State of Alaska ALASKA RETIREMENT MANAGEMENT BOARD MEETING

Location

Alaska State Museum Lecture Hall 395 Whittier Street Juneau, Alaska

MINUTES OF April 4 - 5, 2019

Thursday, April 4, 2019

CALL TO ORDER

CHAIR ROBERT JOHNSON called the meeting of the Alaska Retirement Management Board (ARMB) to order at 9:00 a.m.

ROLL CALL

Eight ARMB trustees were present at roll call to form a quorum.

Board Members Present

Robert Johnson, *Chair* Tom Brice, *Vice-Chair* Gayle Harbo, *Secretary* Lorne Bretz Allen Hippler Commissioner Bruce Tangeman Commissioner Kelly Tshibaka (arrived late) Norman West Bob Williams

Board Members Absent None

Investment Advisory Council Members Present Dr. William Jennings Robert Shaw

Department of Revenue Staff Present

Bob Mitchell, Chief Investment Officer Scott Jones, State Comptroller Pamela Leary, Director, Treasury Division Zachary Hanna, Chief Investment Officer Shane Carson, State Investment Officer Stephanie Alexander, Board Liaison Mark Moon Steve Sikes Michelle Prebula Bronze Ickes Jesse Blackwell **Casey** Colton Victor Djajalie Kevin Elliott **Emily Howard** Kayla Wisner Tina Martin Sean Howard Tim Shockley Nick Orr **Stephanie Pham** Kekama Tuiofu Coltin Lanz Greg Samorajski

Department of Administration Staff Present

Kevin Worley, Chief Financial Officer, DRB Ajay Desai, Director, DRB Mark Breunig, Chief Technology Officer, OIT Kathy Lea Christina Maiquis Emily Ricci Shane Francis Betsy Wood Andrea Mueca Teresa Kesey Melanie Helmick Roberto Aceveda Dawn Bonnett Michelle Holland-Zenger Joshua Hartman

ARMB Legal Counsel

Stuart Goering, Department of Law, Assistant Attorney General

Consultants, Invited Participants, and Others Present

Paul Erlendson, Callan Associates, Inc. Steve Center, Callan Associates, Inc. Jay Kloepfer, Callan Associates, Inc. Nils Andreassen, Alaska Municipal League Greg Behar, Legal and General Investment Management Sara Shores, BlackRock Laura Champion, BlackRock Gaurav Mallik, State Street Global Advisors Robert Shapiro, State Street Global Advisors Gregor Andrade, AQR Capital Management LLC Zachary Mees, AQR Capital Management LLC Daniel Morgan, State Street Global Markets Michael Putica, State Street Global Markets

PUBLIC MEETING NOTICE

Board Liaison STEPHANIE ALEXANDER confirmed that public meeting notice requirements had been met.

APPROVAL OF AGENDA

MRS. HARBO moved to approve the agenda. MR. BRICE seconded the motion.

<u>CIO BOB MITCHELL moved to remove the executive session under Item No. 21, to be taken up at a future meeting</u>. <u>MR. BRICE seconded the motion</u>. CHAIR JOHNSON suggested taking up the election of the Chair of the Actuarial Committee under New Business. With those changes, the agenda was adopted.

PUBLIC/MEMBER PARTICIPATION, COMMUNICATIONS AND APPEARANCES

NILS ANDREASSEN, Executive Director of the Alaska Municipal League, which represents 165 cities and borough governments including 64 who are employers within PERS, addressed the Board. MR. ANDREASSEN noted that the AML had recently expressed concern with the appointment of Mr. Lorne Bretz in place of Kris Erchinger on the ARM Board, asserting that Mr. Bretz does not meet the statutory requirements for the position. MR. ANDREASSEN explained that statutes require that this seat be filled by a finance officer of a participating political subdivision. The Alaska Municipal League objects to Boards and Commissions defining someone whose job is purchasing and property appraisal as a "finance officer", which traditionally means someone with responsibility for the budget of a municipality or political subdivision. MR ANDREASSEN went on the say that the ARM Board is lacking in representation by employers in the retirement system, beyond the largest; and the League is concerned that instead of a cost-sharing plan, what has developed is a cost-shifting plan. He stated

that they believe it is more important than ever that this board represent employers and beneficiaries and others who can not only make the best decisions in the interest of the system, but who are fully aware of the consequences of those decisions.

APPROVAL OF MINUTES: December 11 - 12, 2018 and January 11, 2019

MR. BRICE moved to approve the minutes of the December 11 - 12, 2018, and the January 11, 2019 meetings of the ARM Board. MRS. HARBO seconded the motion.

With no objections, the minutes were approved.

ELECTION OF VICE CHAIR

CHAIR JOHNSON noted that the previous Vice Chair of the ARM Board had not been reappointed, so the board needed to elect a new Vice Chair. <u>MRS. HARBO nominated TOM BRICE</u>. <u>MR. WEST</u> <u>seconded the motion</u>. MR. BRICE confirmed that he would be interested in the position. CHAIR JOHNSON verified that there were no objections, then congratulated MR. BRICE on his election.

CHAIR JOHNSON welcomed two new members, MR. BRETZ and MR. HIPPLER, to the ARM Board. He also welcomed COMMISSIONER TSHIBAKA, who was not present at that time, and thanked all for their service.

STAFF REPORTS

1. **RETIREMENT & BENEFITS DIVISION REPORT**

A. Staff Introductions

MR. DESAI, Division Director for Retirement and Benefits, introduced EMILY RICCI, the chief account policy administrator. MS. RICCI introduced other team members in the DRB, including Shane Francis, healthcare economist; Betsy Wood, deputy health official; and Andrea Mueca, operations manager. VICE CHAIR BRICE noted the absence of Ms. Michaud, who passed away recently, and recognized the Board's appreciation for the work that she did.

MR. DESAI added that these are the people who have been working hard for two and a half years on the EGWP implementation.

MR. WORLEY asked the finance and accounting representatives to introduce themselves. Present were Christina Maiquis, responsible for financial reporting; Melanie Helmick, the state Social Security administrator and the employer auditor for the DRB; Teresa Kesey, who works in the finance section and oversees active payroll; Kathy Lea, chief pension officer; and Roberto Aceveda, counseling and education manager.

B. Membership Statistics

MR. WORLEY reported on retirement system membership through the quarter ending December 31 in the meeting packet. He noted that at the Board's request, they provided the membership accounts for the defined benefit plan and the defined contribution plan for comparison on a quarterly basis. MRS. HARBO commented that the Defined Contribution plan showed 863 full disbursements for PERS and 170 for TRS, almost as many as the number of full retirements, which is a lot of turnover.

C. Buck Invoices

MR. WORLEY noted that Conduent had changed its name back to Buck, and the summary of monthly billings was shown with quarterly results and a comparison to the prior year. MRS. HARBO asked whether the GASB reporting charges were done yet; MR. WORLEY answered that the reports were done the past quarter, but were currently being audited by KPMG, which might incur some minor charges. He also noted that Buck's contract is extended for one year, expiring June 30, 2020.

MR. WORLEY concluded by expressing his appreciation for the work that the DRB staff does.

2. TREASURY DIVISION REPORT

DIRECTOR PAM LEARY said she didn't have much that wouldn't be part of the committee reports, but she wanted to share appreciation of their staff. She recognized the new deputy commissioner, Greg Samorajski; and two employees who just celebrated 25 years with the State, opportunistic strategies manager Steve Sikes, and Michelle Prebula, who was the cash manager and now is an investment officer in the external public equity and DC plans. Also present were cash manager Bronze Ickes and assistant cash manager Jesse Blackwell, investment officer Casey Colton, head of fixed income Victor Djajalie; Kevin Elliott, part of the internal public equity team; Emily Howard, who is an investment officer in the fixed income group; Sean Howard, in the private equity and absolute return group; Scott Jones; and Kayla Wisner, assistant comptroller.

