State of Alaska
ALASKA RETIREMENT MANAGEMENT BOARD
MEETING

Location:
Atwood Building
550 West Seventh Avenue
Anchorage, Alaska

MINUTES OF
June 21-22, 2018

Thursday, June 21, 2018

CALL TO ORDER

CHAIR ROBERT JOHNSON called the meeting of the Alaska Retirement Management Board (ARMB) to order at 9:01 a.m.

ROLL CALL

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

Board Members Present
Robert Johnson, *Chair*
Gail Schubert, *Vice Chair*
Gayle Harbo, *Secretary*
Kristin Erchinger
Commissioner Sheldon Fisher
Commissioner Leslie Ridle
Norman West
Bob Williams

Board Members Absent
Tom Brice

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
Shane Carson, Investment Officer
Sean Howard, Investment Officer
Stephanie Alexander, Board Liaison

Department of Administration Staff Present
Ajay Desai, Director, DRB
Kathy Lea, Chief Pension Officer, DRB
Christina Maiquis, Accountant V, DRB (phone)

Consultants, Invited Participants, and Others Present
Steve Center, Callan LLC
Paul Erlendson, Callan LLC
John Pirone, Callan LLC
David Kershner, Conduent HR Services
Stuart Schulman, Conduent HR Services (phone)
Scott Young, Conduent HR Services
Stuart Goering, Department of Law, Assistant Attorney General
Leslie Thompson, GRS Consulting
Paul Wood, GRS Consulting
Joseph Maietta, MacKay Shields
Andrew Susser, MacKay Shields
Robert A. Gillam, McKinley Capital Management
Alex Slivka, McKinley Capital Management
Matt Day, Mondrian Investment Partners
Todd Rittenhouse, Mondrian Investment Partners
Brad Owens, Retried Public Employees of Alaska
Henry Disano, State Street Corporation

PUBLIC MEETING NOTICE

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

APPROVAL OF AGENDA

MS. HARBO moved to approve the agenda. MS. ERCHINGER seconded the motion.

BOB MITCHELL, Chief Investment Officer, requested to amend the agenda by adding an executive session after Item VIII.8. Legal Review.

VICE-CHAIR SCHUBERT moved to amend the agenda adding an executive session after Item VIII.8.Legal Review. MR. WEST seconded the motion to amend the agenda. The motion to amend the agenda was approved without objection.

The amended agenda was approved without objection.

PUBLIC/MEMBER PARTICIPATION, COMMUNICATIONS, AND APPEARANCES

BRAD OWENS, Executive Vice-President of the Retired Public Employees of Alaska, noted he is impressed and pleased with the Advisory Board members' interest, intelligence, and willingness to listen. He has attended two meetings and believes the Department of Administration has been willing and active in helping the Advisory Board develop an awareness of the legal requirements in changes to benefit levels, types, and coverages. MR. OWENS reported on a subcommittee meeting focused on proposed changes to the pharmacy plan and proposed modernization changes of various benefits. He feels the Advisory Board has been a very productive and positive experience.

APPROVAL OF MINUTES: March 29 - 30, 2018

MS. HARBO moved to approve the minutes of the March 29 - 30, 2018 meeting. MS. ERCHINGER seconded the motion.

The minutes were approved without objection.

CHAIR JOHNSON commented on his and MS. HARBO's reappointment to the Board. CHAIR JOHNSON offered condolences on behalf of the Board to MS. HARBO for the loss of her husband SAM HARBO.

STAFF REPORTS

1. RETIREMENT & BENEFITS DIVISION REPORT

A. Conduent Consulting Invoices (informational)

CHAIR JOHNSON introduced Director AJAY DESAI and accountant CHRISTINA MAIQUIS. MS. MAIQUIS advised the report for the actuarial services for fiscal year (FY) 2018, through March 31, 2018, was provided in the Board packet. There were no questions.

B. Membership Statistics

MS. MAIQUIS advised the Membership Statistical Reports for FY18, through March 31, 2018, were included in the Board packet. She noted the number of active Defined Benefit (DB) members continues to decrease and the number of active Defined Contribution (DC) members continues to increase. Retirement numbers for both plans continue to increase.

MS. ERCHINGER requested MS. MAIQUIS summarize the recent letter distributed to employers regarding the return of contributions to employers for whom non-vested DC employee funds remain in the system. MS. MAIQUIS explained a change beginning in July, whereas employers can use the contributions for DCR members that are not fully vested as an offset against future contributions.

C. DRB Update / Legislation

MR. DESAI reviewed the 2018 legislative update report included in the Board packet. He highlighted specific bills. House Bill (HB) 47 passed and reset the salary floor from 2008 to 2012. HB 47 has connection to HB 286. HB 83 has not had any action and allows the opportunity to choose between the DB and DC plans. HB 224 passed under Senate Bill (SB) 185 and focuses on Teacher Retirement System (TRS) retiree rehires. HB 395 has not had any action and is a companion bill with SB 212. It focuses on peace officer/firefighters retiree benefits. SB 97 passed and focuses on pension obligation bonds. HB 306 passed and allows the offering of many benefit options for the DC retirees.

COMMISSIONER FISHER gave COMMISSIONER RIDLE the pen the Governor used to sign HB 306. COMMISSIONER RIDLE expressed appreciation to Chief Pension Officer KATHY LEA for her work and testimony, and to staff MINTA MONTALBO for her contribution in obtaining the votes to pass this bill.

MS. ERCHINGER directed the Board's attention to the intent language added by the Legislature in Sec. 27(h) of HB 286 suggesting the Board consider the funding ratio when recommending an amount for deposit in the National Guard Naval Militia Reserve System (NGNMRS). As of the June 30, 2017 roll-forward valuation report, the plan is funded at 122%. MS. ERCHINGER reiterated the Board reviews each plan individually and stressed the importance the public is made aware of the process. With respect to NGNRS, the concern is the data from employers is incomplete and inaccurate. The particular nuances of that plan justify a funding ratio above 100%.

MR. MITCHELL reminded the Board the inflation assumption will be discussed later in the meeting. He explained the return assumption is influenced by the inflation assumption. To the extent the inflation assumption is changed, resulting in a lower return assumption for the plan, the funded ratio would decrease from its current surplus level.

MR. DESAI requested MS. LEA provide on overview of the DC plan updates reviewed in yesterday's DC Plan Committee meeting. MS. LEA reported a survey of all 155 employers was sent out a few months ago and a low response of only 11 were returned. Out of the 11 responses, it was discovered the employers are not widely distributing the retirement information to new employees as instructed. This area of weakness prompted a two-day meeting with Empower to develop a strategy for the next two years focused on getting DCR members engaged and better educated.

MS. LEA explained the strategy and includes organizing the Empower representatives by region. An employer conference entitled "Better Together" will occur October 3rd through 5th in Juneau and will detail the responsibility of the employer. It will provide an opportunity for the employer representatives to meet with the regional group. Another area of focus is on attraction and retention. The Department of Public Safety (DPS) is participating in a pilot program specifically designed to attract new Troopers and to retain current employees. DPS recognizes the problem of existing DB members disparaging the retirement plan to new DCR members. The problem will be mitigated by developing new informational flyers and creating a video showing a Trooper Lieutenant, an Empower representative, and a DRB representative dispelling the retirement myths heard in the workplace. MS. LEA noted the lessons learned from this pilot program will be leveraged across all State departments and eventually out to the political subdivisions and school districts.

MS. LEA announced the new employee orientation videos for SBS, Deferred Compensation, PERS, and TRS are all online for employers to use. Empower has agreed to move the targeted communication from targeted age groups to the individual. The targeted communication, which includes plan information, deferred compensation participation, increasing contributions, and general savings, will be based on the individual's specific demographic information and other investment information on-file.

2. TREASURY DIVISION REPORT

CHAIR JOHNSON invited Treasury Division Director PAMELA LEARY to present the Treasury Division Report. MS. LEARY informed the discussion at the Audit Committee meeting yesterday included staffing, promotions, and succession plans. Currently, there is one investment officer position open and two accountant positions open. The Treasury budget remains unchanged from the final budget. MS. LEARY and State Comptroller SCOTT JONES completed a due diligence meeting last week at State Street's data center outside of Boston. MS. LEARY announced the planning of a Board visit to the data center to receive a presentation on cyber security and visit with Fidelity Management. This would occur on October 10th, prior to the education conference. MS. LEARY noted additional information is forthcoming.

CHAIR JOHNSON emphasized the significance of cyber security awareness and the importance of maintaining a high level of education on these issues.

3. CALENDAR/DISCLOSURE

MS. ALEXANDER stated the disclosure memo is included in the packet and there are no transactions requiring additional discussion. The remaining 2018 calendar is also in the packet and the provided 2019 calendar is up for Board approval.

MS. HARBO moved to accept the proposed 2019 calendar. MS. ERCHINGER seconded the motion.

The motion passed with no objection.

4. CIO REPORT

MR. MITCHELL highlighted today's meeting will include presentations regarding economic assumptions embedded in the experience study. MR. MITCHELL encouraged the Board to discuss and make progress toward consensus on adopting actuarial assumptions at its next meeting. MR. MITCHELL informed his later presentation will ask the Board to consider modestly decreasing the risk profile of the plans. The presentation on international equities is a continuation of the review of asset classes. An investment action will be considered at the end of the meeting. Additionally, presentations from the high yield manager and the international fixed income manager will provide updates and proposed changes to their investment guidelines. At tomorrow's meeting, McKinley Capital will present on an innovative strategy for Board consideration.

MR. MITCHELL provided a summary of the 85 items in his transaction report. Item 1 is a series of asset allocation rebalances within the portfolio, and are primarily motivated by drifting asset allocations between the various plans resulting from cash flows. Items 2 through 9 detail the capital calls received on existing commitments. Items 10 through 19 are related to activity involved in the cash equalization program and rolling contracts forward on a quarterly basis. Items 20 through 22 relate to the liquidation of Alliance NFJ, which was a termination decision made at the December meeting. Items 23 through 51 relate to the transition of portfolios terminated during the March meeting. MR. MITCHELL reviewed the next category of other investment actions with existing strategies and funding of Board approved allocations through Item 80.

MR. MITCHELL noted Item 81 is a recommendation to place Mondrian International Small Cap on the watch list for performance reasons. The current portfolio amount is $195 million.

