State of Alaska
ALASKA RETIREMENT MANAGEMENT BOARD
MEETING

Location:
Dena'Ina Convention Center
600 West Seventh Avenue
Anchorage, Alaska

MINUTES OF
June 22-23, 2017

Thursday, June 22, 2017

CALL TO ORDER

VICE-CHAIR ROBERT JOHNSON called the meeting of the Alaska Retirement Management Board (ARMB) to order at 9:04 a.m.

ROLL CALL

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

Board Members Present
Robert Johnson, *Vice Chair*
Gayle Harbo, *Secretary*
Kristin Erchinger
Commissioner Sheldon Fisher
Commissioner Randall Hoffbeck - arrived late
Tom Brice
Norman West - arrived late

Board Members Absent
Gail Schubert, *Chair*
Bob Williams

Investment Advisory Council Members Present
Dr. William Jennings
Dr. Jerrold Mitchell
Robert Shaw

Investment Advisory Council Members Absent
None

Department of Revenue Staff Present
Bob Mitchell, Chief Investment Officer
Scott Jones, State Comptroller
Zachary Hanna, Deputy Chief Investment Officer
Pamela Leary, Director, Treasury Division
Stephanie Alexander, Board Liaison

Department of Administration Staff Present
Kevin Worley, Chief Financial Officer, Division of Retirement & Benefits (DRB)
Ajay Desai, Director, DRB

Consultants, Invited Participants, and Others Present
Paul Erlendson, Callan Associates, Inc.
Eugene Podkaminer, Callan Associates, Inc.
Doug Bratton, Crestline Investors
James Delaune, Crestline Investors
Keith Williams, Crestline Investors
Stuart Goering, Department of Law, Assistant Attorney General
Kelly Carbone, DePrince, Race & Zollo
Marc Miller, DePrince, Race & Zollo
Mike Comacho, JP Morgan
Todd Evans, JP Morgan
Garrett Norman, JP Morgan
Chris Gorgone, Man Group
Keith Haydon, Man Group
Shanta Puchtler, Man Group

PUBLIC MEETING NOTICE

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

APPROVAL OF AGENDA

MR. BRICE moved to approve the agenda. MS. ERCHINGER seconded the motion.

MR. BRICE requested Defined Contribution Committee be added under Item 7. Committee Reports. VICE-CHAIR JOHNSON noted the addition will be placed as 7B. Defined Contribution Committee and the Actuarial Committee will be moved to 7C.

There was no objection to the approval of the agenda, with the amendment addition of 7B. Defined Contribution Committee and 7C. Actuarial Committee.

PUBLIC/MEMBER PARTICIPATION, COMMUNICATIONS, AND APPEARANCES
None

APPROVAL OF MINUTES: April 20 - 21, 2017

MRS. HARBO moved to approve the minutes of the April 20 - 21, 2017 meeting. MR. BRICE seconded the motion.

The minutes were approved without objection.

STAFF REPORTS

1. RETIREMENT & BENEFITS DIVISION REPORT

VICE-CHAIR JOHNSON introduced Division of Retirement and Benefits (DRB) Director AJAY DESAI and Chief Financial Officer KEVIN WORLEY. VICE-CHAIR JOHNSON welcomed Chief Investment Officer BOB MITCHELL, Deputy Chief Investment Officer ZACHARY HANNA, and Board Liaison MS. ALEXANDER to their new positions.

A. Conduent Consulting Invoices (informational)

MR. WORLEY informed the new staff report format is being presented today. The Conduent invoices summarize the first nine months of FY17, ended March 31. Both the Judicial Retirement System (JRS) and National Guard Naval Militia Retirement System (NGNMRS) had a full valuation report completed, which is reflected in the additional costs.

B. Membership Statistics

MR. WORLEY provided the membership statistics for the quarters ending September 30, 2016, December 31, 2016, and March 31, 2017. He reported the continued decline in the number of Defined Benefit (DB) members and the continued increase in the number of Defined Contribution Retirement (DCR) members at each snapshot date. MR. WORLEY noted staff is preparing for the busiest time of the year for retirement processing in the summer.

C. DRB Update

MR. DESAI provided Board members with the fourth quarter audit report of FY17. There are no unusual findings. Staff has completed 32 audits, as shown, and two additional audits have been completed, leaving 22 audits remaining, as shown on the second page. MR. DESAI reviewed the projected audits for 2018, including field audits and desk audits. Overall, the audit process is routine and friendly, but there are times when delayed responses for information occur.

MR. DESAI gave a presentation on one of the SMART goals adopted under DRB for modernization. He provided high-level information regarding DRB, which outlined the benefit administration for both pension and health plans. The DB and DCR plans total approximately $28 billion. DRB has the fiduciary responsibility for record-keeping and counseling services for about 80,000 employee members. Staff processes about 22,000 retirement applications annually, and answered nearly 90,000 phone calls in 2016. Approximately $40 million annually is spent on operations.

MR. DESAI reviewed the work growth projections for the benefit processing area and customer service. The expected growth is one of the many challenges DRB faces that has precipitated the reevaluation of internal business processes, systems, and application. MR. DESAI explained DRB staff holds a very heavy manual workload, and utilizes multiple systems, platforms, software applications, and tools dating back 28 years to accomplish a single task. He provided a step-by-step walk-through example of processing a membership projection. MR. DESAI described the lack of a Single Source of Truth has created inefficiency, inconsistent backup, impediments to customer service, and an unattractive environment for staff.

MR. DESAI described the multi-year business case, which is based on three key drivers; 1) reduction of information technology (IT) costs, 2) optimization of business processes, and 3) improved business operations. MR. DESAI provided detailed examples of each key driver, and discussed the future-state approval concepts regarding a fully integrated single platform that interfaces with third-party administrators and other external entities. MR. DESAI reviewed the scope and strategy of the project, and showed the high-level timeline for the massive multi-year effort. Work on the Draft Business Case Document in underway. MR. DESAI commented ARMB is a strong stakeholder and partner. He requested feedback and guidance to assist in a smooth transition process.

MRS. HARBO requested additional information regarding cost analysis, including cost savings. MR. DESAI gave a detailed explanation and informed the approximate cost for the project is $25 million to $30 million. The current system, and remaining status quo, costs approximately $40 million to $45 million. MR. DESAI commented the new system will save approximately $12 million to $15 million, while gaining advanced technology, better customer service, and a solid, secure system.

MR. BRICE inquired as to payment for the project, potential consideration of cost-sharing with employers, and the timeline for completion. COMMISSIONER FISHER informed trust assets will be utilized. He commented the system is almost to a point where it cannot be maintained because the old technology is no longer supported. He believes DRB has done great work in creating a system that is intelligent and has a positive cash flow associated with the necessary improvement. No research has been conducted to-date whether other departments could leverage the technology. MR. BRICE indicated communicating with other employers may result in worthwhile feedback. MR. DESAI informed the project will take three to four years to implement.