MS. LEARY thanked all of the staff for everything they do to make the Division run as well as it does. CHAIR JOHNSON commented that a silver lining in having more board meetings in Juneau is the opportunity to see all the staff from the Department of Revenue and the Division of Retirement and Benefits, and expressed the Board's appreciation as well.

3. CALENDAR/DISCLOSURES

MS. ALEXANDER directed board members to the disclosure document and calendar in the meeting packet; she noted that the calendar is a work in progress, and asked if anything should be added. CHAIR JOHNSON explained that an Actuarial Committee meeting is listed on May 2 and 3, and since the Actuarial Committee is largely a committee of the whole, MR. WEST had suggested compressing it into the Board of Trustees meeting. There were no objections, so MS. ALEXANDER will revise that schedule. Also, it was noted that the June ARM Board meeting is now scheduled to be held in Juneau.

4. CHIEF INVESTMENT OFFICER REPORT

Chief Investment Officer BOB MITCHELL explained that part of his regular report is a "Summary of Portfolio Moves", which was handed out at the meeting with an update included. He said that the purpose is to convey to the Board actions that he has taken under the authority that has been delegated to him to make investment related transactions other actions. MR. MITCHELL reviewed his report, giving brief explanations and inviting questions; he noted that the plans experienced net outflows of a little over \$400 million, at a rate of a little over \$90 million a month most months, except the month in which the state assistance payment is received, usually as a lump sum early in the fiscal year. That is almost a billion dollar outflow from the plans over a year, and it necessitates liquidating securities to fund, which is reflected in many of the transactions in the report.

MR. MITCHELL discussed the watch list, which currently has five managers on it, based on qualitative and quantitative criteria which would be considered for revisions later in the meeting.

MR. MITCHELL stated that a communication from a participant had requested that they consider adding bank certificates of deposit to the investment lineup for the DC and participant-directed options and creating an open brokerage window. He responded to the participant that he would raise those concerns to the Board, but would express his view that when considering new options, plan managers are mindful of the impact on the range of potential investment options available, and he doesn't think CDs have yields materially different from certain funds currently offered. MR. MITCHELL said that it is staff's view, and he believes Callan's as well, that when brokerage windows are offered they tend to have a low take-up, and more options may be a source of confusion to participants. MR. WEST asked if they had done any surveys on the issue, and KATHY LEA responded that they had, and only got about 20 percent in responses, and of those about 2 percent were in favor of a brokerage window. She added that about 80 percent of participants stay in whatever fund they were originally placed in. The 20 percent who do something else do it through the managed account feature, or on their own. VICE CHAIR BRICE suggested that the Defined Contribution Committee could review on a regular basis the efficacy of possibly offering additional options.

MR. MITCHELL also discussed the securities lending program which was reinitiated in February of 2017. The ARMB lends securities for which participants are willing to pay a premium to borrow, then the cash collateral that is received is invested in Treasury money market instruments. He said that they lend out 20 percent of their securities and get 80 percent of the revenue that they would otherwise get with a lot less operational complexity. State Street, the agent in this program, contacted them and asked them to waive sovereign immunity for a portion of the securities that are being lent. The waiving of sovereign immunity is standard boilerplate language in most agreements with international lenders and borrowers of securities, and they have lent to some of these borrowers since the inception of the program. However, the ARM Board's contract says that they aren't allowed to do that, and after discussion with Mr. Goering, they have instructed State Street to stop lending in those cases. After a couple of weeks, they got all of their securities back and suspended that activity, which should have an impact of about \$350,000 per year.

MR. MITCHELL pointed out a chart on the third page of his report which he described as an attempt to assist the Board by creating a framework of the decision-making of the Board, showing the

hierarchy of decisions in the areas of strategic allocation decisions, implementation by managers, and monitoring of the results.

5. FUND FINANCIAL PRESENTATION AND CASH FLOW UPDATE

State Comptroller SCOTT JONES noted that the February Board report is in the packet, and he would focus on the activity that has occurred in March and the first three days of April. At the end of March, the nonparticipant-directed plans had \$280 worth of income and experienced a \$102 million net outflow. The total for the plans was \$26.2 billion, and in the first three days of April, the plans had \$219 worth of income and net contributions of about \$4 million. Roughly \$9 billion is under internal management.

CFO KEVIN WORLEY explained the figures in his report on fund contributions and withdrawals for the benefit of new Board members. He noted that pages 4 and 5 show, at the request of Trustee Harbo, what financial activity occurs. MRS. HARBO asked a few questions, and commented that it looks like so far this year people leaving the system and taking their money out completely amounts to about \$48 million, or about \$6 million a month. MR. WORLEY added that another \$145 million is leaving through SBS.

6. CHAIR REPORT

CHAIR JOHNSON commented that the new trustees and commissioner have been welcomed, and the rest of the Board looks forward to working with them. He reported that he had sent letters to MS. ERCHINGER and MRS. SCHUBERT thanking them for their service; copies were included in the meeting materials, and he read the letters for the record.

CHAIR JOHNSON reported that he had participated in testimony before a Senate committee a couple of days prior to this meeting about ARM Board issues and unfunded liability. He said that he had taken part in numerous discussions regarding the state budget issues, and consistently urged appropriate increases in budgets for the ARM Board as well as staff to the amounts necessary to fulfill the legislative duties of collective decision-making and the best practice and administration of the retirement systems for the beneficiaries.

7. COMMITTEE REPORTS

A. Audit Committee

CHAIR JOHNSON reported that the Audit Committee had a meeting the day before the full Board meeting. They heard presentations from MR. WORLEY and MS. HELMICK of the DRB about the actual costs and their impact on the ability to audit, again in the same vein of urging appropriate funding for good auditing. MR. McKNIGHT, senior compliance officer with the Department of Revenue, gave a compliance report and update and reported that the FY19 Audit RFP is going through the normal procedures. CHAIR JOHNSON mentioned that there was significant discussion about internal auditing, which is a function provided by staff, and the presentation from DRB was helpful in concluding that those staff are following best practices as laid down by an association of public

pension fund auditors. CHAIR JOHNSON added that the proxy policy was discussed, and he suggested that the Board should review that policy.

B. Operations Committee

VICE CHAIR BRICE reported that yesterday he was made chair of the Operations Committee, which is a combination of the old salary committee and the old budget committee. COMMISSIONERS TSHIBAKA and TANGEMAN spoke at the Operations Committee meeting about pending legislation regarding exempt and partially exempt employees and their salaries that may affect some Treasury Department staff. VICE CHAIR BRICE said there was vigorous conversation about the ARM Board budget and plans for upcoming meetings; more meetings will be held in Juneau and by videoconference to save money. They also discussed the Board's educational efforts, which is a statutory requirement, and the travel budget.

VICE CHAIR BRICE also stated that Callan had given CIO Mitchell some recommendations on the ARM Board's guidelines and Investment Policies and Procedures Manual, which Mr. Mitchell will prepare to address in proposals to the committee and the Board over the next couple of meetings.

<u>VICE CHAIR BRICE moved to adopt the charter for the Operations Committee as written.</u> With no objections, the charter was adopted.

C. DC Plan Committee

BOB WILLIAMS, chairman of the DC Plan Committee, reported that their meeting the day before was lively, with two people calling in to give public testimony. One requested an update on the Monte Carlo analysis, and MR. WILLIAMS said they plan to have that for the June meeting. The other participant had questions about SBS, which KATHY LEA said they would respond to by next week.