<u>MS. HARBO moved to place Mondrian International Small Cap on the watch list. MS. ERCHINGER seconded the motion.</u>

MR. WEST requested a review of the performance of the Mondrian International Small Cap portfolio. MR. MITCHELL informed the rolling six-year period as of December 2017, triggered the watch list performance criteria by underperforming the benchmark by 1.85%, underperforming the style by almost 3%, and underperforming 74% of their peers.

A roll call vote was taken, and <u>the motion passed unanimously.</u>

MR. MITCHELL explained Items 82 and 83 are notifications to the managers that were terminated in March and December. Item 84 begins the consolidation of the DC fixed income passive options. Item 85 describes Callan's engagement in three Board approved mandates. Callan's evaluation of PineBridge and Fidelity Signaling strategies resulted in recommendations to invest. Contract negotiations are underway. Callan is in the process of reviewing investment policies and the Policy and Procedures Manual. Lastly, MR. MITCHELL informed two college interns were hired and are participating in a variety of research projects.

5. FUND FINANCIAL PRESENTATION

MR. JONES advised the Fund Financial Report as of April 30, 2018, was included in the packet. MS. HARBO asked if the line item was added, as requested in the previous meeting, showing the total amount of assets managed in-house. MR. JONES indicated the line item has not yet been added to the report. He stated internally managed public assets were approximately \$7.7 billion as of May 31st, of which \$2.3 billion were public fixed income and \$5.4 billion were public equities.

MR. JONES reported for the month of May, the plans' participant and nonparticipant directed funds had income of \$341 million and outflows of roughly \$88 million. As of June 19th, the year-to-date nonparticipant directed plans had income of \$2.2 billion and outflows of \$927 million, with changes in invested assets at just below 5%.

MS. MAIQUIS reported on the 10 months ending April 30th, 2018. Contributions for the funds were \$1.1 billion and expenditures were \$1.8 billion. MS. HARBO asked for verification the total refund to DC members leaving the system in the 10 months is about \$51 million or about \$5 million a month. MS. MAIQUIS agreed.

MS. ERCHINGER expressed gratitude for the supplemental notes provided in the Treasury Report. She stated the notes have been improving over time. MS. ERCHINGER commented on the \$7.7 billion of funds being managed in-house and thanked staff for their hard work.

TRUSTEE REPORTS

6. CHAIR REPORT

CHAIR JOHNSON suggested a committee be created to focus on policies and procedures. He believes the timing is important now because of the pending Callan report reviewing investment guidelines and policies and procedures. CHAIR JOHNSON has received travel approval requests from staff and suggests the committee consider and debate what processes should be followed for such requests. CHAIR JOHNSON asked Board members to provide feedback regarding the creation of this committee by the next Board meeting.

CHAIR JOHNSON commented on the sheer volume of transactions undertaken by MR. MITCHELL and staff. He believes this indicates the in-house staff is doing an excellent job and it reflects the degree to which trust has been given. CHAIR JOHNSON noted he receives the reports on the transactions and invited other Board members to receive the information. CHAIR JOHNSON informed he has asked for a review of the boundaries of staff delegation over time to ensure the Board understands the decision-making. Board discussion and evaluation of findings will occur in the delegation component later in the meeting.

CHAIR JOHNSON stressed the importance of ensuring a proper record is built that reflects the Board's decision-making processes, especially on investments that are more exotic than the norm or that have a quick turnaround time.

7. COMMITTEE REPORTS

A. Audit Committee

CHAIR JOHNSON, as Chair of the Audit Committee, informed the Audit Committee met yesterday and enjoyed an excellent presentation by KPMG regarding their auditors' review of the fund financials, their process for the ARMB, and their processes worldwide. CHAIR JOHNSON expressed confidence in KPMG's approach and operations. The meeting discussion reviewed the concern of cyber security issues and what mitigations are occurring to identify problems and patterns.

CHAIR JOHNSON informed Chief Financial Officer from DRB, KEVIN WORLEY, has left employment and he will be missed. CHAIR JOHNSON believes MR. DESAI and staff will adequately replace the efforts.

CHAIR JOHNSON reported he testified before the legislative session on HB 306. CHAIR JOHNSON expressed appreciation to COMMISSIONER RIDLE, staff, and MS. LEA for presenting an excellent product, and to the Legislature for adopting the bill.

B. Actuarial Committee

MS. ERCHINGER, as Chair of the Actuarial Committee, reported the committee met yesterday and received the final report from GRS reviewing the valuation conducted by Conduent. This concludes the one-year timeline for completing the valuation. The recommendation by the Committee to the Board later in the meeting will be to approve both the Conduent valuation report and the GRS review of the valuation report. GRS also provided a review of the JRS and NGNMRS systems.

MS. ERCHINGER informed the Committee continued to work on the experience study, with particular discussion regarding the range of economic assumptions with respect to the inflation assumption, the real return assumption, and the tools used to develop the range of those levels. The specific rates will need to be approved by the Board in September. Additional discussion will occur later in today's meeting narrowing down the actual target.

MS. ERCHINGER reported Assistant Attorney General STUART GOERING provided legal input during the discussion focused on the legislation that created the 25-year closed amortization period and resultant Board constraints to alternatives. Future Committee discussion on that topic is expected.

C. DC Plan Committee

MR. WILLIAMS reported the Defined Contribution Committee met yesterday and heard a presentation by MS. LEA, which included the legislative update, employer survey results, and new retirement readiness marketing outreach. Discussion occurred comparing the defined benefit and defined contribution versus the final salary ratio. MR. WILLIAMS reported MR. MITCHELL presented information on the Monte Carlo analysis reviewing various simulations of how long retirement benefits could last after 30 years of employment. Both of the presentations provided coherence and clarity to some of the challenges being faced. MR. WILLIAMS informed the State's deferred compensation is open to school districts and three districts have enrolled. MR. WILLIAMS believes this is a strong product and more information needs to be disseminated.

COMMISSIONER FISHER commented the discussions at yesterday's meeting were very helpful. He expressed appreciation for the work being done in both departments. COMMISSIOER FISHER expressed concern about setting expectations. He believes it may be unrealistic for a person to work from age 25 to age 55, and expect to have enough money through retirement.

MS. HARBO expressed concern on the decrease in 403(b) participation among teachers within the last 10 to 15 years, and would like to find a way to increase that participation. She also suggested reviewing the possibility of automatic enrollment and automatic escalation of contributions.

MR. WILLIAMS agreed to the importance of increasing awareness regarding strengthening a successful retirement through utilizing all the benefits available to employees, including SBS, deferred comp, and access to Social Security, if available.

COMMISSIONER RIDLE noted DRB will return to the DC Committee at the next meeting to continue discussion regarding possible Board supported legislation and ideas on how to increase participation in deferred compensation.

D. Alaska Retiree Health Plan Advisory Board

MS. HARBO, ARMB Advisory Board member, informed the full committee met on May 8th in Anchorage, adopted bylaws, developed a meeting calendar for 2018 and 2019, and discussed rules for public comments. A presentation was given on the Enhanced Employee Group Waiver Program (EEGWP) proposed to replace the retiree drug subsidy program for DC retirees and current DB retirees. A summary of the detailed presentation and frequently asked questions can be found at the website AlaskaRHPAB@alaska.gov.

MS. HARBO reviewed the presentation given by DRB centered around the 12 proposed DB health plan modernization areas of focus. Because of the complexity of the issues, initial work was assigned to a three-person subcommittee that met on June 12th. The subcommittee decided to concentrate on five priority issues; preventative care, lifetime max, pharmacy design, travel benefit, and rehabilitative services. The next subcommittee meeting will be in mid-July. Future full committee meetings will be held in conjunction with the Aetna quarterly meetings, with the next meeting being held in Juneau on August 29th. A draft form of the updated health plan booklet will be presented.

MS. HARBO thanked MR. OWENS for his positive comments in the public session and to COMMISSIONER RIDLE for her presence at both meetings.

COMMISSIONER RIDLE expressed her excitement regarding the committee and her appreciation to its dedicated members.

8. LEGAL REPORT

MR. GOERING reported on the summary judgment issued by the Superior Court on June 14th regarding the Metcalfe v. State litigation.

CHAIR JOHNSON requested additional information pertaining to the ongoing litigation on the subject of diminution of benefits relating to the health plan. COMMISSIONER RIDLE reported court hearings occurred in April and will continue in July. She informed there are two new cases concerning diminishment that have not had any action to-date. MR. GOERING stated he will check the status and provide an update to the Board. He commented JESSIE ALLOWAY has handled these cases and has done an excellent job.

EXECUTIVE SESSION: 10:21 a.m.

MR. WEST moved to go into executive session for the purposes of discussing attorney/client privileged information or matters that the immediate knowledge of which could negatively impact the finances of the Board. MR. WILLIAMS seconded the motion.

The motion passed with no objection.

CHAIR JOHNSON called the meeting back to order at 11:21 a.m., and noted no decisions were reached during executive session.

9. ACTUARIAL REVIEW / ACCEPTANCE - CERTIFICATION OF FY 2017 REVIEW REPORTS AND VALUATIONS

Action: Board Acceptance of GRS Certification for FY2017 PERS, TRS, NGNMRS, JRS, and DC Plan Valuations

MS. ERCHINGER, as Chair of the Actuarial Committee, moved to accept the review and certification of FY2017 actuarial reports by Gabriel Roeder Smith and Company.

MS. ERCHINGER explained the valuation report is prepared by Conduent and reviewed by GRS. Both reports are presented to the Actuarial Committee. The thorough plan review process has occurred over a period of approximately six months, identifying potential conflicts and/or areas of recommended changes. Decisions were made by the Committee that provided Conduent direction to make specific changes. The Actuarial Committee recommends acceptance of the review and certification of the actuarial reports.

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

Action: Board Acceptance of FY2017 Conduent Valuations for PERS, TRS, NGNMRS, JRS, and DC Plan Valuations

MS. ERCHINGER explained the final valuation report contains the two recommended assumption changes. The medical trend assumption was updated to reflect anticipated increases in costs and an obligation was added with respect to the Cadillac tax because it is no longer deemed an immaterial impact on trend rates. Healthcare claim costs will be updated annually and have been described in the valuation reports.