MS. ERCHINGER welcomed the project and believes the current timing will significantly lower the costs and provide a better outcome with well-tested and well-proven technology.

VICE-CHAIR JOHNSON asked MR. DESAI how the ARM Board can be of assistance in this process. MR. DESAI requested Board support for the project. He will provide future updates and will ask the Board for additional guidance as the project progresses. VICE-

CHAIR JOHNSON expressed appreciation to MR. DESAI. He stated the Board, without objection, applauds the efforts of DRB and encourages the project to move forward.

COMMISSIONER FISHER advised the proposed order from the Governor's Office establishing the Retiree Advisory Committee should be announced the week of July 10th. ARMB members are invited to participate in the planning meeting to provide feedback on the proposed structure.

2. TREASURY DIVISION REPORT

VICE-CHAIR JOHNSON invited Treasury Division Director PAMELA LEARY to present the Treasury Division Report. She reiterated MR. BOB MITCHELL was announced as the new CIO and MR. HANNA was announced as the Deputy CIO. The Governor's Office approved the hiring of two experienced investment officers to the internal public equity team. Start dates will be determined once a budget is approved. There is one investment officer vacancy. Two summer interns, accomplished students from UAA and UAF, are working with the investment team. MS. LEARY believes it will be positive in terms of succession planning.

MS. LEARY informed the budget is still being developed and has not passed yet. Shut-down procedures include the Treasury maintaining a minimal level of function to preserve the state's financial assets and any cash management needs identified during the process.

3. CALENDAR/DISCLOSURE

MS. ALEXANDER stated the disclosure report is included in the packet and there are no transactions requiring additional review. The 2017 and 2018 calendars were also included.

4. CIO REPORT

MR. BOB MITCHELL provided an overview of the 42 items and one attachment of his report. The general trend of the transfers has been to divest equity securities and to periodically rebalance the allocation amongst the various plans. MR. BOB MITCHELL informed Eaton Vance had a recent charge of theft and fraud-related activity by a former employee for funds that do not affect the ARM Board. Eaton Vance has engaged a third-party to evaluate their systems. Staff and Callan continue to monitor the situation, and do not believe it warrants placing Eaton Vance on the watch list. Any significant developments will be brought before the Board.

MR. BOB MITCHELL reported one of Cap Guardian's international equity strategy managers announced his retirement, which is scheduled for November. An experienced portfolio manager has been identified to succeed. Staff and Callan have reviewed the multi-portfolio-manager strategy and believes diversification is built in structurally to the process. The announced change does not warrant placing Cap Guardian on the watch list.

MR. BOB MITCHELL expressed appreciation to leadership from the external equity team, SHANE CARSON and SEAN HOWARD, who have negotiated lower fees for over six strategies.

MR. BRICE requested an update on ARMB's relationship with Tishman Speyer, in light of concerns regarding inappropriate work and safety standards. MR. BOB MITCHELL commented on the existing investment relationship with Tishman Speyer and the recent activity directed toward monitoring due diligence. He noted further investigation will occur.

VICE-CHAIR JOHNSON asked if the due diligence is ongoing or scheduled, and requested a description of the process. MR. BOB MITCHELL explained the entire staff is conducting due diligence in the various asset classes on an ongoing basis, depending on the engagement and the investment mandate. On-site due diligence is scheduled on a three-year rotation and covers aspects such as investment strategy, investment team, risk processes, compliance, and infrastructure.

5. FUND FINANCIAL PRESENTATION

State Comptroller SCOTT JONES and MR. WORLEY presented the Fund Financial Report. MR. JONES noted the new format of the financial summary through April. No questions were asked. He informed, as of yesterday, total assets were up 12.72%.

TRUSTEE REPORTS

6. CHAIR REPORT

VICE-CHAIR JOHNSON stated CHAIR SCHUBERT will be in attendance tomorrow and will deliver her report at that time.

7. COMMITTEE REPORTS

A. Audit Committee

VICE-CHAIR JOHNSON informed the Audit Committee met yesterday and primarily focused on the KPMG audit results. No particular events were distinctly different from last year. Additional work has occurred as requested by FASB 74 and 75. KPMG is actively obtaining information directly from Aetna's offices, rather than exchanging PDFs. The process seems to be more efficient.

VICE-CHAIR JOHNSON advised discussion occurred and the decision was made to maintain the status quo of not having a policy in place expecting credit risk and investment risk. He reported the new organizational charts for Department of Administration and DRB were provided and reviewed.

VICE-CHAIR JOHNSON noted Conduent proposed the use of a computer modeling called GEMS for the analysis to project actuarial rates and assumptions. He believes it is worth exploring whether the GEMS model results are similar to the building block model results. Representatives from Callan and GRS agree GEMS is the wave of the future.

B. Defined Contribution Committee

MR. BRICE reviewed yesterday's Defined Contribution Committee meeting highlights, including a presentation and vigorous discussion regarding the Division's efforts to ensure members and participants are retirement ready and how to enhance Defined Contribution programs. He added a new video is close to being released to inform recent hires of the system and benefits available.

C. Actuarial Committee

MS. ERCHINGER reported the Actuarial Committee met yesterday, as well, and heard a presentation by actuary Gabriel Roeder Smith (GRS) reviewing the 2016 Valuation Report for JRS and NGNMRS. There were no material recommendations. MS. ERCHINGER informed the three items remaining on the audit findings list are related to death, disability and COLA, disclosures of Employer Group Waiver Plan (EGWP) savings in the DCR plans, and monitoring the eligible service time for participants.

MS. ERCHINGER conveyed the bulk of the meeting was a presentation by Conduent regarding the economic assumption setting process in preparation for the upcoming experience analysis. Any potential recommended changes to assumptions will be reflected with the valuation beginning June 30, 2018. Future meetings will discuss economic assumptions, such as inflation, investment return, salary scale, payroll growth, and PRPA. The second area to be discussed at the October 4th meeting is healthcare assumptions.

The third area to be discussed is demographic assumptions at the March 28, 2018, meeting. The recommendation regarding economic assumptions is expected to be brought before the Board at the December 6th meeting. Final recommendations for assumption changes will come before the Board at the June 20, 2018 meeting. MS. ERCHINGER expressed appreciation to LARRY LANGER of Conduent for his diligent efforts in assisting the Actuarial Committee.

MS. ERCHINGER reviewed the presentation by EMILY RICCI of Department of Administration regarding the consideration and cost savings to shift the DB plans to the EGWP federal drug subsidy program established to encourage employers to provide prescription drug benefits. The DC plan currently uses the program.