MR. WILLIAMS reported that KATHY LEA and ROBERTO and LIZ DAVIDSON gave a legislative update and an Empower update, and SHANE CARSON and SEAN LEWIS from BlackRock presented to them about combining the existing TIPS and REIT options into a single multi-asset fund, which will come up as an action item recommended by the Operations Committee later in the meeting.

D. Retiree Health Plan Advisory Board

MRS. HARBO is the ARM Board representative on the Retiree Health Plan Advisory Board, and she reported that what they call the Rehab Board just celebrated its first year in February, when some of the members attended the quarterly meeting with Aetna, and they teleconferenced with staff in Juneau. MRS. HARBO said that the Division had been working on the rollout of OptumRx, a new pharmacy provider, and they had a successful rollout on January 1, 2019. EGWP, a wraparound to provide drugs through Medicare Part B, has been very successful. MRS. HARBO said that the reimbursement program will affect employee contribution rates starting in FY21.

MRS. HARBO said that most of the Rehab Board meeting the next day was spent on discussing a

modernization plan, with about 20 items that the Division wanted changed or increased, each of which must have a cost analysis by their actuary from Segal. MRS. HARBO also mentioned that the Division has been very successful with its Tele-Town Hall. The most recent one was held on March 21, and each time 500 to 1,000 retirees participate with lots of questions.

E. General Consultant Evaluation Committee

MR. MITCHELL stated that the contract for the ARM Board's general consultant and a real estate consultant expired on June 30th. The RFPs were issued for both, and the scope of the real estate consultant was expanded from just real estate to include all of the real assets within that asset class. The General Consultant Evaluation Committee, which met on March 6, was comprised of TOM BRICE, GAYLE HARBO, KATHY LEA, and BOB MITCHELL.

F. Real Assets Consultant Evaluation Committee

The Real Assets Evaluation Committee, which met on March 5, was comprised of BOB WILLIAMS, ZACH HANNA, and BOB MITCHELL. MR. MITCHELL reported that they met and scored the RFP respondents in all elements except the cost, which was kept separate, retained by Board Liaison Stephanie Alexander. The scores were compiled by Ms. Alexander and tabulated including costs, and later in the meeting the Board will take up the issue of selecting the new consultants.

8. LEGAL REPORT

Assistant Attorney General STUART GOERING discussed two matters in litigation that may affect the liabilities of the pension funds, the Metcalfe case and the retiree dental benefits case. The first is on appeal, pending oral argument in the Supreme Court, and the second is pending in Superior Court and should be decided soon.

9. PERFORMANCE MEASUREMENT – 4TH QUARTER

PAUL ERLENDSON stated that Callan's general responsibility to the Board is for performance reporting, to provide support and assistance to the staff as needed, and to help facilitate education so that the Board can fulfill their fiduciary duties. MR. ERLENDSON said that he and STEVE CENTER would go over the performance report as of December 31, give an introduction to some capital market issues, and after they speak, JAY KLOEPFER, head of Callan's capital markets research group, would present some preliminary observations about an asset allocation study.

MR. ERLENDSON discussed the conditions in the US economy, and said that over the last 10 years, the average public pension funds' return has been less than 6 percent, and the dilemma is whether to take more risk to get higher returns, or to settle for lower returns and higher contribution requirements. He discussed the difference between growth and value, and the choice of whether to use an index fund or to hire active managers. He explained interest rates on bonds and the beginning of an inverted yield curve, which suggests that a recession may be approaching, which is likely in an economy that has been growing for most of a decade.

MR. CENTER discussed the performance of the pension and defined contribution plans. He explained that in the presentation the PERS portfolio is used as representative of the overall pension system, since PERS and TRS are similar in asset allocations, and the other two plans are built the same way. MR. CENTER showed the asset allocation as of year end and compared it to the target asset allocation, cautioning that the information is no longer current. Then he compared how asset allocation of the PERS portfolio differs from other public funds, with a higher allocation to real assets and alternatives than many of its peers, and a substantially lower allocation to fixed income and slightly lower to domestic equity. These differences were positive for the plan relative to other pension plans, though performance was negative in the fourth quarter of 2018. He went over the Sharpe ratio, a measure of risk-adjusted performance, and standard deviation, which is an overall measure of volatility, in both of which measures the PERS plan is doing well compared to other public pension funds. MR. CENTER explained attribution tables which show the performance drivers of the plan relative to its benchmark, focusing on the columns on Manager Effect and Asset Allocation. He said that the overall driver of performance relative to the index over the past quarter and the past year has been the manager effect, particularly in the alternatives portfolio, and he discussed the performance of various asset classes.

The discussion of the DC plans was postponed until the next day.

CHAIR JOHNSON recessed the meeting from 10:51 a.m. to 11:04 a.m.

10. PERS/TRS ASSET LIABILITY STUDY

MR. MITCHELL explained that in September of 2018, the ARM Board had engaged Callan to conduct an asset liability study, which had last been done about ten years ago. The purpose of the study is to evaluate the asset allocation decisions with the benefit of evaluating the interaction of assets and liabilities. JAY KLOEPFER, executive vice-president and director of capital markets research and alternative research at Callan, presented the initial insights. MR. KLOEPFER explained that the point of the study is to help set investment policy, which is the cornerstone of what the Board does, and the most important decision is how much to risk in assets.

MR. KLOEPFER emphasized that there is no one right answer; each pension plan is unique. The goals are very long term and some may be more concerned with minimizing costs, while others may be concerned about funded status volatility. He noted that every year they do an in-depth dive into the asset allocation, but this study is a chance to do it in an even bigger picture with the liabilities involved. The plan was closed just prior to the last study, and now has been closed for ten years. A lot has changed since then. Ultimately the Board wants to confirm that the policy is meeting their return and risk requirements.

MR. KLOEPFER noted that it is reasonable to do a study like this every five years. COMMISSIONER TSHIBAKA asked why it has been ten years, if every three to five years is best business practice. MR. MITCHELL replied that the idea that it is best practice has only recently been socialized, but they have now inserted language into their general consultant contract providing these studies as part of the services.

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MR. KLOEPFER explained that the Board only has control over the investment policy. The sponsoring body sets the funding policy, and the benefit policies are typically set elsewhere as well, and the Board has to consider those. He went over how the asset liability study is carried out and how the results are presented to view it as a risk-and-reward tradeoff. MR. ERLENDSON mentioned that this presentation should help the Board start prioritizing their objectives to use as a lens through which to evaluate the various asset mix alternatives and decide which best fits their sense of risk management.

MR. KLOEPFER said that they would be doing a Monte Carlo simulation, a technique for evaluating ranges of potential outcomes and then coming up with distributions of those outcomes. He showed an example, not based on the ARMB portfolio because they are still getting data from Buck to put through this model; he said that they should deliver the results in the next couple of months. He went over things the Board will be considering, including liabilities, net cash flow, liquidity, duration, and risks like inflation, longevity, and limited interest rates.

MR. KLOEPFER said that the capital markets pose the biggest risk of volatility for the plan, so they do 10-year forecasts of capital market expectations, and he explained how they do the calculations. He noted that some of the alternative strategies like real estate, private equity, and others are harder to model because they are not publicly traded, so it takes a lot of informed judgment to make decisions about these, which are also sources of illiquidity. He discussed grouping asset classes by risk stance: equity and real assets are risk-seeking, while fixed income would fall under risk mitigation. MR. KLOEPFER said that when the study is presented to trustees, they will discuss whether it is necessary to pursue the 7.13 percent return over a 10-year time horizon, and figure out the broad risk posture of the fund, then talk about implementation. They will be acknowledging liquidity requirements, and talking about what would happen if they had a longer time horizon. Callan comes up with 10-year sets of expectations and a long-term equilibrium number, and they will consider different scenarios and different mixes of assets. This overview was to prepare the Board for the discussion of strategic asset allocation at the June meeting.