<u>MS. ERCHINGER, as Chair of the Actuarial Committee, moved to accept the Actuarial Valuation Reports prepared by Conduent for the PERS, TRS, DC, Teachers DC, and the Roll-Forward Actuarial Valuation Reports for Judicial and National Guard and Naval Militia Retirement Systems, as of June 30, 2017.</u>

CHAIR JOHNSON commented the record of the lengthy Actuarial Committee meeting yesterday is available should anyone wish to review the robust discussions regarding support of this action and the previous action.

A roll call vote was taken, and <u>the motion passed unanimously.</u>

VICE CHAIR SCHUBERT requested the record reflect the action was brought before the Board by the Committee Chair on behalf of the Committee.

10. DEFINED CONTRIBUTION AND SUPPLEMENTAL BENEFIT SYSTEM PARTICIPANT INFORMATION

MS. LEA provided an overview of the information that is available to new hires and existing employees for the Defined Contribution and Supplemental Benefit participants. The partnership exists among the employer, the Division, and Empower Retirement Services. It is important for participants to be engaged in their plan from the time of hire. The employer is asked to be the first level of introduction to the general plan summary information by providing handbooks or links to the handbook, showing the videos during orientation meetings, posting flyers in the workplace to encourage savings, facilitating telephonic appointments with financial and benefit counselors, and alerting employees when the Division schedules a visit to the worksite. The employer has a required list of items to give each participant, including the investment fee structure, access to free financial advice, access to paid financial advice, as well as other available options.

The Division provides all the information given to the participant. The Division's biggest strength is the one-on-one counseling with members, which can occur in-person, through Web-ex, or telephonically. Empower Retirement Services is under contract to provide certain information to the employee, including a welcome letter containing important information about the retirement plans, contact information, a description of the target date funds, access to account information online, and additional disclosures. All participants receive a quarterly newsletter containing financial wellness information, basic savings, budgeting, tax information, financial education, and how to get help.

MS. LEA informed the website is currently undergoing a redesign to make finding the plan information more intuitive and employee specific, to include the ability to schedule an appointment with a counselor online. The new website roll-out is expected in the fall. There will also be links to the Empower website, which contains education information, investment calculators, as well as access to the participant's own particular information.

MS. LEA stated a fourth Empower counselor representative will be added by January to assist in the requests from participants for in-person appointments. The demand is high. Currently, the wait is up to three months for an in-person appointment with a counselor. State budgetary constraints impede the hiring of additional counselors. The feedback regarding the Empower website's new web design was mixed between younger participants, who like the changes, and older participants, who do not like the changes as well. Empower is in the process of developing an instructional video on how to navigate through the new changes on the website.

MS. LEA noted the employer survey showed the employers were not disseminating their information as instructed and the welcome letter from Empower was acting as the first contact to the member. The Division and Empower are working together to modify the welcome letter to provide more robust information.

MS. HARBO inquired as to the timeframe employers have to transfer contributions to the plans from the payroll check. MS. LEA indicated the statute includes a 15-day period from the date the payroll check is issued until the information is submitted to the Division and then up to two days until the information is sent to Empower. Empower has 24 hours to process the information. MS. LEA advised the State of Alaska and the Municipality of Anchorage (MOA) have new payroll systems resulting in considerable issues that are being resolved. Currently, the 15-day timeframe for MOA is not being met. There would typically be an interest penalty applied for being late, but some of the limiting issues are within the DRB system and interest will not be charged until the issues have been resolved. Any interest penalty received would go directly to the plan and not to the individual. IRS rules provide 45 days for an employee contribution to be entered.

MS. ERCHINGER suggested a legislative review be conducted regarding the possibility of providing some level of interest to protect the employee against employers who take longer than 45 days to submit contributions into the system.

MR. WILLIAMS reiterated the public comment made yesterday in the meeting regarding the Social Security assumption automatically populating on Empower's DC platform. He noted multiple reports of this occurring with members and requested the automatic assumption of Social Security be turned off system-wide. MS. LEA noted the occurrence was an anomaly and Empower was directed to turn off the Social Security link systematically for all State employees and for all TRS members. She will review further to ensure system compliance.

11. DELEGATION

MR. MITCHELL requested MR. GOERING assist in facilitating the delegation discussion. MR. MITCHELL conveyed CHAIR JOHNSON requested additional information be presented regarding the Board's statutory authority to delegate, and provide examples of resolutions in which delegation has occurred.

MR. MITCHELL reviewed the Board shall exercise the powers and duties of a fiduciary of a State fund under AS 37.10.071, including the general investment powers and duties of how public funds are invested for the State of Alaska. As fiduciaries, the Board can delegate investment, custodial, or depository authority on a discretionary or nondiscretionary basis to officers or employees of the State or to independent firms, banks, financial institutions, and/or trust companies. The fiduciary shall apply the prudent investor rule and exercise the fiduciary duty in the sole financial best interest of the fund entrusted to the fiduciary.

MR. MTCHELL described the operational structure is established in AS 37.10.210 through 390. Consistent with standards of prudence, the Board has the fiduciary obligation to manage and invest these assets in a manner that is sufficient to meet the liabilities and pension obligations of the systems, plan, program, and trusts. The Department of Revenue shall provide staff to the Board.

MR. MITCHELL explained the delegations the ARM Board has made to staff. The CIO has the authority to adjust asset allocation within Board-approved parameters and may contract with current ARM Board managers in good standing in amounts up to 1% of total ARM Board defined benefit assets per single investment. Currently, 1% is approximately $260 million in authority. The CIO can rebalance the portfolio when the asset allocation falls outside of the strategic bands. The strategic band for equities is plus or minus 6% of current allocation. The ARM Board has delegated responsibility to staff to approve annual real estate investment manager property operating budgets, business plans, tactical/strategic plans, and variances up to $300,000 in annual approved capital expenditure budgets, subject to a $3 million maximum per separate account. Additionally, similar language is included in the farmland and timberland guidelines.

MR. MITCHELL reviewed the CIO has the authority to make direct investments in private equity partnerships. Abbott and Pathway have the ability to commit up to 50% beyond their target allocation with CIO approval, equaling to approximately $100 million each. The CIO has authority to commit up to 1%, currently $260 million, of total defined benefit assets in addition to the targeted amount for direct partnership investments.

CHAIR JOHNSON informed he requested this presentation to ensure the Board is familiar with the current delegations. He asked the Board to consider whether this range is legal and prudent, and if the Board is comfortable with these limits. CHAIR JOHNSON requested specific feedback regarding best practices from MR. MITCHELL, MR. GOERING, the IAC, and comments from Board members.

MR. MITCHELL believes the Board has the authority to delegate and he is comfortable with the existing delegation and level of authority, as it provides opportunities to express real-time best judgment, while maintaining transparency and a thoughtful process.

DR. JERRY MITCHELL noted in his many years of experience, the evolution has been toward more discretion for the staff, as staffs have become more professional and have demonstrated their ability to warrant more discretion.

MR. SHAW commented on the importance of the detailed feedback loop provided by the CIO, MR. MITCHELL during his Board reports on investment decisions made. This also allows for a specific opportunity the Board can ask questions and evaluate the decisions of staff that have occurred within the delegated authority.

DR. JENNINGS agreed with the comments made by both DR. JERRY MITCHELL and MR. SHAW. He gave anecdotal examples of the trend of increased delegation. DR. JENNINGS emphasized the importance of proper delegation for rebalancing and providing specific instructions to staff to carry out their delegations.

MS. ERCHINGER expressed her level of comfort with the existing delegation, primarily because of the ongoing detailed activity feedback reports given by MR. MITCHELL.

CHAIR JOHNSON shared his support for the existing level of delegation. He requested the CIO's report include a column on the chart citing the delegation of authority for each transaction; i.e., 2017-05.

MR. GOERING stated there is no such thing as perfection in any human endeavor. The Board is responsible for all delegations. Delegations to staff have to be prudent, and in the ARM Board's case, the staff role is assigned by law to the Treasury Division staff. The ARM Board has a supervisory responsibility over the staff delegation, which is absolutely appropriate from a legal perspective.

MR. GOERING advised if the Board wanted to revisit the subject at a later date to enhance capabilities or change anything related to delegations, he urged the process be undertaken in a very gradual and incremental manner with considerable deliberation in order to maintain stability. He counseled against making changes in response to an event.

MR. WILLIAMS shared his strong belief in building internal capacity and believes staff operates with high levels of trust and quality. He emphasized the importance of the feedback loop and communication between staff and the Board. MR. WILLIAMS asked the IAC for an explanation of a proper balance in delegation. DR. JERRY MITCHELL gave the example that portfolio rebalancing is appropriate, but investing in a new asset class for the first time probably would not be delegated to staff.

MR. WEST requested MR. MITCHELL explain the meaning of a single investment, as used in the statute, and if the definition offers enough latitude to operate during a catastrophic situation. MR. MITCHELL noted he interprets a single investment to mean an investment mandate. He believes his investment authority is sufficient to operate outside an extreme event.

CHAIR JOHNSON recessed the meeting from 12:27 p.m. to 1:30 p.m.

12. TRUSTEE INFO. REQUESTS AND PORTFOLIO UPDATE

MR. MITCHELL informed the Trustee information requests are responses to Trustee requests from the last meeting. MR. MITCHELL noted he provided the portfolio update in his opening comments.

MR. MITCHELL informed SHANE CARSON, Manager of External Equity and Defined Contribution Investments, is willing to present Item 13. Global Equity Ex-US at the end of the day to minimize disruption to the agenda. There was no objection.

14. FY 2013 - 2017 EXPERIENCE STUDY: PRESENTATION OF RECOMMENDED ASSUMPTIONS

DAVID KERSHNER introduced his colleagues SCOTT YOUNG, and STUART SCHULMAN, all from the actuary Conduent HR Services. MR. KERSHNER provided a high level overview of the 54-page presentation that was delivered in detail before the Actuarial Committee meeting yesterday. Most of the experience study discussions have focused on different analysis performed on the expected return and inflation rate assumptions, which are the two most important and significant assumptions for the retirement plans. The discussion process has been lengthy, including details about the various economic assumptions, interest rate, inflation rate, salary increase rate, potential funding method changes, and demographic assumptions.

MR. KERSHNER informed work was conducted with MR. MITCHELL to identify certain potential economic scenarios projected for PERS and the resultant cost impacts of different assumptions. Details were described at the Actuarial meeting regarding the economic simulator GEMS and the building block method used to assist in providing guidance on the potential ranges of expected returns and inflation rates. The modeling was based on the Board allocation adopted effective June 30, 2017. MR. KERSHNER stated MR. MITCHELL will be presenting a potential allocation change to the Board for adoption later in the meeting and the analysis that will be presented in September will reflect the new allocation.