MS. ERCHINGER informed the Committee will be requesting approval of two action items discussed yesterday; acceptance of the GRS certification of the 2016 plan valuations, and acceptance of Conduent's FY 2016 valuations.

8. LEGAL REPORT

Assistant Attorney General STUART GOERING will provide training later in the session.

9. CYBER-SECURITY REPORT

VICE-CHAIR JOHNSON requested MR. JONES and MR. DESAI to present the Cyber Security Report. MR. JONES explained information security is the combination of physical security, which is protection of personnel, hardware, software, networks and data from damaging physical events, and cyber security, which is the protection of networks, computers, programs and data from attacks or unauthorized access. MR. JONES gave an in-depth detailed description of the processes and protocols for maintaining physical and cyber security at the State Street facility and backup facilities.

MS. ERCHINGER commented she attended an onsite visit in the past and found the conditions as impressive as MR. JONES described.

VICE-CHAIR JOHNSON asked if the contractual relationship with State Street includes specific security demands they would otherwise not perform. MR. JONES advised State Street is currently required to follow very stringent and comprehensive Federal and State reviews.

MR. DESAI outlined the strict security layers DRB currently has in place to protect the Personal Identifiable Information (PII) and protected health information (HIPAA) held in the information technology systems. He reviewed the training staff undergoes regarding HIPAA confidentiality and cyber security awareness.

VICE-CHAIR JOHNSON asked if the DRB was subject to the recent worldwide malware virus. MR. DESAI explained thousands of attacks are routinely occurring because of connection to the internet, and because of the solid security protections adopted, penetration of the system's firewall is rare.

COMMISSIONER FISHER discussed the State's hiring of Chief Information Officer BILL VAJDA, who is focused on cyber security. The recent malware attack was seen attempting to penetrate the State's network, but was unsuccessful. COMMISSIONER FISHER stated the State's IT group could provide a security presentation to the Board, if requested.

VICE-CHAIR JOHNSON believes it is important to repeatedly advise the constituents and beneficiaries regarding the safety and security measures utilized by the administrators.

VICE-CHAIR JOHNSON recessed the meeting from 10:34 a.m. to 10:52 a.m.

10. ACTUARIAL REVIEW/ACCEPTANCE-CERTIFICATION OF FY2016 REVIEW REPORTS AND VALUATIONS

Action: Board Acceptance of GRS Certification for FY2016 PERS, TRS, NGNMRS, JRS, and DC Plan Valuations

<u>MS. ERCHINGER, as Chair of the Actuarial Committee, moved to accept GRS Certification for FY2016 PERS, TRS, NGNMRS, JRS, and DC Plan Valuations.</u> <u>No second required.</u>

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

Action: Board Acceptance of FY2016 Conduent Valuations for PERS, TRS, NGNMRS, JRS, and DC Plan Valuations

MS. ERCHINGER, as Chair of the Actuarial Committee, moved to accept FY2016 Conduent Valuations for PERS, TRS, NGNMRS, JRS, and DC Plan Valuations. No second required.

VICE-CHAIR JOHNSON noted for the record considerable discussion occurred in Committee yesterday regarding the resolution. Committee meeting minutes are available for anyone interested.

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

11. ASSET ALLOCATION REVIEW AND APPROVAL

MR. BOB MITCHELL informed the Board asset allocation review and approval occurs annually. At the April Board meeting, a detailed presentation was given regarding the process, changes to the benchmarks, redefinition of asset classes, and an additional 30-year expected return horizon. Board members provided feedback, which included engagement with Callan and IAC members regarding recommended changes. MR. BOB MITCHELL noted additional interactive evaluation process between staff, Callan and the IAC occurred. He continued his presentation with a review and description of the proposed process changes.

COMMISSIONER FISHER commented he feels the discussion around asset allocation comes to the Board as a request for an approval, and Board members are not in a position to offer much during the process. He requested information at a future meeting pertaining to the ARMB's range of engagement in the asset allocation processes compared to peer group processes.

MR. BOB MITCHELL responded this is the third discussion this year at the Board level regarding asset allocation and he anticipates ongoing participation. He reiterated staff wants to engage the Board at whatever level the Board directs. A governance presentation will be given by PAUL ERLENDSON of Callan at an upcoming meeting and will specifically address COMMISSIONER FISHER's process questions and peer group analysis.

MS. ERCHINGER requested a discussion occur in the future focusing on the issue of liquidity in the closed system DB plan, particularly the fact that more money is exiting the plan than is entering the plan and the effects over time the ability to make benefit payments and still maintain the asset allocation. She requested additional discussion occur regarding the possibility of a split asset allocation for shorter-term assets and longer-term assets in order to maintain the return assumption and address liquidity concerns.

MR. BOB MITCHELL informed discussions with the Board regarding liquidity will occur over the next year or two. The three-billion-dollar injection into the system has increased assets, lowered the annual cash inflows, and provided a stabilizing period before assets gradually decrease. He noted the current review includes 10-year assumptions and 30-year assumptions that are different. It is possible a formal asset liability study could be conducted by Callan to address the Board's specific concerns and questions.

MR. BOB MITCHELL continued his presentation describing the asset allocations structure and included a comparison to peers. He reviewed Callan's 2017 capital market expectations and decline of earnings assumptions over the next 10 years. The expected 10-year return for the plans, not including Military, is 6.6%, and minus inflation, it is 4.35%. This is 50 basis points lower than last year's expected return due to the lower overall market return expectations. The portfolio's risk profile remains the same. The Military plan expected 10-year return is 5.3%. MR. BOB MITCHELL showed five asset allocation mixes Callan created based on the Board's risk tolerance. The existing allocation is identical to Mix 4.

COMMISSIONER FISHER asked what the asset allocation would look like without the 50 basis-point reduction in real return. MR. BOB MITCHELL explained the market return expectations are lower and it would take changes to asset allocation and portfolio concentrations in private equity to return 7.13% over 10 years, none of which is prudent.

MR. SHAW commented issues with lower capital market assumptions for the future are being addressed by his plan in San Francisco and industry-wide.

MR. ERLENDSON reminded the Board the expected outcomes is a probability analysis model suggesting there is roughly a 40% probability the current target mix, indexed and net of fees, will achieve or exceed the return goal. Strategies that give a higher probability of exceeding the benchmark return net of fees can be added incrementally, otherwise, it does not make sense to take additional risk and introduce worse downside outcomes.

DR. JERROLD MITCHELL commented the differences between the standard deviation in Mix 1 through Mix 5 are small, but directional. The Board gets to determine if it is comfortable in its current positioning or if it is willing to take on more risk for more return.