CHAIR JOHNSON recessed the meeting from 12:15 p.m. to 1:30 p.m.

11. WHAT IS FACTOR-BASED INVESTING?

MR. MITCHELL said that a couple of years ago, the ARM Board had adopted a strategy called factorbased investing, which is now internally managed. He said that they are now in the process of contracting with Legal and General to deploy a similar strategy for emerging markets, and staff is considering the feasibility of investing in that internally as well. MR. MITCHELL said that factorbased investing is an important concept, and given the recent turnover on the Board, he thought it should be brought back as an education item, which is why Legal and General are here.

GREG BEHAR, head of index strategy for Legal and General Investment Management, said that one of the things they do is passive indexing, and managing factors is a part of that. He explained active and passive investing, and the development of indexes and of using indexes to gauge the success of active managers. Legal and General does indexing with \$450 billion in assets owning all 500 securities of the S&P 500 to replicate the risk and return characteristics. They are trying to create

smarter indexes that capture some of the same things that active managers are looking for such as value, high momentum, or low volatility. Factor-based investing is capturing those characteristics in a low-cost, transparent, and rules-based index.

Factors, by academic consensus, are value, low volatility, small size, and momentum, each of which has a risk-based, behavioral rationale for its existence. MR. BEHAR briefly explained each one, and said that having a balance of 25 percent in each factor is ideal to achieve higher returns with less risk and lower management fees.

12. BLENDING ALPHA-SEEKING, FACTOR AND INDEXING STRATEGIES

MR. MITCHELL commented that the bar has risen over time for what is considered active investing, and avoiding paying active fees for something that can be done at a lower cost is appealing. LAURA CHAMPION, ARM Board's client service contact from BlackRock, and SARA SHORES, global head of investment strategy for BlackRock's factor-based strategies group, presented to the Board on how active, passive, and factor-based investing can be combined.

MS. CHAMPION explained that BlackRock's factor-based strategies team is led by Andrew Ang, who has been with the firm for over four years, and they oversee just over \$200 billion in assets including smart beta strategies, enhanced strategies which encompass risk parity strategies, and absolute return-seeking strategies.

MS. SHORES said that their philosophy is similar to that of the previous speaker. She went on to describe how thinking about returns in portfolios has evolved over the last few decades due to advancements in data and technology, so that now it is understood that a lot of above-benchmark return comes not from the insight of managers, but as a result of these broad, persistent drivers of return called factors. She defined "broad" as spanning asset classes: not just U.S. stocks but global; not just stocks but bonds, currencies, commodities, even private asset classes. She defined "persistent" as enduring over decades, even after being well understood.

MS. SHORES described two different kinds of factors: macroeconomic factors, including the pace of economic growth, the level of interest rates, and the rate of inflation, are the three most important drivers that impact every asset class, both public and private; and within asset classes, style factors including value, momentum, quality, low volatility, and carry. She said they have actually identified about 200 factors.

MS. SHORES listed BlackRock's four criteria that an investment idea must meet to qualify as a rewarded factor, persistently rewarded over time. The first and most important is economic rationale. They believe that every rewarded factor is a result of a rewarded risk, a structural impediment, or a behavioral bias, which is why it earns positive returns even if everyone knows about it. If they don't understand why, they don't invest.

Second, they want to see evidence of value creation through a positive return. MS. SHORES noted that growth is not on the list. She explained that growth is the opposite of value, and if there is a positive expected return for value by definition, there must be a negative expected return for growth.

Also, the different factors are rewarded at different points in an economic cycle. Diversification, or low correlation with other factors, is another criterion. They want ideas that are distinct from each other and from the core risks that are in the portfolio. The final criterion is that the idea must be something that can actually be implemented at scale. It is important to understand the potential cost and market impact of trading.

MS. SHORES said that BlackRock has designed a tool called Aladdin Factor Workbench, which essentially X-rays a portfolio through the factor lens previously described to help investors see what they own and think about what they want to own. She said that often the first step is an index-based form in equities, similar to what Mr. Behar described. But a lot more can be done if some constraints are released, such as investing in factors across fixed income, currencies, and commodities. These enhanced strategies are more dynamic and often more diversifying. Some investors transcend asset classes altogether and think in terms of factors. MS. SHORES named a few international funds that now write their investment policy statements in factor language.

MS. SHORES said that in bringing index factors and alpha together as an element of portfolio design, it is important to pursue above-benchmark returns, while recognizing that not all of that is alpha; to pursue value for money; and to make informed and deliberate decisions. BlackRock believes that they can deliver a better portfolio, can more effectively and consistently meet objectives, and ultimately lower costs by thinking of index, factors, and alpha as three complementary sources of return. This moves past the active/passive debate and seeks to deliver something above and beyond the benchmark return by accessing those broad and persistent drivers, value, quality, and momentum, at a modestly higher fee than for an index strategy. While considering fees, transparency, and risk, investors put together a mix to try to get the outcome they are aiming for. MS. SHORES said that the right mix for each investor is a function of the returns they want, the risk they are willing to take, and the fees that they are willing to pay.

MS. SHORES showed some examples and comparisons of optimal mixes at different levels of risk. Investors also have to consider their investment philosophy and practical issues like their governance, oversight, and constraints. Graphs of the efficient frontier showed that adding factor strategy to the opportunity set, as well as some low risk, systematic equity strategies, which are complementary, allows a move up the efficient frontier, with a higher level of return at every level of risk. MS. SHORES concluded that the exercise of combining index factors and alpha requires introspection and a bit of math, but it can have a good payoff.

13. OVERDIVERSIFICATION

MR. MITCHELL introduced State Street to present on overdiversification, which he described as the potential of picking too many investment mandates and ending up with expensive asset investments. GAURAV MALLIK said that the focus was mainly on the number of active managers, and the presentation is based on a paper written by his colleagues, ROB SHAPIRO, SHAWN MCKAY, and RIC THOMAS called "What Free Lunch? The Cost of Overdiversification," which asserts that too much diversifying can result in paying too much for what looks like expensive index investments.

MR. MALLIK said that diversification is intrinsic to what investors do in allocating assets and in

selecting managers. Overdiversification may result from not wanting to put more than a certain amount of money into a single manager or not wanting to own more than a certain percent of a manager's assets. These constraints and others may lead to having more managers than desired in the portfolios. Some negative effects of this are that it minimizes or reduces tracking error for active risk, and such diversification can result in something similar to the index fund, but with fees. MR. MALLIK showed slides comparing numbers of managers in other defined benefit plans and showed how their average active risks drop with increased numbers of managers, close to the risk of factor-based index-plus, yet for high fees.

MR. SHAPIRO explained more of the economic theory and math in the study they did, showing how combinations of portfolios have an active risk similar to that of enhanced index strategies, but with active management fees. MR. SHAPIRO compared three examples of portfolios with various levels of active risk, one low, one medium, and one high, including an analysis of fees per unit of active risk in the various combinations. He concluded that he hoped this was food for thought as the Board makes choices about their plan.

DR. JENNINGS commented that he would take the opportunity to repeat his refrain that fewer managers with larger allocations is wise.

CHAIR JOHNSON recessed the meeting from 2:58 p.m. to 3:12 p.m.

14. **RISK PARITY PRESENTATION**

MR. MITCHELL told how last October at the Ed Conference he had tasked Pete Hayden with answering the question, "How would a hedge fund guy invest a public pension portfolio?" The answer was basically to take less equity risk and lever up the whole portfolio. That sounded a lot like risk parity, so MR. MITCHELL asked Board members if this was something they wanted to learn more about, which led to a presentation at the December meeting. One of the conclusions was that it is worth considering allocating a small portion of the portfolio into risk parity strategies. MR. MITCHELL explained that he thought another educational presentation would be prudent prior to the strategic asset allocation discussion in June, so GREGOR ANDRADE and ZACHARY MEES from AQR are presenting on risk parity.