MR. SCHULMAN continued the presentation detailing two approaches using the GEMS method and building block method to estimate the expected future return on assets over the time horizons of 10 years, 20 years, and 30 years. He focused the Board's attention to the GEMS geometric returns for a 20-year time horizon. MR. SCHULMAN informed the actuarial standards of practice support a range of reasonable methods for determining various economic metrics, including expected return valuations. MR. SCHULMAN advised all of the nominal rates of return net of investment expenses that were determined and illustrated are within the reasonable range. Certain stakeholders, actuaries, and investment consultants will feel more strongly about one set of rates than another set of rates. MR. SCHULMAN believes consensus for inflation over the next 10 to 30 years ranges from about 2.2% to 2.6%.

MR. MITCHELL requested additional explanation regarding how the 30-year inflation numbers were determined in Approach 1 for GEMS at 3.12% and in the building block method at 2.6%. MR. SCHULMAN gave a detailed explanation on how the GEMS model tends to revert to the mean of the historic long-term averages for inflation in the 3% range. The building block method utilizes estimates, including TIPS spreads, surveys of professional forecasters, and last year's Social Security Trust Fund Report, which had inflation at around 2.6%. MR. SCHULMAN advised he is comfortable with the inflation assumption being 2.6%, but believes 2.5% is more reasonable.

MR. MITCHELL commented the two key decisions the Board needs to make are the inflation assumption and the real return assumption. He asked MR. SCHULMAN to provide more information regarding the 6.2% real return assumption that is used in both models. MR. SCHULMAN explained the 6.2% is a little bit higher than the peer group of public systems due to asset allocation. The ARMB portfolio has 11% in liability hedging non-risk assets like treasuries and cash equivalents. The remainder of the portfolio is invested in return generating, risk bearing assets like domestic and international equities, opportunistic assets, real estate, and private equity. The 6.2% real return assumption is based on the risk premium range of all the assets in the portfolio. MR. SCHULMAN is comfortable with the 6.2% range, and noted it would not be unreasonable for the estimated range to be from 5% to 6.2%.

MS. ERCHINGER requested more information on the definition of inflation used in the modeling. MR. SCHULMAN discussed the Fed target of 2% inflation is based on personal consumption expenditures, which is a different measurement than is used to calculate Consumer Price Index (CPI). If the Fed met its target of 2% inflation, the CPI would be around 2.3%. It is not a one-to-one correspondence.

MR. KERSHNER continued the presentation conveying the understanding there is no one single right answer to the assumed portfolio return. The reasonable range Conduent suggests is between 7.25% and 8%. The Board will also consider the rate of funding and pattern of funding in determining the specific return assumption. MR. KERSHNER described in detail each of the 18 reasonable scenarios that were diligently studied and explained the differences in the components. MR. KERSHNER reviewed the results of the changes in assumptions for each scenario, including the funded ratios of the plans, the total employer contribution rates, State contribution rates, and salary increase rates. MR. KERSHNER noted the projections shown do not include changes in the healthcare trend rate. He informed the real return assumption and the inflation assumption the Board adopts today will be used for the upcoming June 30, 2018 valuations.

COMMISSIONER FISHER expressed support for formally adopting an inflation rate and a real return rate; with the understanding the actuaries will add those together to get the nominal rate of return. He believes it is important to view the components separately.

MS. ERCHINGER commented on the distinction between the nominal rate of return and real rate of return. She believes setting these rates is one of the most critical and visible decisions for the ARMB. MS. ERCHINGER agreed it is important to reframe the conversation and view the return components as a combination of the real return assumption and the inflation assumption.

15. REVIEW OF EXPERIENCE STUDY RECOMMENDATIONS

LESLIE THOMPSON and PAUL WOOD of GRS Consulting gave their presentation on the review of the experience study assumptions. MS. THOMPSON informed the review included all the supportive data Conduent utilized, various presentations from Conduent, the history of the plan's performance, and best practices of public sector investment consultants. MR. WOOD explained the role of the review actuary is to provide a different opinion on the assumptions, to show what assumptions GRS would have set if GRS were the primary actuary, and to explain the process followed to arrive at these assumptions.

MR. WOOD agreed it is good to view the nominal assumption in two separate pieces; the sum of the real rate of return and the inflation rate. He noted GRS presents the nominal assumption as the combination of those two separate pieces.

MR. WOOD discussed the investment horizon relating to the closed period funding policy. The plan will be 100% funded by 2039. The plan's liquidity needs after the 21-year period are drastically different than the liquidity needs through that 21-year period. After the plan is fully funded, there will be a very high negative cash flow situation because contributions are no longer flowing in. The benefit payouts for the PERS plan will be over $2 billion. MR. WOOD explained GRS considered order of return during the investment time horizon while calculating the suggested real rate of return of 5%. MR. WOOD noted this is in line with Callan's real rate of return projection of 4.35% to 5.15%, and Conduent's real rate of return suggested in December of 5%.

MR. WOOD described GRS does not develop its own inflation assumption. GRS utilizes multiple sources to view trends and expectations. GRS surveys approximately 10 investment consultant firms and collects their capital market assumptions. GRS also uses the Social Security trustees' report to identify inflation assumptions, as well as TIPS versus nominal treasuries, and finally, GRS reviews information from Philadelphia's Professional Forecasters to determine inflation expectations. Based on all of the data studied, long-term inflation expectations over the last five to 10 years have been trending down dramatically in the range of 2% to 2.6%. GRS recommends setting an inflation rate at no higher than 2.5%.

MR. WOOD explained the amortization payment used to pay off the unfunded accrued liability is effected by the payroll growth assumption being calculated as a level percent of pay. He emphasized the importance of the payroll growth assumption being accurate. If payroll growth is slower than expected or does not materialize, the unfunded accrued liability will not be paid, which will create actuarial losses and put drastic upward pressure on the contribution rate, especially toward the end of the closed amortization period.

MR. WOOD discussed the payroll growth assumption is comprised of the inflation rate assumption and a productivity rate assumption. Currently the inflation assumption is 3.12% and the productivity assumption is 50 basis points, which totals 3.62% for the current payroll growth assumption. MR. WOOD agrees with the alternatives presented to decrease the spread between inflation and total wage growth from 50 basis points to 25 basis points. MR. WOOD noted individual merit and promotion increase assumptions is more data-driven and GRS concurs with the recommendations received. MR. WOOD stated additional discussion will be presented regarding the importance of the healthcare trend assumption and how it is affected by a lower inflation rate, as well as the value of the healthcare benefit at the time of retirement.

MS. HARBO believes almost all the members in Tier 1 of TRS are at the top of the pay scale and are receiving bonuses rather than payroll increases of 3.62%. She recommends the consideration of lowering that assumption.

COMMISSIONER RIDLE informed PERS members, depending on the contract, have automatic every-other-year raises of about 3.25%, and they do not top-out of a pay scale. In addition, they also receive bonuses.

MS. THOMPSON continued the presentation and informed GRS would not support an 8% nominal return assumption. GRS agrees with Callan that a real return assumption in the range of 4.88% to 5% is reasonable, and the inflation assumption rate should be decreased to a 2.5% range. The Minnesota State plan reduced its assumption from 8% to 7.5% recently. Texas is the only other state retirement plan that has a nominal rate of return at 8%. If Alaska stays at 8%, it would place the plan as a significant outlier among peers.

MS. ERCHINGER requested additional explanation of the effects of having a high inflation assumption. MS. THOMPSON noted the inflation assumption affects both the nominal rate assumption and the salary assumptions. The nominal rate lasts from hire date until death of the member. The salary assumption lasts from hire until retire. If the inflation assumption is wrong and high, the offset of gains and losses is not equal. It becomes more of an issue because the Alaska plan is closed.

MS. THOMPSON reviewed the demographic assumptions in detail regarding the GRS findings of concurrence or concern. The areas of concurrence included mortality, retirement, withdrawal, disability, occupational-related death and disability, withdrawal of contributions upon termination, Alaska residency for COLA, part-time service, participation, aging, rehires, unused sick days, population growth, relative value between DCR and DB healthcare plans, coverage election percent for retiring members, and Medicare coordination discount.

MS. THOMPSON explained the few areas of concern. Conduent will make some labeling changes that will be reflected in the annual valuations, such as changing the name from marriage rates to spousal coverage election. The State of Alaska has many dual coverage participants and the concern is Conduent should review the assumption annually. The concern with the DCR Plan decreasing costs by .2% per year is not significant and is one of opinion. GRS understands Conduent's reasoning and disagrees with their process. The concern regarding the EGWP assumption on a perpetual subsidy is backed by measurements of possibilities in the event the law changes.

MS. ERCHINGER believes working with Conduent and GRS has satisfied exactly the purpose of the Actuarial Committee to have the opportunity for robust, professional and respectful discussions in reviewing and determining the best estimations possible with the available information. MS. ERCHINGER expressed appreciation to Conduent and GRS for working cooperatively, resulting in a much better product for the ARMB.

16. REVIEW OF EFFICIENT ASSET ALLOCATION MIXES

PAUL ERLENDSON and JOHN PIRONE of Callan, LLC led the review of efficient asset allocations. MR. ERLENDSON showed and described an exhibit he created last night, inspired by the Actuarial Committee meeting. He will provide a copy of the slide to members. The illustration shows the rolling 10-year real returns of public pension funds over the last 40 years, and the average is 5.1%. The average for the period before the 2009 financial crisis was about 5.6%.

MR. PIRONE continued the presentation noting the two sections of discussion will focus on Callan's economic assumptions, including real return rate, inflation rate, and time horizon, and the second area of focus is evaluation of the asset allocation of PERS. PERS will be used as a proxy for the other plans. Militia will be viewed separately. Callan's approach to developing economic assumptions embodies evaluation of current conditions combined with long-term expectations based on historical numbers. MR. PIRONE walked through the valuations for capital markets over a 10-year horizon, including components such as equities, asset allocation, and interest rates. The compilation for the 10-year nominal return reflected an expectation of 6.6%. The 10-year real return expectation equals 4.3%. The current nominal return is 8%, comprised of a real return of 4.88% and inflation rate of 3.12%.