MR. BOB MITCHELL stated the existing policy directs achievement of top quartile risk-adjusted performance while taking less risk than the median peer. He believes the recommendation of Mix 4 is within the guidelines. He reviewed Callan's long-term 80-year capital market projections and noted the 30-year return for plans, not including Military, is 8.1%. Projection for 30-year returns for Military is 6.7%. MS. ERCHINGER requested the record reflect the 30-year projected return is a combination of the first 10 years projected return, plus a proportionately higher return in years 11 through 30, producing the average annualized return of 8.1%.

Adopt Asset Allocation:
Resolution 2017-03:
DB PERS/TRS/JRS
PERS/TRS/JRS Retiree Health Trusts
Retiree Major Medical HRAP/ODD

Resolution 2017-04: DB NGNMRS

MS. ERCHINGER moved to adopt Resolution 2017-03 approving the asset allocation for DB PERS/TRS/JRS, PERS/TRS/JRS Retiree Health Trusts, Retiree Major Medical HRAP/ODD, and to adopt Resolution 2017-04 approving the asset allocation for DB NGNMRS. MR. BRICE seconded the motion.

There was no objection from members of the IAC to adopting both resolutions.

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

12. PERFORMANCE MEASUREMENT - 1ST QUARTER

MR. ERLENDSON provided the performance measurement review for the first quarter 2017. He expressed appreciation for the level of engagement from Board members. MR. ERLENDSON gave a broad overview of the strongly rising markets in the first quarter, noting emerging markets returned over 17% year-to-date, as the dollar has started to fall. The recent currency effect has been positive, but is expected to be moderate in the long-term. The ARMB's portfolio is purposefully more conservative than the benchmarks and tends to lag in strongly rising markets against the benchmarks. The reverse is true in declining markets when the portfolio suffers less volatility when the markets decrease.

MR. ERLENDSON discussed valuation and price-to-earnings (P/E) ratios for stocks are at the high end of historical averages, and the prices for bonds are high relative to their yields. Callan expects the capital markets going forward will be more muted. The economy continues to grow and wage growth has begun to move forward. Unemployment is low. Strong areas in the economy include financial services, information technology, and healthcare.

MR. BOB MITCHELL requested additional information regarding the persistent underperformance of international equities relative to domestic equities over the last 30 years. EUGENE PODKAMINER of Callan explained the drivers of rates and returns are influenced by different cycles of currency fluctuations, interest rates, inflation rates, and government policy. This provides diversification and is a key measure of an internally efficient portfolio.

MR. ERLENDSON noted the Federal Open Market Committee has raised interest rates twice this year, causing an uptick in the short end of the yield curve. He reviewed the trend in interest rates and informed higher interest rates may be painful initially for the bond portfolio, but will be good for institutional investors in the long-term. U.S. real estate indexes have returned over 10% in the last five years. Non-U.S. real estate indexes have experienced lower returns due to a less robust market environment and the currency effect.

MR. ERLENDSON continued the presentation focussing on the PERS plan as a proxy for all of the plans. Actual asset allocation is very close to strategic targets and exemplifies tight risk control. MR. ERLENDSON discussed the comparison between the PERS asset allocation and Callan's database of public funds. PERS has a lower allocation to domestic equities, a lower allocation to fixed income, and a higher allocation to non-U.S. equities, real assets, and alternatives, such as private equity and absolute return.

MR. ERLENDSON reported on the plans relative to peers and noted the plans performed at or above median for most of the time periods. He recommended reviewing the allocation exhibit in reference to peer group comparisons to see the drivers in return distributions. The PERS performance Sharpe ratio to the public fund database over the last five years is above average. Over the last year, there have essentially been no draw-downs. For three and five years, draw-downs have remained about the same, and over 10 years, the plan is close to average. Standard deviation over the last five and 10 years is average to below average, which is good.

MR. ERLENDSON showed tracking of performance over 25 years versus the asset allocation policy return and the actuarial target return. Assets were well-ahead of the actuarial return for the cumulative period until 2008, when the market crisis eroded 30% of the funds. Total fund returns continue to closely track the strategic allocation target. MR. ERLENDSON focused on PERS' domestic equity allocations compared to Callan's public pension fund database. PERS trailed slightly by one percent last year, but had much less risk than other managers.

MR. ERLENDSON informed approximately 60% of the large cap assets is passively managed. There are 12 active managers whose account sizes vary from $94 million to over one billion dollars. This creates a potential impact of given managers. MR. ERLENDSON recommended analyzing the variation and size allocation among the managers to see if readjustment is necessary. He noted the small cap portfolio has 14 mandates with a much smaller allocation to passive management. MR. ERLENDSON suggested the same analysis be conducted in regards to range of account size for small cap managers.

MR. ERLENDSON described the high grade fixed income program structure for PERS, and performance over all time periods outperform the benchmark. The bulk of the assets are managed internally and are conservative, containing less interest rate risk and less credit risk. MR. ERLENDSON gave a detailed performance report of the PERS Defined Contribution (DC) Plan. The names Tier I, Tier II, and Tier III are slated to be changed to eliminate confusion. The 14 options include three balanced funds and 11 target date funds. MR. ERLENDSON believes this platform provides participants with a greater engine for wealth creation over longer periods of time at lower fees compared to peers. Growth in the DC plan has increased $200 million in the last year. The TRS DC plan has similar capital allocations and has increased in the last year. The Deferred Comp Plan is net shrinking, with last year's contributions at $380 million and withdrawals at $400 million.

VICE-CHAIR JOHNSON recessed the meeting from 12:23 p.m. to 1:32 p.m.

13. ALTERNATIVE BETA

VICE-CHAIR JOHNSON invited MR. PODKAMINER to present on alternative beta. MR. PODKAMINER explained the industry has multiple names for the alternative beta subset of the broad multi-asset class strategy, including risk premia, strategic beta, exotic beta, or hedge fund replication. He continued the presentation with a big-picture analysis of four strategic asset allocation groups consisting of various asset classes and strategies brought together for simplicity. They are economic growth, risk mitigation, real assets, and absolute return. MR. PODKAMINER gave examples of specific investments driving performance in each bucket. The absolute return sleeve does not consist of asset classes, but of particular strategies. The multi-asset class strategies are included in the absolute return sleeve. Multi-asset class strategies are different from hedge funds in that they are transparent, liquid, and relatively cheap. Multi-asset class strategies are different from long-only mandates because they span asset classes, are allowed to go short, use leverage and derivatives, and are a little more expensive.