MR. ANDRADE explained that AQR is an alternatives manager, and they manage hedge funds. They realized in the mid-2000s that they should diversify their portfolio, so they designed a strategy for themselves which is now called risk parity. Risk parity is about asset allocation, the main goal of which is to achieve the return objectives with an acceptable amount of risk. Contrasting risk parity with traditional asset allocation, instead of allocating capital to different geographies and asset classes, risk parity allocates risk. This results in quite different portfolios, and has important implications for how the portfolio behaves in bad times and in the long run.

MR. ANDRADE showed pie charts demonstrating that a portfolio with capital apparently diversified may be heavily weighted toward equities for risk. He explained that precisely estimating the risk of an asset is very important in risk parity, and it is important to be able to rebalance, so in practice, managers tend to focus this as a liquid part of their portfolio. The premise is that the pie chart of risk

should not be dominated by any one thing; the risks should be balanced.

MR. ANDRADE acknowledges that no one can forecast risk exactly, but by attempting to forecast risk and changing exposures to keep risk steady, overall risk can be kept within a tighter range so it doesn't explode in bad times or collapse in times of low volatility. He said there are two or three different ideas why risk parity works, but they all result in similar portfolios. He explained some assumptions that lead to risk parity: the belief that no liquid asset class is superior to any other, and assets that have higher returns have higher risk; the realization that while asset classes may not be superior to each other, they do work at different times; and market timing is really hard.

MR. ANDRADE said that leverage is inherent to every risk parity portfolio, and that is why everyone doesn't do it. Some people feel that leverage is like taking out a home equity loan to go to a casino, as MR. WILLIAMS said. MR. MEES replied that it is fairly low leverage, about 200 to 300 percent, and the amount of capital that has to be freed up to get that leverage is pretty small. MR. ANDRADE added that the leverage allows exposure to assets that behave better in different economic environments, so the likelihood of a significant loss is lower. He concluded that they think a portfolio well-diversified by risk parity can, over the long term, outperform a traditional allocation by about 150 basis points. However, because the portfolio is so different from the traditional allocation, it has a large tracking error, and it may take a long time horizon to see an outperformance.

RECESS FOR THE DAY

CHAIR JOHNSON recessed the meeting for the day at 3:58 p.m.

Friday, April 5, 2019

CALL BACK TO ORDER

CHAIR JOHNSON reconvened the meeting at 9:00 a.m. on Friday, April 5. All Board members were present.

15. PORTFOLIO RISK MANAGEMENT (TRUVIEW +)

ZACH HANNA, deputy chief investment officer, talked about the ARM Board's risk management tools and compared them with public pension fund peers. He said that risk is anything that impacts the primary objective of retirement systems to pay benefits when they are due, and it encompasses both assets and liabilities. Setting and monitoring investment risk is one of the primary roles of the ARM Board.

MR. HANNA said that the ARM Board and staff work to identify and understand the implications of significant risks, which can be categorized into compensated an uncompensated. Compensated risks should be set at appropriate levels, and uncompensated risks should be diversified and managed to minimize them as much as possible. Risks should be monitored regularly for changing conditions and points of control.

MR. HANNA said that the most significant risk management actions the Board takes are setting actuarial assumptions and the asset allocation. The main sources of control are rebalancing across asset classes and ongoing feedback into the annual asset allocation process.

MR. HANNA showed the ARM Board's actuarial assumptions over time alongside an average of 170 public pension fund peers using data from NASRA, the National Association of State Retirement Administrators. The ARM Board's nominal return assumption has been as high as 9 percent and has been reduced in the current lower return environment, and the inflation assumption has also decreased over time. But since inflation has fallen faster than nominal returns, the real rate of return has actually risen. MR. HANNA discussed other comparisons with pension fund peers, and showed that the ARM Board asset allocation is in the upper quartile, with 1.08 times the risk and 1.04 times the expected return, and the asset allocation that was adopted was consistent with that. The real challenge is figuring out the right level of risk and return that best balances current and future benefit obligations with the plan's ability to bear risk and the desire for low and stable contributions. The actuaries are conducting an experience study, and Callan is doing an asset liability study, which should offer helpful insights.

MR. HANNA discussed liquidity and current and future inflows and outflows. His definition of liquid assets are purely public equities plus fixed income, and he noted that the ARM Board has quite a few liquid assets among their alternative strategies. Liquidity is important for rebalancing and maintaining the Board's strategic asset allocation, especially during extreme equity drawdowns. The analysis showed that if there were a 45 percent drawdown, the ARM Board would need about 4 percent more fixed income than they currently have to be able to fully rebalance.

MR. HANNA said that for risk monitoring analytics they use State Street's truView+ risk system, which can help answer important questions about risk exposure, asset allocation, diversification, likely performance in historic market events and scenarios, and the probability and magnitude of potential losses. He explained how the data is used to estimate risk and showed some comparisons of the risk of the ARM Board public equity portfolios, saying that overall risk was dominated by equity investments. He said that the measured level of compensated risk is not materially different from what the ARM Board has adopted as its strategic asset allocation.

Trustees asked some questions about how private equity was evaluated, and MR. HANNA explained that they proxy private equity with the Callan proxy, probably with a risk proxy that is higher than would really be observed. Real assets and absolute return are handled similarly, using a model instead of actual ARM Board holdings. MR. HANNA said that there is no standard for evaluating private equity, but they look at diversification across sectors, countries, and strategies that it is exposed to. He added that they are trying to take a more unified approach to looking at illiquid investments through a risk lens and hope to make measurable improvement.

16. CIO UPDATE

MR. MITCHELL noted that he had included some information that he might not have otherwise for the benefit of the newer Trustees. He reiterated that for his past couple of years as CIO, his focus has been on net-of-fee outcomes. He said that they look at six-year periods as a focusing tool to think about the contribution of each element in the portfolio. He reminded everyone that last June, during the annual strategic asset allocation presentation, he mentioned that over the course of the following years, the Board would consider the role that private equity, real estate, and absolute return play in the portfolio. In December he presented information on an attempt to create a public equivalent portfolio to answer the question of whether the plan is getting something unique in the fullness of time from these alternative investments. He said that this presentation was intended to wrap up his thinking on alternatives and he hoped to receive feedback from the Board that he could take to the IAC, Callan, and staff as they work to formulate options for the June strategic asset allocation meeting. He noted that he thinks they should consider ways to simplify the structure of the portfolio and to make consequential decisions.

MR. MITCHELL showed charts of the assets under management by the ARM Board, the total value of which as of June 30, 2018 were a little over \$32 billion. He reviewed unfunded liability and return expectations and explained how the calculations were made. MR. MITCHELL recommended a series of steps for the strategic asset allocation discussion, starting with a new one, articulating the time horizon. The next step is to identify the asset classes, and then calibrate Callan's capital market assumptions to be relevant over that time horizon and those asset classes. Then the most risk-efficient options can be identified for the Board to consider. The last step he proposed, also new, is the establishment of a policy portfolio that would be comprised solely of publicly traded stocks and bonds and have the same risk profile as for the optimal asset allocation. This portfolio would be virtual, not real, and would provide another measure of return information over time to help evaluate the impacts that alternatives have had in the return performance of the ARMB portfolio.

MR. MITCHELL described the time horizon as the ability to take a punch, to absorb a once-in-20years event and stick around long enough for the markets to recover. He discussed how to establish an appropriate time horizon, and noted that since 2014 when they recalculated the amortization tables, they have been targeting to be fully funded by 2039, so all of the payments are calibrated based on that, and will continue to be despite the fact that the fund has adopted layering. The longer the time horizon, the less risk needs to be taken.