MR. PIRONE described inflation assumptions are derived by reviewing the Federal Reserve policy and its near-term target indicators. Callan also looks to the market to gather expectations of inflation reflected through bonds of different maturities. The aggregate of information for inflation leads to a central expectation of CPI at 2.25%. MR. PIRONE noted Callan uses a 2.25% inflation rate for 10-year, 20-year, and 30-year time horizons.

MR. PIRONE discussed the process used for transitioning the 10-year expectations into longer time horizons using the building block approach. Additional study is reviewed which models the concept of equilibrium returns, where normal levels return for interest rates and equity valuations. As the timeframe moves from 10 years to 20 years to 30 years, the equilibrium model will increasingly be incorporated into the model. The 10-year nominal return shows 6.6%, with a 4.4% real return. The 20-year nominal returns shows 7.1%, with a 4.8% real return. The 30-year nominal return shows 7.4%, with a 5% real return.

CHAIR JOHNSON requested information on best practice regarding time horizon projections. He noted Social Security uses a 75-year horizon. MR. PIRONE reiterated best practice embeds understanding the specific characteristics of the plan. ARMB closed amortization plan makes it reasonable to utilize a 20-year horizon. MR. ERLENDSON explained the projections are assuming there will be no changes to the asset allocation policy. History has shown allocations do change and as the plan matures, the allocation may become more conservative. Callan finds the 10-year projections to be the most useful because it provides an intermediate planning horizon and is more reflective of investor behavior.

COMMISSIONER FISHER asked for additional explanation regarding the time horizon because the closed plan has 20 more years' worth of payments remaining and then an additional 20 years or more of a decumulation period. MR. PIRONE commented the time horizon can be viewed as a math problem to the actuaries, in terms of determining an analytical figure. MR. PIRONE believes a 20-year time horizon is prudent.

MR. PIRONE noted the second area of focus for the presentation is the valuation of asset allocation mix alternatives. He emphasized the importance of the dimensions of a policy, not only the expected return, but also the risk factor in terms of standard deviation. The risk is shown as the extent of the variability of returns above or below the expectation. A higher standard deviation reflects that potential downside. MR. ERLENDSON reiterated this critical issue because the actuarial assumption is assuming the same return year after year after year. He noted the reality is returns do not happen that way. There are variations each year and although the median return is useful, it is not very informative, absent the idea of standard deviation around that median rate of return.

MR. PIRONE explained the risk of equities in the illustrations reflect a broadly diversified portfolio. The premium spread between equities and fixed income is approximately 4% per year. The models from left to right decrease the bond allocation by 5%, while increasing the equity allocation by 5%, and thus increasing the standard deviation risk.

MR. PIRONE showed the current PERS risk model has a 14.7% standard deviation, which is essentially the same as Mix 4. The PERS plan is somewhat aggressive in terms of having 10% as an anchor in fixed income. The way to decrease risk in the portfolio would be to increase allocation to bonds. This would also lower the expected return of the portfolio. Conversely, the option to decrease the allocation to bonds would increase the risk to the portfolio and increase the expected return.

MR. PIRONE reviewed the similar asset allocation exercise regarding the current Militia plan and showed the risk model has about 9% standard deviation, which is closest to Mix 3. The Militia plan has almost 50% of its asset allocation in bonds and a significantly more conservative expected 10-year return of 5.3%.

CHAIR JOHNSON recessed the meeting from 3:21 p.m. to 3:26 p.m.

17. ASSET ALLOCATION REVIEW AND APPROVAL

MR. MITCHELL conveyed his hope to advance the continued discussion regarding economic assumptions and to facilitate Board agreement with a set of real return assumptions and inflation assumptions. He explained the presentation describes the annual process of establishing a strategic asset allocation. The action memo refers to two asset allocation resolutions. The first resolution is a recommendation is to decrease the risk profile and liquidity risk of all the plans except for the Militia fund by increasing the allocation to fixed income by 5%. Using Callan's parlance, the recommendation is to move from Mix 4 to Mix 3. The impact, based on Callan and Conduent, over a 10-year period is a decrease in return of about 10 basis points. Longer-term, the decrease in return is estimated at about 20 basis points. The second resolution is a recommendation to decrease the fixed income allocation in the Militia fund by 3%.

MR. MITCHELL reviewed the Board statutes and highlighted the Board has the fiduciary responsibility to manage and invest assets in a manner that is sufficient to meet liabilities. MR. MITCHELL noted the Board has the authority to assess market conditions and make appropriate decisions regarding the risk profile and expected return assumptions in the best interest of the fund. MR. MITCHELL explained consideration to employer contributions and timing should be part of the decision because of the possible impacts to employers and their ability to make contributions.

MR. MITCHELL discussed the in-depth study completed by Deputy Chief Investment Officer ZACHARY HANNA of the funds return assumptions relative to 260 state and local peers from the National Association of State Retirement Administrators (NASRA) dataset. The highlight is the ARMB portfolio's nominal return assumption is about 50 basis points higher than the median peer and the asset allocation is riskier than the median peer. The data show the ARMB portfolio's risk profile has been incrementally increasing since 2001, and the median peers' portfolio risk profile has been relatively flat since 2001.

MR. MITCHELL described the ARMB portfolio over time has been expanding allocation to alternatives, materially decreasing allocations to fixed income, and remaining relatively flat with equity allocations. Alternatives include private real estate, some public real estate, private infrastructure, MLPs, farmland, timber, and private equity. MR. MITCHELL explained the staff focused on a study to determine the liquidity needs of the portfolio within the current asset allocation structure. The liquidity risk scenario was based on how much of an equity drawdown the portfolio could sustain before being unable to rebalance to target asset allocation, after a year's worth of net benefit payments were held back and 1% for capital calls for the alternatives portfolio was held back. The calculation yielded a 20% drawdown in equities would make it difficult to rebalance to target asset allocation. Staff requests the Board to consider this as a limit on how much risk should be taken at the broader portfolio level.

MR. MITCHELL reviewed the amounts of additional liquidity or fixed income the portfolio would need to handle 35%, 45%, and 55% drawdowns in the equity market to be able to rebalance to target allocations. The profile starts at 2% more liquidity needed and grows at a slightly positive slow until the end of the funding period, at which point employer contributions drop dramatically and the liquidity needs of the portfolio grow dramatically in 2039. MR. MITCHELL informed the recommendation to modestly increase the liquidity profile of the portfolio by moving to Mix 3 is based on this information.

MS. ERCHINGER asked if the State has other ways of addressing short-term liquidity needs from the possibility of a catastrophic event, including the ability to borrow money from other State holdings, rather than drag the portfolio's return for decades. MR. MITCHELL noted his view in only within the ecosystem of the retirement plans. COMMISSIONER FISHER responded his concern is if the ARMB portfolio is experiencing a severe drawdown, then other State financial sources will be in a similar trough, and it will be difficult for the State to divert money away from other places.

COMMISSIONER FISHER inquired if it is better to increase fixed income by decreasing equities or reducing alternative exposures. MR. MITCHELL noted he does not have a clear answer right now. Currently the alternatives are frozen at the same level in the Callan mixes. The risk profile and risk drivers in the alternative portfolio would have to be studied. The alternative portfolio consists of typically illiquid, slow-moving commitments that are limited as to the amount of adjustment that can be made. MR. MITCHELL informed addressing these issues are slated on his agenda before the asset allocation conversation arises next year.

CHAIR JOHNSON commented he believes the progression toward liquidity would arise years in the future due to being a closed-end fund and inquired as to the possibility of using funds in the future from the slow moving alternatives rather than converting the equities into bonds now. MR. MITCHELL explained the long-term liquidity concern occurs after the funding period in 2039. The possible short-term liquidity concern is the ability to rebalance to target after a market downturn. The proposed asset allocation change addresses the rebalancing concern. MR. MITCHELL asserted further analysis is necessary because reducing allocation to alternatives could entail a greater reduction in return.

MS. ERCHINGER requested more discussion regarding the importance of rebalancing. She expressed concern about a long-term reduction in the portfolio's return in order to address a potentiality that may never occur. MR. MITCHELL indicated the proposed asset allocation change is defining the liquidity limit. It is possible there could be a shallow recovery after a market correction that looks more like an L shape, and that would be a more difficult adjustment period, with possibly having to sell at distressed prices at that point. MR. MITCHELL believes a more aggressive asset allocation will have a higher return over the long-term, but this assumes rebalancing to target over time. The expected return may be degraded if rebalancing does not occur. The 5% move from equities to fixed income is approximately $1 billion and would partially come from liquidating equities and partially from the State assistance payment. The portfolio is cash flow negative and the approach would be to sell equities to fund benefit payments that come due. This would move the portfolio closer to the target asset allocation. Currently, the portfolio is at about 9% in fixed income, which is underweight by about 1%.

MR. MITCHELL discussed equity valuations are at the relatively high end of expectations and corporate profitability is at the high end of its historical range. Equities are expensive. Drawdowns could occur if price-to-earnings begin to normalize and earnings begin to normalize.

MR. MITCHELL explained staff's recommendation is to move from the current exposure slightly up in the Militia fund to Callan's Mix 4. He expressed being content with the current position if the Board does not want to adjust the allocation now.

MR. MITCHELL showed a comparison graphic of the impact on employee contributions over the next 10 years if returns were lower than the long-term expected return rate assumption. Beginning in year three, the employers would have to contribute more to make up for the shortfall. A higher set of employer contributions is estimated leading to 2039, followed by a set of surpluses in the plan or lower contributions. MR. MITCHELL explained another graphic modeling the effects of discounting the cash flows back to the net present value with a flat return assumption. This would reduce contribution stress on employers by providing a smaller sine wave. MR. MITCHELL noted he would like Conduent to conduct additional study of this impact if the Board agrees.

MS. HARBO expressed discomfort with the recommendation to increase the fixed income allocation from 10% to 15%. She commented on being proud of the ARMB's diverse allocation and of the amount that is managed internally. MS. HARBO advised she could support a 1% increase.

CHAIR JOHNSON inquired as to the timing of the recommendation to change the asset allocation. He feels it is conflating asset allocation with the current process at hand of setting economic assumptions. MR. MITCHELL noted the annual review and establishing asset allocation historically has occurred in April and June. This is the last opportunity to make a decision prior to the beginning of the new fiscal year. MR. MITCHELL noted he appreciates the difficulty involved.