MR. PODKAMINER further explained multi-asset class strategies provide exposure to the two different categories of risk factors. The macro factors of GDP growth, inflation, and real rates drive performance risk and return across asset classes. Style factors help explain risk and return within an asset class, such as value, momentum, quality, and carry. Alternative beta/risk premia strategies provide exposure to those types of style factors with both classic rules-based finance and behavioral explanations. The implementation of a long/short approach is inherent in the design of risk premia strategies in order to capture the difference. An important consideration to note is risk premia has very low correlations to traditional equity and fixed income assets already held in the portfolio. They have large capacity and run at high levels of intended volatility. There is no industry standard benchmark used and most managers will report on a couple of different benchmarks, including 60/40, T-bill plus a rate, or active indices of alternative risk premia. The general risk level is 10%, with a 7% return goal.

DR. JERROLD MITCHELL requested additional information on the degree of acceptance of risk premia in the institutional investment community and the flow rate of money into this practice. MR. PODKAMINER reported there is a resounding flow of funds into the strategies. Acceptance differs by geography, with Nordic plans, Canadian plans, and Northern European plans investing like this for quite some time, and American plans now starting to catch up.

VICE-CHAIR JOHNSON inquired as to the specifics of the rules-based process used. MR. PODKAMINER informed there is a high quantitative component that is not calculated with paper and pencil. There is much data manipulation. The art comes in the way the models are specified and factors are exploited. They typically begin by looking at broad asset classes or markets and not on the granular level.

MR. ERLENDSON asked two questions: 1) if it is reasonable to invest in these strategies as a standalone separate account or is a comingled fund a better option, and 2) how important is the custodian to the efficacy of implementing the strategies. MR. PODKAMINER explained both a standalone separate account and a collective trust fund are institutional quality type wrappers for the vehicles. The custodians of these types of instruments are top tier. There are no concerns because they know how to mark, monitor, and house these types of assets.

14. ALTERNATIVE BETA MANAGER SEARCH

MR. BOB MITCHELL informed Callan was directed to perform an alternative beta manager search process, which resulted in six finalists and ultimately the two presenters here today. MR. ERLENDSON stated the screening process was quite iterative, utilizing at least four representatives from the research group, as well as peer review at the end of the process to select organizations that were credible, committed to the strategy, and produced lower correlations to the other asset classes. He will provide a copy of the actual document used.

A. JP Morgan Systematic Alpha

MR. BOB MITCHELL introduced TODD EVANS, of JP Morgan Asset Management, who introduced GARRET NORMAN, Client Portfolio Manager, and MIKE CAMACHO, Global Head of Beta Strategies. MR. EVANS expressed appreciation for ARMB's longstanding client relationship with JP Morgan of 34 years. He noted today's presentation focuses on their fastest growing part of the business, the beta platform and systemic alpha.

MR. CAMACHO stated he has been with JP Morgan 26 years and joined the asset management team last year to build out the quantitative beta platform. Alternative beta investments have been a focus since 2008. Growth in this area is quite strong and is currently between \$7 billion and \$8 billion. The four key principles the investments provide are liquidity, transparency, capacity, and modest costs.

MR. NORMAN continued the presentation describing the systematic alpha strategy as the flagship of the factor-based investment platform. It is centered around providing access to core hedge fund return sources from a bottom-up perspective. Diversification is provided at many levels, including the number of return sources being accessed. The systematic alpha strategy also seeks to provide investors with diversification against their existing traditional exposures. It is designed to have zero equity beta and zero duration over the long-term. The recommendation for the ARMB portfolio is the 10% implementation, with a target range of 8% to 10% volatility over the long-term and excess returns over cash of 6% to 8%. MR. NORMAN provided a detailed example of the systematic framework.

After the representatives completed their presentation and exited, DR. JENNINGS inquired as to the amount of the management fees. MR. BOB MITCHELL informed the fees start at approximately 1% and decline, based on assets under management. VICE-CHAIR JOHNSON asked if the systematic alpha investment vehicle is comingled investments or a separate account. MR. BOB MITCHELL noted both options are available, and he believes the comingled version would be utilized.

B. Man Alternative Risk Premia

MR. BOB MITCHELL introduced CHRIS GORGONE, Managing Director of U.S. Institutional Sales for Man Group, who introduced KEITH HAYDON, CIO for Man Solutions Limited, and SHANTA PUCHTLER, CEO for Man Numeric. MR. GORGONE advised Man Group is a global asset management firm based in London and runs a variety of absolute return and long-only investment strategies. Man Group has 12,000 employees in every major market and a significant U.S. presence. Numeric hedge fund is a systematic Boston-based equities business that has been in operation for 30 years with approximately $25 billion assets under management. AHL hedge fund is a London-based quant equity firm, also with a 30-year history and approximately $25 billion assets under management. Numeric and AHL are the core business divisions of Man's alternative risk premia program.

MR. HAYDON described the effect of the alternative risk premia program is to produce a return of 6% to 7% annually, independent of the environment in which it operates, with a low beta to equities over a cycle. The management fee is less than 1% and there are no performance fees. The structure is completely transparent and invests in long and short bonds, equities, currencies, and commodities. The portfolio utilizes the maximum amount of capital to finance trading activities and a minimum amount in treasury bills. The structure is scaleable, with up to $10 billion in capacity, a Sharpe ratio of .8, and daily liquidity.

The risk premia program was established in 2015, but the contents go back as far as 1987. MR. HAYDON gave a detailed outline of how the risk premia program was created utilizing AHL's macro, top-down, technical signals, and combining that with Numeric's bottom-up, security valuation, and fundamental data information. MR. HAYDON provided information on risk allocation strategies and targets.

MR. PUCHTLER noted he grew up outside of Fairbanks and expressed how good it is to be back. He continued the in-depth presentation on the risk premia research capabilities, product line, and underlying process components. MR. PUCHTLER explained trading is an important part of harvesting and capturing the risk premia and total return available in the processes. The portfolio is quantitatively rebalanced daily or weekly and a significant amount of focus is directed to utilizing the sophisticated cost saving trade algorithms.

MR. HAYDON discussed the critical importance of managing downside risk in the portfolio. He reviewed the different risk management strategies built into the original design, including resizing positions and volatility scaling. The independent risk management team is technically competent and provides oversight to ensure consistency with the objectives.

MR. BRICE expressed appreciation for the presentation. He asked if there is a regional bias to the investments. MR. PUCHTLER advised the portfolio is long/short and is market neutral and regionally neutral. MR. HAYDON added the momentum portfolio is constructed using volatility scaling and risks of each asset class instrument are balanced and equal to each other.

DR. MITCHELL requested views on the argument that every successful investment strategy occurred as imitators and the strategy is soon arbitraged away. MR. HAYDON expressed the same concern and addressed the issue in two ways. Within the investment program itself there are filters that will not allow the program to acquire an anti-value tilt. He understands the flow of capital into alternative risk premia is because it is a cheap form of alternative return. He believes the central flow of funds, having a much bigger effect in the market, is the move to passive investing.