MR. MITCHELL proposed doing everything in their power to evaluate what they are paying versus what they are getting and to reduce costs, because every basis point of fees reduced at the portfolio level is a basis point of additional return. He noted that he doesn't want to minimize fees, but rather to maximize net-of-fee outcomes. He also pointed out that the fund has 10 percent fixed income, all in Treasuries. If the amount of fixed income were materially higher, they could invest more broadly in investment-grade U.S. dollar bonds, which has a yield 60 basis points higher. He went on with many examples of various scenarios, and discussed his ideas for changes to the portfolio. He concluded with recommendations, including talking about the real assets portfolio with the new consultant and bringing any recommendations back to the Board; discontinuing absolute return; being thoughtful about alternative strategies; and collapsing the 10 percent allocation to fixed income and 1 percent allocation to cash into one for simplicity.

MR. MITCHELL then discussed manager structure, noting how much time is spent on monitoring the various managers, and argued that simpler is better; therefore, he recommends termination of several strategies.

CHAIR JOHNSON recessed the meeting from 10:31 a.m. until 10:42 a.m.

MR. MITCHELL reviewed his key points for reactions from Trustees, who made comments and asked questions.

17. MANAGER SELECTION/MONITORING AND WATCH LIST

SHANE CARSON described the process of selecting managers and reviewed the evaluation criteria. He explained how staff gathers information, emphasizing that the interviewing process is very important in getting a sense of the culture within the firm. He explained the methodology and frequency of the monitoring process, which differs for each asset class, and said they also monitor the investment style of the managers to make sure they are staying within the stated or expected style. Staff does onsite due diligence including interviews throughout the firm and tours of their facilities. Also, managers give periodic presentations to the Board, which allows Trustees to familiarize themselves with the managers and to ask questions or address concerns.

MR. CARSON explained that the watch list guidelines provide a formal mechanism for staff to communicate to the Board that an issue has been identified, and staff is working to resolve it. The guidelines don't apply to closed-end funds where there is no true exit or to separate accounts like timberland, farmland, and real estate, but index funds are always watched with high scrutiny, because any small deviations need to be explained. He cautioned that it's important to understand why the rules-based mechanism of the watch list has flagged a certain manager or performance before jumping to terminate them. The watch list is a procedural step, not a trial; also, the Board may terminate a manager who hasn't been on the watch list at its own discretion at any time. The CIO is not delegated to terminate an investment manager, but is delegated to allocate away from that manager, and then come to the Board and ask for termination at the next meeting, or even call a special Board meeting to address the issue. MR. MITCHELL pointed out that for illiquid investments, the ability to exit the relationship varies; for example, in private equity, it may be many years in the future.

MR. CARSON emphasized that manager monitoring is ongoing, and that inclusion on the watch list does not require terminating a manager. The guidelines provide both quantitative and qualitative testing, and the qualitative tests each require some degree of discretion.

MR. CARSON went over a red-line and a final version of changes that staff are suggesting changes to the watch list guidelines which were adopted in 2012. One change is adding a statement of the purpose of the watch list: "The watch list guidelines are established for the purpose of providing staff a mechanism to communicate formal notification to the Board and any investment manager for whom an issue has been identified and that staff is working to resolve the issue." Another significant change is removing language regarding the performance objectives, because they are not currently relevant at the manager level and may not be achievable. Also, it is recommended to allow staff to determine the significance of the violation and recommend a resolution. MR. CARSON said that the most impactful change they are recommending is to change the 1 percent underperformance provision to underperformance after six years net of fees, which is more stringent. Also, they recommend

removing it being necessary that all three tests be met for a manager to meet the watch list criteria, and they recommend removing the style-specific test component because staff have been moving the contractual benchmarks to the style-specific benchmarks, making it redundant.

23A. Investment Actions: Manager Watch List, Resolution 2019-01

CHAIR JOHNSON stated that the recommendation is that the Alaska Retirement Management Board adopt Resolution 2019-01, amending the Watch List Guidelines to reflect those changes detailed in the Manager Selection, Monitoring, and Watch List presentation at the April 2019 ARMB meeting.

MRS. HARBO so moved. MR. WILLIAMS seconded the motion. A roll call vote was taken, and the motion passed unanimously.

18. INTERNATIONAL EQUITIES: REVIEW OF THE INVESTMENT MANAGEMENT LIFECYCLE

MR. MITCHELL reminded the Board that it previously passed a resolution authorizing staff to invest in international equity portfolios internally. Staff intend to report at the June meeting whether they believe it is feasible to do this. There are a lot of things to consider when investing internationally, such as varying regulatory regimes, varying currencies, and many more different markets, so they've asked State Street Global Advisors, who are experienced in this area, to present to the Board the full scope of the complexities of investing in international equity markets. He introduced DANIEL MORGAN and MICHAEL PUTICA from State Street Global Markets.

MR. MORGAN introduced the presentation as a high-level overview of the investment management process infrastructure requirements, including some of the complexities of transacting in various marketplaces. He showed a pictorial of the entire life cycle of the investment process, which transcends asset classes. The first step is portfolio construction. MR. MORGAN noted that in domestic investment, the initial focus is on sector and then individual securities. When constructing an international portfolio, there is more complexity because first countries have to be selected, then information obtained. The compliance rules and corporate actions are different, and to implement plans managers have to work with various counterparties and vendors in those other countries. Transaction management and collateral management are more complicated. MR. MORGAN reviewed the infrastructure, risk and optimization tools, and governance that is necessary to invest internationally, including staff and data requirements.

MR. PUTICA discussed the risk framework, including market risk, operational risk, and legal and regulatory risk. Various risks are taken on when investing internationally, and it is important to understand, manage, and monitor those risks and to have a legal framework to audit and check compliance with regulations. Market risk is the risk of going to market and not being able to do the trade you intend to because of technology, infrastructure, or counterparty issues. Different markets have different rules that an investor needs to understand. Then there are the currency transactions before the investment can be done, and the different time zones, even different holidays, to work with, so that the operational risk can quickly eat away at any ideas investors have. MR. MORGAN noted that this is primarily intended to instruct the Board as to the magnitude of the decision they may be

making.

CHAIR JOHNSON recessed the meeting from 12:01 p.m. until 1:16 p.m.

19. IAC PRESENTATION – ARMB AND FIXED INCOME

MR SHAW discussed fixed income, how the Board is currently invested, how they should be invested, and whether internal, external, or not at all.

He said that they want to put a framework in place that incorporates the investment horizon and the liquidity of the plan. He argued that fixed income is absolutely the most complex asset class there is, with many different options within it, from overnight securities to perpetual bonds, zero coupons, callables, putables, inverse floaters, and many others.

MR. SHAW said that the next issue is what role fixed income should play, from diversification to liquidity protection to income generation. He emphasized that the goal is to have the ability, in as many markets as possible, at all times to be able to get out of an investment. During difficult times, liquidity tends to dry up, because people don't want to buy. Fixed income also has a protective role in downside events, because it doesn't go up and down with everything else. He pointed out that since November, the yield curve has been moving toward being inverted, which tends to happen about 12 to 19 months ahead of a recession, and the current period of economic expansion is the second longest in U.S. history. He noted that unemployment is very low, and employers are having trouble finding workers with the skills they need, which could lead to wage inflation. He said that overall he thinks the economy is stable, but probably headed for a recession.

MR. SHAW said that with all those conditions, it might be a chance for some tactical rebalancing, but he cautioned that tactical shifts require decisions about when and how much to shift, and the same on the other side, most of which have to be correct for it to work. He said that investing is a belief system, and it's better to just stick to one strategy than to make tactical bets.