MR. WEST expressed support for the proposed increase allocation to fixed income from 10% to 15%. He feels the timing should occur now so the actuaries can run the economic assumptions and impacts with the updated information. MR. WEST agrees with the presentation and feels there are additional reasons why liquidity may become constrained that were not included.

CHAIR JOHNSON requested feedback from the IAC. DR. JENNINGS commented that altering the process to allow change is probably more important than the actual number chosen. He reiterated the importance of rebalancing and having the liquidity available to rebalance. MR. JENNINGS believes the stress testing the portfolio for a 20% to 30% decline is an appropriate level of magnitude.

DR. JERRY MITCHELL agreed with the staff proposal and suggested the 5% could be placed in cash rather than treasuries. This would give the most non-correlation against other assets and provide liquidity. He noted the liquidity might not be used to pay for benefits and could be use for making more private equity investments at the appropriate time.

Action: Adopt Asset Allocation
Resolution 2018-01:
DB PERS / TRS / JRS
PERS / TRS / JRS Retiree Health Trusts
Retiree Major Medical HRAP / ODD

<u>MR. WEST moved to adopt Resolution 2018-01.</u> <u>COMMISSIONER FISHER seconded the motion.</u>

COMMISSIONER FISHER expressed appreciation to MR. MITCHELL for the thoughtful energy and reflection in bringing this issue forward. He anticipated the day would come when the portfolio would need to shift to more liquid assets, but did not expect the transition to occur so soon. He suggested the possibility of the State Assistance payment and new monies that come in could go into fixed income to fund the increase. COMMISSIONER FISHER asked if staff is satisfied this is now the correct asset mix or if the portfolio is now too heavily invested in illiquid assets. MR. MITCHELL responded that in the short-term, the increase in fixed income or cash would come from the public equity market. He proposed staff make a concerted effort to address the alternative and illiquid allocation question and bring the conclusion before the Board for discussion either during the asset allocation review next year or sooner.

MS. ERCHINGER expressed appreciation for the amount of work endeavored for this proposal from staff and consultants. She stated she is not prepared to vote in favor of a change at this point. MS. ERCHINGER noted the proposal caught her off guard and she does not feel she has had enough time to really address the issues. Previous liquidity presentations have shown liquidity is not a concern, and her impression today is the view has changed to addressing a possible catastrophic liquidity issue, which is driving this major decision. She requested to continue the discussion about liquidity to see what options are available to address the concerns. MS. ERCHINGER noted she is comfortable with the National Guard resolution.

CHAIR JOHNSON asked what effect this change would have on the recommendations with respect to assumptions from Conduent and GRS in 2018. MR. MITCHELL expects this change would have an approximate effect of 20 basis points off of return from Conduent's 30-year real return number presented in December, and an approximate effect of 10 basis points off of return from Callan's 10-year numbers.

VICE-CHAIR SCHUBERT inquired if there were any issues that will be faced by not adopting this resolution before the fiscal year-end. MR. MITCHELL indicated there are no explicit issues. He would be supportive of the decision to table this for further discussion and analysis.

A roll call vote was taken, and the motion failed, with VICE-CHAIR SCHUBERT, MS. ERCHINGER, MS. HARBO, and CHAIR JOHNSON voting against.

Resolution 2018-02: DB NGNMRS

MR. WEST moved to adopt Resolution 2018-02. MS. HARBO seconded the motion.

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

13. GLOBAL EQUITY EX-US

MR. CARSON gave the presentation on the Global Equity Ex-US allocation. He noted the ARM Board has heard from a panel discussion and several managers in recent meetings presenting on the topic of the non-US equity investment environment, forecasts, and investment philosophies. The key takeaways from those presentations were, 1) the non-US economic landscape has become more globalized, 2) emerging markets may offer a higher long-term return prospect from developed markets, and 3) China is anticipated to play an ever increasing role in the global markets.

MR. CARSON explained global ex-US and non-US will be used interchangeably throughout his presentation. He noted some of the benchmarks used in non-US equities are MSCI, MSCI World Ex-US, MSCI EAFE, EAFE Small Cap, and IMI. The current global equity ex-US portfolio allocation consists of the non-US component of a global mandate managed by Lazard and benchmarked to the MSCI EAFE Index, three non-US all country mandates, two non-US developed small cap mandates benchmarked to the MSCI EAFE Small Cap Index, two non-US all country passive mandates, and three emerging market mandates.

MR. CARSON discussed the dollar allocation to the different mandates and strategies do not necessarily represent the stylistic exposure within those mandates. He gave the example that an ACWI ex-US manager can invest in developed markets and emerging markets, but a developed manager in small cap will only focus in that area. MR. CARSON showed an illustration of the current style exposures in the aggregate total portfolio level. This is a snapshot in time because style exposure varies considerably as the market moves. MR. CARSON noted Callan will review the relative performance of the funds.

MR. CARSON outlined the recommended modifications to the portfolio and the evidence of support for each change. MR. MITCHELL informed the first two proposed recommendations were discussed with affected managers and the managers were supportive of the changes overall.

- Change Baillie Gifford performance benchmark to MSCI ACWI Ex-US Growth Index (Action).
- Modify the Brandes mandate to include emerging markets and change the benchmark to the MSCI ACWI Ex-US Value Index (Action).
- Terminate merging markets mandate currently managed by Parametric (Action).

MR. CARSON explained the next set of recommendations is related to manager searches. He reviewed the opportunities and provided effective reasoning for each category.

- Conduct a passive manager search to replace the current two passive ACWI Ex-US IMI mandates.
- Conduct an interim manager search to invest in the Board approved scientific beta, multi-beta, multi-strategy, equal-weighted, and developed ex-US strategy until internal management capabilities can be established.
- Conduct a manager search to invest the scientific beta, multi-beta, multi-strategy, equal-weighted, emerging markets strategy in the EM space.
- Engage Callan to conduct a manager search for emerging markets growth strategy (Action).
- Engage Callan to conduct a manager search for a dedicated all-China investment strategy (Action).

RECESS FOR THE DAY

CHAIR JOHNSON recessed the meeting at 5:01 p.m.

Friday, June 22, 2018

CALL BACK TO ORDER

CHAIR JOHNSON reconvened the meeting at 9:03 a.m.

Trustees Schubert, Harbo, Erchinger, Fisher, Ridle, West, and Williams were also present.

CHAIR JOHNSON recommended the Board make a specific decision or give particular guidance to staff regarding the real rate of return assumption and the interest rate assumption after agenda Item 23. There was no objection.

18. GLOBAL HEALTHCARE TRANSFORMATION STRATEGY

MR. MITCHELL introduced Robert A. Gillam and Alex Slivka of McKinley Capital Management. MR. MITCHELL explained discussions and developments with staff, Callan and McKinley have been ongoing for about eight months regarding the Global Healthcare Transformation strategy. MR. SLIVKA expressed appreciation to the Board and staff for their overall 20-year working relationship with McKinley. Over the past decade, McKinley has spent very heavily on both people and systems to focus in areas of the market where there is opportunity for alpha. A designated data science team with natural language processing expertise has been created as part of this transformative process.

MR. GILLAM described the Global Healthcare Transformation strategy represents one of the single best return opportunities and active risk diversifier opportunities for the next decade in the global equity markets. Healthcare spending is on the rise and is unsustainable. For the first time in human history, there are more people older than 65 than there are people younger than five. Technology, innovation and industrial redesign have been proven to be safe in the healthcare delivery space. McKinley believes a global transition is converging from the old model of healthcare to a new model of healthcare and is transforming across six main categories; payment reform, healthcare delivery redesign, patient-centered care, digital health, wireless and mobile health, and personalized medicine.

MR. GILLAM reviewed the rigorous process McKinley uses to build its portfolio. He gave a detailed description of the research developed and due diligence performed during portfolio construction. The standard deviation is expected to be at or below the global ACWI benchmark. MR. GILLAM shared the extensive biographies of two of McKinley's healthcare investor advisors; DANIEL LUBIN and GILLIAN SANDLER. MR. GILLAM expressed McKinley has clients from around the world, but he is Alaskan first. He feels it is important to offer Alaskan beneficiaries the opportunity to partner with McKinley on their best ideas.

EXECUTIVE SESSION: 9:28 a.m.

MR. MITCHELL recommended MR. GILLAM and MR. SLIVKA attend the initial part of the executive session to convey additional information, and then return after executive session to answer any follow-up questions. CHAIR JOHNSON suggested staff and IAC members also attend the initial part of the executive session.

MS. HARBO moved to go into executive session for the purposes of discussing matters that the immediate knowledge of which could negatively impact the finances of the Board. MR. WEST seconded the motion.

The motion passed with no objection.

CHAIR JOHNSON called the meeting back to order at 9:56 a.m., and noted no decisions were made during executive session.

DR. MITCHELL requested further explanation regarding three topic areas; 1) transformative healthcare companies being part of larger companies that become unsuccessful, 2) the possibility of not being able to profit from innovative technology, and 3) the ability to invest in private companies. MR. GILLAM explained the evaluation McKinley uses to determine companies for the portfolio is protectively stringent. The opportunity for profit growth for innovative technology is expected to come directly from lowering the cost of care for the patient in general. MR. GILLAM stated this strategy does not intend to invest in private companies.

STEVE CENTER of Callan noted the initial reviews appear to have proposed holdings that skew toward the size of small cap and mid cap companies. He asked if the MSCI ACWI benchmark is the appropriate benchmark for this strategy. MR. GILLAM noted McKinley believes the MSCI's definition of healthcare misses transformation healthcare. The ACWI Small Cap Healthcare benchmark would theoretically be more demonstrative of the kinds of companies in the portfolio by size, but also misses the definition of transformative healthcare.

Action: Request to Engage Callan for Strategy Review

MR. MITCHELL stated staff recommends ARMB direct Callan to review the Diversified Public Portfolio of the Global Healthcare Transformation Fund managed by McKinley Capital and present the results of findings to the Board at the September 2018 meeting.

MS. HARBO moved to direct Callan to review the Diversified Public Portfolio of the Global Healthcare Transformation Fund managed by McKinley Capital and present the results of findings to the Board at the September 2018 meeting. VICE-CHAIR SCHUBERT seconded the motion.