VICE-CHAIR JOHNSON recessed the meeting from 3:21 p.m. to 3:31 p.m.

15. LEGAL FRAMEWORK FOR TRUSTEES

MR. GOERING informed MR. BOB MITCHELL requested this presentation. The Board has statutory obligation to provide Trustees with fiduciary training on an annual basis. MR. GOERING stated most of the presentations from staff and others are within the category of fiduciary education. He believes the education conferences play a valuable role. MR. GOERING noted the subjects he will review today could each be addressed in a semester-long course. His objective is to perhaps shed new insights to the categories and provide inquiry notice to Board members, meaning further questions will have to be asked if specific situations arise because not enough information will have been given today.

MR. GOERING reviewed the prudent investor rule in Alaska Statute (AS) 37.10.071 (c) and AS 37.10.210 (a). He discussed the ability to prudently delegate fiduciary duties to investment managers. The vetting process needs to be thorough and provide clear instruction in investment management agreements and investment guidelines. Continued oversight needs to occur to ensure the mandate is being followed and expectations are being met.

COMMISSIONER FISHER requested additional information regarding the fiduciary duty in reference to addressing a substantial unfunded liability. MR. GOERING does not believe the fiduciary duty requires the Board to do the impossible of making up underfunding through short-term investment strategy. MR. GOERING explained the unfunded liability issue is resolved in a different statute focused on contribution rates for past service liability.

MR. BOB MITCHELL asked for guidance on the seemingly additional difficulty of the Board setting a return expectation, and how that is determined. MR. GOERING believes the Board is and has historically been responsible for operating within a framework of reality. The long-term view is stable and consistent in trying to match return expectations with future liabilities, based on actuarial calculations. MR. BOB MITCHELL expressed interest in further discussion of this ambiguous and challenging topic offline.

MR. GOERING continued the presentation with extensive discussion on the additional individual topics of open meetings, public record, role of counsel, privilege, confidentiality, Executive Branch Ethics Act, and securities law. He commented the environment is legally saturated and advised Board members to discuss any legal doubts with him or staff.

RECESS FOR THE DAY

VICE-CHAIR JOHNSON recessed the meeting at 4:03 p.m.

Friday, June 23, 2017

CALL BACK TO ORDER

CHAIR GAIL SCHUBERT reconvened the meeting at 9:02 a.m.

Trustees Johnson, Harbo, Erchinger, Fisher, Hoffbeck, Brice, and West were also present.

16. EMERGING MARKET VALUE STRATEGY

MR. BOB MITCHELL informed representatives from DePrince, Race & Zollo (DRZ) will give the presentation on the Emerging Market Value Strategy. DRZ has managed a microcap strategy for the ARM Board since 2011, and employs the same value approach within the Emerging Market Value Strategy. Staff has vetted this strategy and believes it would be additive to the existing emerging market equity mandate with a compelling management fee of 30 basis points. MR. BOB MITCHELL introduced KELLY CARBONE, Managing Partner, and MARC MILLER, Co-Portfolio Manager.

MS. CARBONE reported DRZ became an independent firm in 1995, and included in their mission was commitment to the institutional marketplace and commitment to the 32-year investment philosophy, methodology, and discipline embedded across all firm strategies. Each strategy has a dedicated team, and the Emerging Market Value Strategy has four analysts exclusively focused on emerging markets. The strategy invests in all capitalization, large, mid, and small. The growth of the assets within the strategy is capped conservatively at $4 billion to maintain the nimbleness for the smaller cap opportunities. MS. CARBONE provided a detailed review of the strategy's buy/sell decision process. On average, the portfolio holds 65 to 75 stocks and maintains a 1% minimum dividend yield requirement for all stocks.

MR. MILLER continued the presentation discussing emerging markets' history and growth catalysts, including the inflection of earnings estimates and the continuation of historical inexpensive valuations. MR. MILLER described an extensive analysis of the currently held Indian stock Tata Global Beverages as an illustration of the investment philosophy. MR. MILLER discussed travel to other countries is an important component in understanding companies, their business models, and the changes occurring in the market. MR. MILLER reviewed the eclectic top 10 holdings in the portfolio, and discussed the particular dynamics and perspectives regarding the Taiwanese-based company Delta Electronics.

MR. MILLER shared an overview of the sector and country allocation. The portfolio has sector overweights in consumer discretionary, financials, and materials, and underweights in technology. The country overweight is in Latin America and the underweight is in Asia.

MR. ERLENDSON requested information on the break-even range at which the international team is paying for itself, given the firm's decision to shut down marketing of existing international products. MS. CARBONE informed after discussions with Callan and other consulting firms, DRZ decided to close international and global strategies as a commitment to adding the most alpha to the emerging market space. She noted the U.S. strategies have been subsidizing work outside the U.S. in a joyful way because the growth engine for the firm is the emerging market space. Most of the funds from the international and global strategies, approximately $200 million in verbal commitments, are moving to the emerging market strategy. MS. CARBONE informed the fee of 30 basis points was offered in order to reach critical mass. She noted the strategy will be moving to its published fee of 100 basis points in the next couple of months, given the verbal commitments to the strategy.

MR. SHAW inquired as to selection of using the standard EM benchmark rather than the EM Value benchmark in light of DRZ's definitively value-tilted process. MS. CARBONE stated the preference would be to utilize the EM Value Index as the benchmark and believes it will change to this over time. She noted that more importantly, the strategy does not manage to either index. It is decisively value.

17. CRESTLINE INVESTORS

MR. BOB MITCHELL advised Crestline manages several mandates for the ARM Board in the absolute return asset class, oriented toward credit and opportunistic. He advised the presentation will be an overview of the current investments, including Specialty Lending Fund 1, which focuses on making first lien secured investments to low market cap high quality companies. Crestline will then introduce Specialty Lending Fund 2. MR. BOB MITCHELL informed later in the meeting, staff will recommend investment in Speciality Lending Fund 2.

DOUG BRATTON, Founder and CIO Crestline Investors, introduced KEITH WILLIAMS, Partner, and JAMES DELAUNE, Head of Coinvestment Operations. Crestline is an institutional credit-focused alternative asset manager with about $8.8 billion of assets under management, with a diversified institutional client base. Offices are in the U.S., London, and Tokyo, and are comprised of 66 investment professionals and 140 employees. Crestline has provided innovative alternative investment offerings for 19 years, and has been an asset manager for the ARM Board since 2004.