In fixed income corporate bonds, there are investment grade and high yield, with high yield correlating more to equities. Treasuries offer much more protection and opportunity to rebalance back into other asset classes. He pointed out that staff has proven the skills to run money in-house on fixed income for at least a decade across all major segments within U.S. fixed income. Deciding which segments to invest in is the question. There are many different markets, and investing in other countries requires custody relationships and dealing with currency issues and so on. He said that the four segments shown in his presentation are laid out in order of easiest to most difficult, but staff has run each one at various points in time. Whether U.S. Treasuries or Bloomberg Barclays Aggregate, it provides diversification and different levels of capital preservation and liquidity, and is cost effective to run internally. It is also the asset class with the lowest return, so it offers the most bang for the costs of going internal. He concluded by saying that if fixed income is going to be a diversifier, it should not be correlated with stocks.

20. CYBER SECURITY UPDATE

MR. MITCHELL explained that cyber security is a key risk that must be protected against, and it consumes a lot of resources collectively, therefore is a topic on which the Board should be periodically updated and educated. AJAY DESAI and SCOTT JONES were joined by MARK BREUNIG, the chief technology officer at the state Office of Information Technology (OIT) on the telephone. MR. JONES said that their plan would be to present regularly, maybe every other meeting; today would be an overview to help new Board members understand where the Board has exposure, what type of exposure, and what is at risk. In the future they hope to have representatives from other agencies or third-party contractors that the ARM Board deals with present on how they manage the physical and cybersecurity risks and mitigate the risk that the ARM Board is exposed to.

MR. JONES classified risks as internal to the State of Alaska and external, and described many types of risks: improper permissions, improper or inadequate business continuity plans, disaster recovery, loss of information or data, unauthorized access to information. Within the state, there is exposure through the Treasury Division and the Division of Retirement and Benefits. Security for both of these divisions is provided and controlled by the Department of Administration.

MR. JONES said that physical access is controlled by the Division of General Services, and the Office of Information Technology generally controls all other aspects of IT security, although his Treasury Division consists of only him and one other person, and they don't have IT staff.

MR. DESAI stated that Alaska Statute 44.21 designates the Commissioner of the Department of Administration with the responsibility for oversight of all State of Alaska executive branch information technology. The OIT provides core information technology services to all state agencies. It provides the underlying hardware, software, network infrastructure, and enterprise services. He said that the pension and health plans administered by DRB must adhere to strict standards to protect members' personal identifiable information (PII) and health information protected under HIPAA. The OIT publishes policies and procedures regarding the handling of PII and HIPAA, which DRB strictly follows and works closely with contractors to make sure they follow too.

MR. DESAI said that for risk management, business owners must implement a formal risk assessment and management process in collaboration with the State Security Office and the Division of Risk Management, and SSO personnel ensure annually that the requirements are met and check to identify vulnerabilities for the Department. MR. JONES said examples of things that could be at risk if someone accessed them include confidential contracts, proprietary information, non-public investment information, and there is a risk of unauthorized or improper trading or access to accounts.

MR. WEST asked if penetration testing is done by third parties; MR. DESAI said he believes so, but he would follow up to make sure. He discussed requirements that are specific to the DRB and internal policies and safeguards that are in place. He explained how physical security limits access to offices and computers through security badges and key cards, and they do annual training with a test for safe data handling that all DRB staff have to pass before they are authorized to view or touch any DRB data. Access to the DRB website requires going through multiple firewalls and authentication points, and member data received by e-mail is encrypted.

MR. JONES said that areas of exposure external to the state include external investment managers, actuaries, books of record, external auditors, and indirect exposure through Aetna, Moda, and PayFlex.

Office of Information Technology Security

MARK BREUNIG from the OIT explained how the evolution of technology has increased the number of external threats, and the attacks on Mat-Su and Valdez show that Alaska is a target for cyber attackers. The mission for the Information Security Office (ISO) is to ensure that robust security is provided for all of the State of Alaska for the information collected, processed, transmitted, and disseminated in general support systems. He reviewed the ISO objectives, which are based on the CIA triad, which stands for confidentiality, integrity, and availability, the foundational concepts of information security. He said that the office has implemented new endpoint detection and response tools which allow much quicker containment of any viruses or malware, and they are continuing to develop and enhance it. They also provide security awareness training for all state employees, and they have enhanced threat protection and filtering for e-mail coming into the State of Alaska e-mail system. They have installed new network border security to protect against malicious internet domains. He said that they continue to develop their systems and are looking to standardize and implement government and industry security frameworks at an enterprise level for more uniformity, and they continue to educate staff on new threats and to assist agencies in meeting their compliance standards and requirements for external data handling.

DRB IT Modernization Status Report

MR. DESAI updated the Board on DRB's IT modernization project, the primary goal of which is to create an integrated, enterprise-wide system that supports all of the core business functions for pension and health plans. It will provide modern tools that will enable the state to maintain and improve its services to members, and will integrate core business processes, facilitate consistency, and enable additional oversight and accountability. They received a budget approval for the project in 2018, and the first step was to seek an appropriate project management company that specializes in IT and state employee benefits and public retirement plans in the U.S. They have signed an agreement with Linea, and they held initial sessions for identifying requirements in March. The next step will be seeking a vendor for an enterprise-wide solution.

CALLAN ON THE DC PLAN - POSTPONED FROM ITEM NO. 9

MR. ERLENDSON stated that about 20 percent of the assets under the ARM Board's purview are in defined contribution plans. About another \$260 million flowed into DC assets between February of last year and this year, and there was actually cash outflow on a net basis in the pension fund in terms of market values. About 56 percent of the assets are in target date funds, for which people don't need to make asset allocation decisions. MR. ERLENDSON said that in most plans only about one third of assets are in target funds, so Alaska is ahead of most other plans with members deferring decisions about manager selection and asset allocation to professionals, and they think that's the way the industry will go, because most people are overwhelmed trying to make choices.

STEVE CENTER showed charts of the distributions of investments in the various DC plans. PERS and TRS both have about 60 percent of the assets in target date funds, which are the default options for participants, and the rest split among the active and passive options and the specialty options. He said that most of the plans are in a positive inflow state, but had a negative market movement in the fourth quarter. The deferred compensation plan has only about 25 percent in target date funds, and is in a cash-flow-negative state. The SBS fund, the largest of the funds at about \$3.7 billion, also has about 60 percent in target date funds and had net outflows in the last quarter. He showed ratings for each investment option and discussed their performances.

MR. WEST commented that most of the target date funds that he is familiar with are pretty close to stable value funds by the time they reach maturity. He was concerned that the plans continue to offer an ever more limited group of balanced funds or target date funds, and maybe not offering enough other choices. He speculated that the fact that people are just going into the default funds and riding them up and down might show a lack of understanding, and he questioned why Callan characterized it as a good thing.

MR. ERLENDSON said that some plans have hundreds of options, which is a nightmare for the average person to figure out, but typically there are five times as many equity options on a plan as other options. Alaska has created an easier menu of options, and has made big efforts to educate participants to understand the potential risks and opportunities, but the average behavior of corporate DC participants is for well over half to stay in the default investment and not even look at the options. MRS. HARBO remarked that it's not that they're not intelligent or well-educated; it's that people in new jobs, especially teachers, are overwhelmed with so many things to do that the easy way out is to take the default. Also, she noted that in the DC plan, a lot of people are leaving the system and taking their money out after five years.

MR. ERLENDSON pointed out that the options available in Alaska's plan are among the least expensive in the marketplace, and every dollar that goes out in fees is a dollar that doesn't stay in the pool to compound to the benefit of the participant, so this is a major advantage for their participant base.