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

19. SECURITIES LENDING UPDATE

MR. MITCHELL introduced HENRY DISANO, Securities Finance Division of State Street Corporation, to provide the update on the securities lending program; its structure, mechanics, progress, and activity results. The ARMB reinstated its State Street Securities Lending program in February 2017, after a hiatus of approximately nine years. MR. DISANO described security finance as the lending of cash or securities against collateral between two parties, for the purpose of enhancing yield, generating incremental revenue, assisting in trade settlement, or for other strategic purposes. The program lends the portfolio securities that are in custody at State Street in return for cash as collateral. MR. DISANO described other products the Securities Lending Division offers. State Street is one of the most experienced providers in the business, offering securities lending since 1974.

MR. DISANO noted benefits to the lender include additional alpha, ability to offset State Street custody service fees, outperformance of peers, data generation, market liquidity, and enhanced market price transparency. The lender receives collateral before or at the same time as security delivery. The security lending program does not impact the investment managers' ability sell the securities, nor does it limit the transaction of purchasing additional securities.

COMMISSIONER FISHER requested additional explanation of the process, because his experience with securities lending resulted in impact to the manager's ability to transact the stock and close. MR. DISANO explained the process that when a State of Alaska manager sells a security that is on-loan, State Street swaps that on-loan security to on-loan security with another State Street customer. This occurs 97% of the time. In the occasional instances a security is very illiquid, a delay in settlement could occur, but the price at which the security was transacted remains the price at which the trade will be settled.

MR. MITCHELL informed all the portfolio managers were advised regarding the reestablishment of the securities lending program and were offered the option of nonparticipation. One manager requested not to be included and the request was honored.

CHAIR JOHNSON expressed his concerns with securities lending include ensuring the ability to control the amount of lending activity, limiting certain securities from being included, and limiting lending activity during certain times. MR. MITCHELL stated the program was consciously constructed to have more staff control over the parameters of the securities being lent. The staff has the ability to recall a security at any time. MR. DISANO explained the program was designed to be as flexible as possible for the client. The client has the ability to restrict markets, limit the percentage of the security that can go on loan, and limit the borrowers.

MR. DISANO described the details of the transaction process. The cash collateral is invested at the discretion of the client. The current portfolio invests with SSgA in a government money market fund, which is the most conservative option for investing cash collateral. It also utilizes floaters. The revenue generated for lending transactions is split 80/20 between the client and State Street. MR. DISANO advised State Street has 265 clients in the program with almost $4 trillion in lendable assets and about 10%, close to $400 billion, in active securities on-loan. The credit rating for State Street is AA minus. MR. DISANO reported the State of Alaska program has generated about $4 million in revenue since reentry in February 2017. There are approximately $12 billion in lendable assets and the average return on loans is 225 basis points. Once revenues reach $2 million in a year, the fee split moves to 85/15.

MS. ERCHINGER requested a general description of the borrowers who participate in this program and the circumstances under which this program is useful to borrowers. MR. DISANO explained securities lending initially began to assist in the settlement of securities in the event the broker committed to make a delivery, and for whatever reason, did not have the security in their inventory. The bigger brokers include Goldman Sachs and Morgan Stanley. The most familiar reason for securities lending is the scenario when borrowers have a client who is shorting a security and needs to borrow the security to make the short sale. Treasuries are borrowed for other reasons, including use as collateral.

MR. WEST clarified the term securities lending and explained it is technically a structured purchase and sale. The brokerage firms are not lenders in the legal description and other readily used terms including rebates, loans, and collateral are not the actual legal descriptions.

MR. DISANO explained the credit risk involved in securities lending. The portfolio is indemnified against counter-party default in the event the borrower declares bankruptcy. State Street is focused on ensuring the credit quality of the counterparties. Market risk is the possibility of the value of the securities appreciating during the time they are on-loan, which is why the excess margin of 102 or 105 is established. Operational risk includes the complicated and important functions to ensure the securities are marked to market daily, the loan transactions are marked to market daily, borrowers are sending excess collateral when there is a shortfall and collateral is being returned where there is an excess. There are buffers in the program to assist with concerns around sell/fail transactions.

State Street mitigates the legal risk by utilizing their extensive experience and standard securities lending authorization agreement. Seven attorneys are dedicated to this product. Reinvestment risk is addressed by the State of Alaska deciding to only invest the cash collateral in the most conservative government money market fund and floaters. Yield has been increasing in alignment with the Fed interest rate hikes, but the impact has been minimal because of the floaters and the extremely short terms. Fifteen employees are dedicated to risk management and almost 270 employees are dedicated to securities lending. State Street also has an additional independent team outside of securities lending called Enterprise Risk Management who provides checks and balances and focuses on risk management. MR. DISANO expressed appreciation to the Board for participation in the program and was available to answer any questions.

CHAIR JOHNSON recessed the meeting from 10:34 a.m. to 10:43 a.m.

20. MACKAY SHIELDS HIGH YIELD INVESTMENT REVIEW

MR. MITCHELL introduced JOE MAIETTA of MacKay Shields who provided the portfolio update and described recommended changes to the investment guidelines for the strategy allowing for higher risk-adjusted returns. MR. MAIETTA introduced Lead Portfolio Manager and head of MacKay Shields' High Yield Team ANDREW SUSSER. MR. SUSSER informed MacKay Shields is 100% owned by New York Life, but operates separately from New York Life. The high yield group also operates separately from all other groups within MacKay Shields and manages approximately $22 billion of high yield for institutional clients. The State of Alaska portfolio is a core high yield strategy. MR. SUSSER reviewed the experience and expertise of the investment team.

MR. SUSSER explained the portfolio focuses on the risks and rewards in the US high yield market. There are no hedge funds, no derivatives, no foreign currencies, no structured products, and no indexing. An emphasis is placed on asset coverage; the difference between the value of the company and the amount of company debt. A company must have a minimum of 1.5 times asset coverage to be considered for the portfolio. MR. SUSSER gave a detailed explanation of the accountability, analysis and investment process, which includes a formal, structured evaluation of environmental, social and governance (ESG) factors. MR. SUSSER discussed examples of specific credits within the portfolio and the investment discipline for selection.

MR. SUSSER reviewed the portfolio's net-of-fee returns. The year-to-date return is down 19 basis points, but is outperforming the market, which is down 91 basis points. Over the timeframes of one year, three years, and five years, the portfolio has provided value. The since-inception return is lagging due to the 2009 underperformance. MR. SUSSER showed the beta for the six-year period was .9 and the alpha generation was 1.5% per year. He described the current portfolio construction in terms of yield, duration, credit quality, and sector in comparison to the index.

MR. MAIETTA gave a thorough description of the proposed new high yield BB strategy designed to structurally improve the high yield risk-adjusted returns. It includes advantages of having minor flexibility to opportunistically invest in B or CCC rated bonds when the spreads are above the historical median of 525 basis points. The strategy would be benchmarked to a BB index. MR. MAIETTA extensively reviewed the investment risk, credit risk, long-term performance, standard deviation, Sharpe ratio, information ratio, and market liquidity of high yield BB rated bonds.

21. MONDRIAN INTERNATIONAL FIXED INCOME AND BLENDED EM DEBT

MR. MITCHELL introduced TODD RITTENHOUSE of Mondrian who provided the portfolio update and described proposed changes to the investment guidelines for the active strategy. The intent is to improve risk-adjusted performance relative to the benchmark. MR. RITTENHOUSE introduced Senior Portfolio Manager of the Global Fixed Income and Currency Team MATT DAY. Mondrian has been managing the portfolio since 1997. MR. DAY reviewed the strong relative performance track record since inception.

The current portfolio is comprised of 70% unhedged international fixed income and 30% local currency emerging market debt. The international fixed income contains government bonds denominated in foreign currencies of developed countries. The local currency emerging market contains government bonds of emerging markets. MR. DAY informed the proposal makes three changes; 1) the 70% unhedged international fixed income piece is reduced to 50% international fixed income and is hedged back to US dollars, 2) the 30% local currency emerging markets debt element is reduced to 25%, and 3) there is an addition of 25% of hard currency emerging markets debt. These are bonds issued by emerging market currencies that are denominated in US dollars. The proposal moves from a portfolio entirely denominated in foreign currencies to a portfolio that is 75% denominated in US dollars.

MR. DAY explained Mondrian has worked closely with MR. MITCHELL and VICTOR DJAJALIE to develop the strategy and informed the investment process will remain the same. MR. DAY provided a detailed description of the simulated results of the proposed strategy compared to the current strategy. The proposed strategy involves shorting currencies because the index currency weights are zero due to moving to a hedged benchmark for developed market countries. MR. DAY answered questions and gave an extensive review of the portfolio risk controls, constraints, monitoring process, and manager experience the proposed portfolio offers.

MR. DAY noted the yield to maturity of the proposed portfolio is 4.5% compared to the US Aggregate of 3.2%. The credit rating distribution average is single A. MR. DAY explained in detail how the new strategy will allow additional flexibility under the proposed benchmark change and will continue to add performance to the portfolio above the benchmark.

22. CALLAN OVERSIGHT OF INTERNAL INVESTMENT MANDATES

MR. MITCHELL advised this presentation is the result of a question expressed at the previous meeting regarding the ability to provide oversight to internally managed strategies. MR. MITCHELL invited MR. ERLENDSON and STEVE CENTER to present Callan's framework for evaluating internally managed strategies. MR. ERLENDSON informed the review report does not include private equity or absolute return portfolios. It does include all other strategies. The findings suggest the majority of the strategies are meeting or exceeding the benchmarks for the period under which they have been managed internally.

MR. ERLENDSON recommended the evaluation continue using the same standards for other capital managers, including performance and characteristics expectations. Callan proposes the internally managed portfolios receive a review once a year. MR. ERLENDSON walked the Trustees through the draft of the report and requested feedback regarding additional information Trustees would like included in the report.

MR. ERLENDSON provided a detailed description of each portfolio in relation to current market conditions and in relation to matching the characteristics of the designated index. The Russell 1000 Growth, Russell 1000 Value, and Russell Top 200 strategies were recently implemented by the internal investment team at the end of the fourth quarter, and the long-term track record shown is not indicative on the internal team's management. The internally managed yield portfolio benchmarked to the Dow Jones US Dividend 100 was implemented in the first quarter of 2013, and has outperformed the benchmark over longer periods of time.

MR. CENTER noted the internally managed STOXX minimum variance portfolio was implemented in the fourth quarter of 2015, and has slightly outperformed the benchmark. This has been a difficult period for these types of strategies. The internally managed portable alpha portfolio began about a year-and-a-half ago and has trailed the benchmark by 150 basis points. There are no concerns at this point, given that the program has not yet completed a full market cycle. MR. MITCHELL believes this strategy deserves additional scrutiny by both Trustees and Callan because of the use of derivatives and its complex structure.