MR. BRATTON noted two of the current mandates were split between the credit opportunistic strategies of Blue Glacier Fund (BGF) Class B and Blue Glacier Fund Class C. The strategies are liquidating mandates, which are evergreen by design to keep consistent allocation in the portfolio. BGF Class B had an inception date of May 2013, and focused on niche strategies, private credit strategies, and hedge fund secondaries. The account is currently liquidating and returning capital to ARMB. The return expectation is 10% to 12% net, and the mark-to-market return is in line at about 11.9%.

MR. WILLIAMS provided the update on the active opportunistic mandate BGF Class C, incepted in April 2015, which focuses primarily on underserved and capital constrained asset classes, and takes advantage of market inefficiencies and dislocations. The investment was $350 million and $178 million has been committed across 17 deals, underwritten with a cash yield of 8.83% and a structured return of 14.91%. The pipeline looks very robust at this point.

VICE-CHAIR JOHNSON requested comment regarding the degree of exposure in this strategy and having to utilize lawyers in order to recover and preserve money in the fund. MR. WILLIAMS explained 43% of the deals are senior secured loans and 25% are mezzanine or structured equity. The lawyers for all of those are paid for by the counter-party. Structure is vital in every situation and often can dictate the outcome and recovery in the deal. It is important to be at the top of the capital structure risk, either a first lien lender or owning the entire asset. The IRR on the portfolio was 7.6% net as of February 28. He discussed deal examples of the portfolio showing diversification and the utilization of unique deal-sourcing through bilateral relationships and personal networks.

MR. ERLENDSON asked if the owned assets are encumbered. MR. WILLIAMS informed the assets were free and clear at underwriting. Since then, two of them have performed well enough to place a minimum amount of leverage on them.

MR. WILLIAMS continued the update noting the BGF Class C PE Credit strategy provides portfolio financing to private equity firms that are later in life, and would need capital to either provide liquidity for their LPs and/or for growth opportunities. The key to the strategy is to take senior positions on diversified portfolios at loan-to-values of less than 30%. MR. WILLIAMS walked Board members through a recent successful situation within the portfolio.

MR. WILLIAMS reviewed Specialty Lending I IRR to NRV is about 11.03% as of March 31. There were no payment defaults as of March 31, and no credits moving to non-accrual status. One transaction is in process and 31 have been completed. Out of the $625 million, $570 million has been invested. The portfolio level based on the average EBITDA was about $35.5 million, 4.4 times levered, 54% loan-to-value, and a 9.7% yield at a three-year takeout on a non-levered basis. The vast majority of the deal support acquisitions and/or growth. Industry diversification is high. MR. WILLIAMS discussed the new strategy Specialty Lending II is an exact extension of Specialty Lending I.

MR. BOB MITCHELL requested additional information on the structure of Specialty Lending II with respect to leverage and risk to investors. MR. WILLIAMS advised the two forms of leverage in many of the direct lending strategies are subscription lines, used to facilitate quicker capital calls, and permanent leverage, the advanced rate ascribed by the permanent leverage provider, which is Goldman Sachs in Specialty Lending I. Pricing of leverage typically ranges from LIBOR 250 to LIBOR 350. The strategies can endure up to 1.5 to two times leverage, but on average the strategy seeks about a 50/50 equity to debt ratio. MR. WILLIAMS informed the risk is only at the investment level to the equity ARMB has committed.

MR. SHAW requested explanation of how the strategy aligns the life of each investment with the life of the placed leverage. MR. WILLIAMS explained Specialty Lending I was structured to ensure the life of the leverage mirrored the life of the fund. Since Specialty Lending II is a direct extension of Specialty Lending I, it will have the exact same strategy, same sourcing channeling, and exact same team. The only difference will be the max position size will increase from $30 million to $50 million in order to take advantage of additional opportunities.

MR. WILLIAMS continued the presentation providing a detailed executive summary of the Specialty Lending II strategy, including team continuity, industry focus, attributes, risk mitigation, sourcing, and position size. MR. SHAW inquired as to the effect to this strategy of bank competition if Dodd Frank provisions were eliminated. MR. WILLIAMS commented the banks were not heavily participating in this area of the market before the Dodd Frank provisions and so he does not foresee an automatic increase if provisions were eliminated. MR. WILLIAMS believes the market the banks would most likely enter is the larger deal sizes, which are priced at LIBOR 400-plus and would generate large fees.

CHAIR SCHUBERT recessed the meeting from 10:14 a.m. to 10:28 a.m.

3. TIR UPDATE
EXECUTIVE SESSION: 10:30 a.m.

MR. GOERING advised it is appropriate to go into executive session to discuss the TIR update under the Open Meetings Act, AS 44.62.310 (c) 1.

MR. BRICE moved to go into executive session to discuss the TIR update. MS. HARBO seconded the motion.

The motion passed unanimously.

CHAIR SCHUBERT called the meeting back to order at 3:12 p.m.

19. INVESTMENT ACTION

A. Callan Contract Option

MR. WEST moved to direct staff to exercise the first one-year contract option, extending the consulting contract with Callan until June 30, 2018. VICE-CHAIR JOHNSON seconded the motion.

COMMISSIONER FISHER commented he is in favor of the motion and requests additional effort be put forth to build a more complete and independent relationship between Callan and the Board.

DR. JENNINGS noted legislation specifically tasks the IAC with advising the Board on selection of performance consultants. DR. JENNINGS supports Callan, who is a top tier firm and is incentive-aligned. DR. JENNINGS informed MR. SHAW emailed his advice regarding each of the upcoming discussion items to share with the Board, and supports the Callan and Townsend recommendations.

A roll call vote was taken of MS. ERCHINGER, COMMISSIONER FISHER, VICE-CHAIR JOHNSON, MR. WEST, and CHAIR SCHUBERT, and the motion passed unanimously.

CHAIR SCHUBERT indicated the other Trustees were excused.

B. Townsend Contract Option

MR. WEST moved to direct staff to exercise the first one-year contract option, extending the contract with Townsend until June 30, 2018. VICE-CHAIR JOHNSON seconded the motion.

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

C. Crestline Investors Mandate

MR. WEST moved to direct staff to negotiate with Crestline Investors a commitment of up to $60 million to Crestline Specialty Lending Fund II, LP. MS. ERCHINGER seconded the motion.

MR. BOB MITCHELL explained this recommendation is to effectively maintain the asset size of the existing strategy to this mandate. Specialty Lending Fund I is at the end of its investment period and as redemptions are made, investments are returned. The main purpose is to have investment in the new fund as investments are returned. The investment amount of $60 million was specifically chosen because of the asset levels held within the current Crestline mandates. Staff is cognizant and concerned with concentrating large amounts of investments in illiquid strategies with one firm.