MR. CENTER announced some upcoming Callan events, including a workshop in San Francisco in June about liquidity in retirement plans and also in endowments and foundations, and another session of Callan College coming up in July in San Francisco.

CHAIR JOHNSON recessed the meeting from 2:50 p.m. to 2:58 p.m.

21. EXECUTIVE SESSION

The executive session was postponed to a future meeting.

22. PROCUREMENT ACTIONS

A. RFP General Consultant 19-006

MR. MITCHELL read the committee recommendation: "The RFP Evaluation Committee recommends to the Board that staff publish a notice of intent to award the general investment consultant services contract to Callan LLC and, upon expiration of a 10-day notice period, if there are no protests, that a contract be entered into with Callan LLC."

MRS. HARBO so moved. VICE CHAIR BRICE seconded the motion.

For the record, MR. MITCHELL noted that the RFP Committee is comprised of MR. BRICE and MRS. HARBO from the ARM Board, and KATHY LEA and BOB MITCHELL.

A roll call vote was taken, and the motion passed unanimously.

B. RFP Real Assets Consultant 19-007

MR. MITCHELL described how the committee reviewed the consultant applicants and read the recommendation: "The RFP Evaluation Committee recommends to the Board that staff publish a notice of intent to award the real assets consulting services contract to Callan LLC, and, upon expiration of a 10-day notice period, if there are no protests, that a contract be entered into with Callan LLC."

MRS. HARBO so moved. VICE CHAIR BRICE seconded the motion.

MR. MITCHELL explained that it is not a real estate contract anymore, as real estate comprises only about 30 percent of the broader real asset class. In the past, the general consultant oversaw the non-real estate components of real assets, which created difficulty in having a unified view on the asset class. Therefore, staff recommended changing the scope of the contract from real estate only to include all of real assets, the entire asset class.

A roll call vote was taken, and the motion passed unanimously.

C. RFS Investment Advisor 19-009

MR. MITCHELL explained the RFS (request for services) to seek a replacement for BOB SHAW as an IAC member. MR. SHAW's term expires on June 30th, and he does not intend to seek reappointment. Alaska Statute provides for three to five Investment Advisory Council members, and with Mr. Shaw's departure they would have only two. The three advisory positions are designated by areas of expertise: an academic advisor, an advisor with experience as trustee manager of a public fund or endowment, and an advisor with experience as a portfolio manager. MR. SHAW holds seat one, which is designated for a person with experience and expertise in financial investments and management of investment portfolios for public, corporate, or union pension benefit funds, foundations, or endowments. MR. MITCHELL recommended that the Board direct staff to advertise and solicit applications from persons interested in serving on the Investment Advisory Council.

<u>MRS. HARBO so moved.</u> <u>VICE CHAIR BRICE seconded the motion.</u> With no objections, staff will go forward with the recommendation.

23. INVESTMENT ACTIONS

A. Manager Watch List: Resolution 2019-01

Resolution 2019-01 was addressed under No. 17.

B. DC Real Assets

MR. MITCHELL reminded Board members that at the September 26 meeting, Callan had presented their investment structure evaluation of the participant-directed plans, in which they recommended combining the existing U.S. Treasury Inflation Protected Securities Index Fund, TIPS, and the existing U.S. Real Estate Trust Index Fund, REITs, into a single multi-asset class real assets fund. MR. MITCHELL said that staff evaluated 13 strategies offered by 11 managers, and their recommendation is: "The Alaska Retirement Management Board direct staff to contract with BlackRock to offer the Strategic Completion Fund in the Alaska Supplemental Annuity Plan, the Defined Contribution Retirement Plans (PERS Tier IV, TRS Tier III) and the Deferred Compensation Plan subject to successful contract and fee negotiations. Additionally, the Alaska Retirement Management Board direct staff to map participant assets from the existing U.S. Real Estate Investment Trust Index Fund and the U.S. Treasury Inflation Protected Securities Index Fund into the Strategic Completion Fund appropriate participant notification requirements."

MRS. HARBO so moved. MR. WILLIAMS forwarded the recommendation on behalf of the committee.

In response to a question from MR. HIPPLER, MR. MITCHELL said that after this action is completed, there would not be a REIT or a TIPS option available to participants. MR. WEST stated for the record that he believes this recommendation has two steps, and while he likes and would support the BlackRock fund, he does not support the arbitrary decision to map some 14,000 participants over to this new fund with any understanding of their wishes.

In response to a question from CHAIR JOHNSON, MR. MITCHELL stated that the existing fees for the TIPS and REITs strategies respectively are about 6 to 9 basis points, and the fee currently contemplated for the BlackRock strategy is 11 basis points if the existing assets get mapped to the new assets, but would be 17 basis points if that were not the case. VICE CHAIR BRICE explained that although about 13,000 people use these funds, they don't put much money into them, so they hope to have some compression of those options in a higher value fund that has shades of both the REITs and the TIPS.

A roll call vote was taken, and the recommendation was approved by a vote of 7 to 2.

C. Investment Guideline Revision: Resolution 2019-02

MR. MITCHELL explained that in January of 2017, the ARM Board had reinitiated a securities lending program with State Street. In 2018, the ARM Board hired PineBridge to manage a global tactical asset allocation mandate, the guidelines of which prohibit lending securities. However, the language was not intended to limit the availability of securities held in this portfolio from the ARM Board's securities lending program. Therefore, to clarify that portfolio securities are available to participate in the ARM Board securities lending program, staff recommended changes to PineBridge's investment guidelines.

MR. MITCHELL stated that staff recommended that the ARM Board adopt Resolution 2019-02, which adopts the revised Global Dynamic Asset Allocation Investment Guidelines.

MRS. HARBO so moved. MR. WEST seconded the motion.

A roll call vote was taken, and <u>Resolution 2019-02 was adopted unanimously.</u>

UNFINISHED BUSINESS

CHAIR JOHNSON said that he would appreciate Trustees joining some of the four committees of the Board, and specifically he requested that MR. BRETZ consider joining the Audit Committee. He asked people to let him know.

NEW BUSINESS

MR. MITCHELL suggested that an Investment Advisory Council Committee should be formed for the purpose of evaluating responses to the RFP that has been approved to replace MR. SHAW. MRS. HARBO, MR. WILLIAMS, and VICE CHAIR BRICE volunteered.

MR. MITCHELL said that the Actuarial Committee needs a chair elected, and noted that the Actuarial Committee is virtually a committee of the whole. <u>MRS. HARBO nominated NORM WEST. MR.</u> <u>WILLIAMS seconded the motion.</u> MR. WEST accepted, and with no objections from the Trustees, CHAIR JOHNSON congratulated him as the new chair of the Actuarial Committee.

MRS. HARBO requested to see a pie chart of the internally managed funds. MR. MITCHELL said he had noted that request.

OTHER MATTERS TO PROPERLY COME BEFORE THE BOARD

None.

PUBLIC/MEMBER COMMENTS

None.

INVESTMENT ADVISORY COUNCIL COMMENTS

None.

TRUSTEE COMMENTS

MRS. HARBO thanked the new Trustees for the interest they have shown in this meeting and welcomed them.

FUTURE AGENDA ITEMS

None noted.

ADJOURNMENT

There being no objection and no further business to come before the board, the meeting was adjourned at 4:00 p.m. on April 5, 2019, on a motion made by MRS. HARBO and seconded by VICE CHAIR BRICE.

Chair of the Board of Trustees

Alaska Retirement Management Board

ATTEST:

Sayle Harbo

Corporate Secretary

Note: An outside contractor recorded the meeting and prepared the summary minutes. For in-depth discussion and more presentation details, please refer to the recording of the meeting and presentation materials on file at the ARMB office.

Confidential Office Services Karen Pearce Brown Juneau, Alaska

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