so that the security and the stability of the Fund overall is maintained.

CHAIR RICHARDS commented on attending the Callan conference. It was great and an amazing job was done. His final comment is from his perspective, a former attorney general, to think about getting another lawyer on staff to look at securities litigation which will pay for itself easily. He would hope if there is a second lawyer it would be a core part of the focus. Law is

just overwhelmed, and they do not have resources to focus on that area. With that, he thanked staff for a great meeting, and then adjourned the meeting.

(Alaska Permanent Fund Corporation Full Board meeting adjourned at 11:05 a.m.)