VICE-CHAIR JOHNSON asked if the approval is subject to favorable negotiations on terms and conditions. MR. BOB MITCHELL agreed.

DR. JENNINGS commented he has concerns on the broad level about over-saturation and over-commitment to the private debt markets. He believes this space seems differentiated and durable. He noted good experience with Crestline and expressed support for the motion. DR. JENNINGS informed MR. SHAW emailed his support, noting the firm is high-quality, with a solid and consistent applied investment approach.

CHAIR SCHUBERT informed MRS. HARBO indicated her support.

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

D. DRZ Emerging Market Mandate

MR. WEST moved to direct staff to contract with DePrince, Race & Zollo, Inc. to manage an initial allocation of up to $200 million in an emerging markets equity strategy subject to successful contract negotiations. MS. ERCHINGER seconded the motion.

COMMISSIONER FISHER requested comments from MR. ERLENDSON regarding Callan's conversations with DRZ about their success, and comments from MR. BOB MITCHELL regarding the $200 million investment amount compared to the overall position. MR. ERLENDSON commented DRZ indicated recently they would no longer raise money for their other international strategies. The track records were somewhat midland and some of the clients had started redeeming because they do not see an ongoing commitment to the strategies. MR. ERLENDSON stated it is important to keep the talented staff motivated, partly by receiving earnings off of what they manage. That was the reason for the question about the break-even rate. He noted MS. CARBONE indicated the firm was committed to the strategy and Callan absolutely believes that is the case, but wanted to put it on the record since DRZ has shut down other products. MR. ERLENDSON believes asset values at $500 million, as projected, will be profitable.

MS. ERCHINGER requested comment regarding unsettling remarks by MS. CARBONE, who noted as a result of Callan and other investment advisors expressing concern about DRZ international investments, DRZ made a decision to wind down their international. MS. ERCHINGER asked if Callan would be recommending this strategy if the fees were not at the significantly lower offering. MR. ERLENDSON answered yes, the research staff at Callan has reviewed this strategy and are advocates.

DR. JENNINGS reported MR. SHAW emailed his comments and supports the motion, suggesting this is a differentiated approach to emerging markets that will complement more traditional growth-oriented emerging market strategies. DR. JENNINGS stated his opinion that there is seemingly good value in emerging markets, especially within a value strategy. He believes saving 70 basis points off the typical fee is compelling. DR. JENNINGS noted the $200 million investment is aggressive at 40% of the portfolio. He discussed the manager risk relative to ARMB's assets under management is small, and he is comfortable with the allocation level.

DR. JERROLD MITCHELL expressed support for the recommendation and believes emerging markets is a good place for long-term assets. He noted a slight disconnect between the stated strategy of value and smaller cap and the portfolio's largest holdings. He believes DRZ is committed to this strategy and that it is a growth platform for the company.

VICE-CHAIR JOHNSON indicated he would vote no on the motion, but stated he would accept a modification for a $100 million allocation.

A roll call vote was taken, and <u>the motion passed, with VICE-CHAIR JOHNSON voting against.</u>

E. Alternative Beta Manager Selection

<u>MR. WEST moved to direct staff to hire JP Morgan Asset Management and Man Group to collectively manage an initial allocation of up to $400 million subject to completion of due diligence and successful contract negotiation.</u> <u>COMMISSIONER FISHER seconded the motion.</u>

MR. WEST requested IAC members and MR. BOB MITCHELL to go on record as supporting the recommendation and indicating their due diligence. He does not believe the Board has enough empirical evidence to make the decision because the asset class does not have an industry-defined benchmark and has only a three-year track record. DR. JENNINGS reported MR. SHAW's comments supporting both alternative beta firms and noted this is a newer space, which will offer the ARM Board opportunity to earn differentiated returns not available in more traditional equity and fixed income spaces.

DR. JENNINGS informed there is economic evidence to support these strategies. He expressed issue with the 1% fee perhaps being expensive and believes successful fee negotiation is critical. DR. JENNINGS believes the IAC's due diligence is similar to the Board's due diligence in listening to the staff and the consultant's report. He is supportive of the motion.

DR. JERROLD MITCHELL expressed support for the recommendation and commitments to both firms.

MR. BOB MITCHELL commented he and MR. HANNA participated in a due diligence trip to visit all six finalists, including the two recommended today. Confidence in the firms is driven by multiple levels of risk management and the institutional quality of the organizations. He believes the fee advantage is significant because is it on the order of 1/3 of the all-in cost for traditional hedge fund strategies.

VICE-CHAIR JOHNSON found the presentation to be dense and requested an additional thumbnail review. MR. ERLENDSON informed much time has been focused on researching and evaluating these kinds of strategies. He noted it is challenging to understand the space because there is not a lot of history, but there is significant amount of academic research. Callan is 100% behind the research supporting the implementation. MR. ERLENDSON stated Callan will work with staff to ensure the standard ways of evaluating, in terms of peer group, benchmarks, and other protocols are readily accessible to the Board.

MR. BOB MITCHELL characterized the strategies as attempts to access return streams that traditional hedge funds access. This is done in a systematic way that is rules-based, transparent, and at a lower implementation cost. He noted that hedge fund strategies have effectively captured a significant portion of their total return from risk factors, and alternative beta attempts to access those risk factors at a lower cost.

MS. ERCHINGER expressed appreciation for the extra explanation.

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

CHAIR SCHUBERT noted for the record MRS. HARBO indicated her support for the motion.

UNFINISHED BUSINESS
None

NEW BUSINESS
None

OTHER MATTERS TO PROPERLY COME BEFORE THE BOARD

CHAIR SCHUBERT informed she has nothing to report under the Chair's report.

PUBLIC/MEMBER COMMENTS
None

INVESTMENT ADVISORY COUNCIL COMMENTS

DR. JENNINGS provided two social announcements; 1) MR. SHAW is newly appointed as the CIO of the San Francisco's Treasurer's Office, and 2) MR. ERLENDSON has reached a milestone birthday.

TRUSTEE COMMENTS

VICE-CHAIR JOHNSON expressed appreciation to MR. BOB MITCHELL for his efforts and for extending explanation when requested.

MS. ERCHINGER reminded all members the Actuarial Committee will meet on October 4th to discuss healthcare assumptions. Recommendations regarding economic assumptions will be brought before the Board on December 6th. Demographic assumptions will be discussed on March 28th.

FUTURE AGENDA ITEMS
None

ADJOURNMENT

There being no objection and no further business to come before the Board, the meeting was adjourned at 3:47 p.m. on June 23, 2017, on a motion made by MR. WEST and seconded by MS. ERCHINGER.

Chair of the Board of Trustees
Alaska Retirement Management Board
ATTEST:

____
Corporate Secretary