CHAIR JOHNSON inquired as to the possibility of involving the IAC in review process of the internally managed portfolios. MR. MITCHELL noted the IAC is currently not involved in the review process of the underlying strategies. MR. MITCHELL noted he will participate in any level of scrutiny the Board recommends. CHAIR JOHNSON requested MR. MITCHELL utilize the expertise of the IAC.

MR. ERLENDSON described the internally managed S&P 600 is exceeding its benchmark since inception, just over a year ago. The internally managed Scientific Beta strategy is relatively new and lags the benchmark by three basis points over the year. The internally managed S&P 500 equal-weight benchmark is one basis point ahead of its benchmark over its short tenure. The internally managed REIT portfolio has a history of 13.5 years and is a tightly controlled active strategy. It has outperformed the benchmark over the long-term, but recently has lagged the benchmark. The internally managed US Treasury Pool portfolio has exceeded the 1.7% return of the benchmark over the last seven years. The internally managed TIPS portfolio has also outperformed the benchmark.

MS. HARBO expressed appreciation for the presentation. She requested the next report contain a table that includes the individual strategies, with a description of its investment start date, initial investment amount, and current investment amount.

MR. CENTER recommended Callan perform an onsite visit to the offices in Juneau to conduct an operational review and provide further due diligence regarding investment processes before the next annual report. MR. ERLENDSON believes the onsite visit is the final piece of the proposed reporting framework. The performance figures are gross of fees and were provided, calculated and verified through the third-party custodian. No tracking errors compared to the indices were found. Callan has not identified an accurate way to calculate a fee rate for staff or external portfolio costs. Callan will work with staff to determine reasonable alternatives in order to present a net-of-fee calculation.

MR. MITCHELL noted staff will continue to provide qualitative asset class reviews on a rotational basis, and specific presentations on private equity, absolute return, and real assets.

CHAIR JOHNSON recessed the meeting from 12:09 p.m. to 1:07 p.m.

23. PERFORMANCE MEASUREMENT – 1st QUARTER

MR. MITCHELL informed Callan will present the quarterly performance measurement and describe the one-time changes to the performance calculation. MR. CENTER explained private market assets, which include private equity, portions of the absolute return portfolio, and portions of the real assets portfolio, are typically reported on a one-quarter lag because the timing of the investment information is not available to include in the quarterly return calculation. MR. CENTER explained MR. MITCHELL wanted to institute the ability to remove the one-quarter lag by reporting two quarters' of performance within one single quarter. This is called de-lagging. The effect is the private equity portfolio first quarter performance of 2018 includes the performance that was earned during the fourth quarter. The de-lagging contributed about 75 basis points to the plan's performance numbers. This is a one-time adjustment and should become less impactful for cumulative returns over time.

MR. ERLENDSON provided an overview of the markets noting the first quarter GDP estimates were at 2.3%. The new tariffs will be closely watched because they specific to certain products and industries and could have an up to 2% impact on S&P 500 earnings. The unemployment rate at the end of May is an 18-year low at 3.8%. The wage growth for hourly earnings is up about 2.5%. Consistent employment gains have been continuous for 94 months. Growth of earnings per share in the S&P 500 has been fairly steady since 2008. Emerging markets have been the strongest performing part of the market over the last three years. The best performing sector year-to-date has been small cap equities, which are up about 9.5% through June 8th. The growth small cap stocks are up 11.5% and value small cap stocks are up 7.3% year-to-date.

MR. ERLENDSON reviewed current short-term and long-term interest rates. The yield curve has started to flatten. The long-term interest rates have not increased as much as the short-term rates have increased over the last year. The Fed raised rates three times last year, and were raised a second time this year on June 13th to a target range of 1.75% to 2%. The expectation is the Fed will raise rates at least two more times this year, to end up at 2.5%.

MR. ERLENDSON discussed the market environment for real assets and noted appreciation growth is slowing. The benefits of real assets include producing income and stabilizing the value of the fund. The active managers are adding value over the benchmark.

MR. CENTER provided the overview of the performance for the quarter using the PERS plan as a proxy for the program. The returns were discussed gross-of-fees. As of the end of March, the portfolio was in line with its target asset allocation, but had a slight underweight to fixed income and opportunistic equity, and a slight overweight to opportunistic fixed income and non-US equities. The portfolio's asset allocation relative to peers tends to have a lower allocation to domestic equity and fixed income, and a higher allocation to real assets and alternatives. Total plan returns over the last quarter have outperformed the benchmark and contain the de-lagging positive effect. Total plan returns over the last year came in at 11.3%. The three-year return was 7.1% and the five-year return was 8.5%, just below the top quartile versus the peer group. Over the last 10 years, the plan has performed slightly below median, due primarily to the lower allocation to domestic equity relative to peers. The 26-year return is ahead of the benchmark.

MR. CENTER described the domestic equity performance within the portfolio was slightly behind the Russell 3000 and S&P 500 Index for the quarter. Longer-term performance is fairly close to or slightly ahead of the benchmark. The large cap portfolio slightly lagged the Russell 1000 for the quarter, but is very close to the benchmark over time. Positive contributors for the quarter included Lazard's value portfolio and McKinley's growth portfolio. Barrow Hanley's large cap value and QMA's large cap value both lagged the benchmark and negatively impacted performance. The internal scientific beta portfolio was a positive performer during the quarter. The small cap portfolio contributed positively to the domestic equity portfolio and was well ahead of the benchmark. Positive contributors included Jennison, Arrowmark, Fidelity, and Frontier. Two of the three microcap managers, Lord Abbett and Zebra, had strong performance, while DePrince Race and Zollo lagged the benchmark. The standard deviation, downside risk, and tracking error are all below median for the small cap portfolio.

MR. CENTER continued the presentation noting the developed market international equity portfolio outperformed the MSCI EAFE by approximately 125 basis points during the quarter, is well ahead of the benchmark over the last year by about 3%, and ahead of the benchmark long-term. The stronger performers are Arrowstreet, Baillie Gifford and Brandes. The strugglers are most recently Mondrian and Schroder. Over the long-term, they have contributed positively to the program.

MR. CENTER reviewed the emerging markets portfolio and noted later in the meeting staff will recommend the Parametric portfolio be replaced, and request Callan to conduct a search for a portfolio that compliments Lazard. Both Lazard and Eaton Vance had a strong quarter returning ahead of their benchmark. The total bond portfolio slightly lagged the index during the quarter. The total bond portfolio has an intermediate duration bias and most public plan peers have a longer duration bias and more credit exposure. The opportunistic asset class has investments in both fixed income and equities. Positive performance came from the international fixed income portfolio. The taxable municipal portfolios were down about 1.5% and the high yield portfolio was slightly negative. The real assets portfolio was positive for the quarter, and both farmland and timber had strong quarters. The MLP portfolio was negative, but did not decline as much as the benchmark. Infrastructure was a positive contributor for the quarter. The absolute return portfolio was slightly negative for the quarter. The long-term performance compares favorably to the HFRI Fund-of-Funds Composite.

MR. CENTER described the overall investments and asset changes in the DC plan. The Balanced funds and the Target Date funds have performed in line with their benchmarks. The Target Date funds extend out to the Target 2060 Trust. The stable value funds have performed quite well. MR. CENTER made the correction the Allianz Socially Responsible fund returned a positive 1% for the quarter, not a negative 1%, and noted the portfolio has been replaced with a passive strategy. The passive options show no areas of concern and have performed in line with the benchmarks, as expected. The World Equity Index Fund did differ from the benchmark enough to be highlighted, but the difference resulted in a positive effect. MR. CENTER directed the Board's attention to the materials and research paper recently published by Callan included at the end of the report regarding cryptocurrencies. MR. CENTER noted he is available to answer any questions.

CONSIDERATION OF RATE ASSUMPTIONS

CHAIR JOHNSON advised this segment will address the consideration of setting rate assumptions for the actuarial analysis. MR. MITCHELL informed the Board will be asked to adopt a set of demographic and economic assumptions at the September Board meeting. The basis for the economic assumptions is an expectation of inflation and real returns for the portfolio. The inflation assumption number will translate into other economic assumptions, such as salary growth rates and healthcare growth rates. Board presentations by Conduent, GRS, and Callan revealed their views regarding the assumptions and discussion regarding the material impact on the present value of liability. MR. MITCHELL believes additional study is warranted. He described the option the Board has to specify a new inflation assumption and a new real return number today, and direct Conduent to conduct a review of the impacts of the new set of assumptions on the valuations and present the results at the September meeting. He believes this would help the Board finalize their decision.

MS. ERCHINGER moved the ARM Board, for the purposes of Conduent's valuation reporting, approve a tentative rate recommendation for setting the inflation assumption at 2.50% and the real return assumption at the current 4.88%, for a total nominal return of 7.38%. MS. HARBO seconded the motion.

MS. ERCHINGER expounded the assumptions she used come specifically from the recommendation presentations of Conduent, GRS, and Callan. She cited Conduent's presentation on page 10 recommending an inflation assumption rate of lower than 2.6%. Page eight of GRS' presentation reflects an acceptance of an inflation assumption of no higher than 2.5%. Page two of Callan's presentation provides an inflation assumption rate range of between 2.0% and 2.5%.

MS. ERCHINGER stated the current real return rate is set at 4.88%. GRS states on page seven of their report that a real return assumption between 4.75% and 5% is reasonable. Callan supported a reasonable real return assumption between 4.35% and 5.15%. The 4.88% real return assumption falls in between Conduent's 20-year and 30-year historical information and Conduent's new Approach 2 modeling. The tentatively set rates are for the purpose of Conduent conducting their analysis and returning in September with the results. The Board will be asked to definitively approve economic rates in September. MS. ERCHINGER noted for the record the proposed decrease in the inflation assumption to 2.5% causes the total return assumption to decrease from 8% to 7.38%.

MS. HARBO expressed support for the motion.

COMMISSIONER FISHER expressed support for the motion.

MR. WILLIAMS expressed support for the motion. He requested additional information regarding the cost effects of such a change. COMMISSIONER FISHER noted Conduent will return in September with those study findings. He believes this change will result in a material increase in the State assistance.

CHAIR JOHNSON requested Callan and the IAC provide feedback. MR. ERLENDSON noted the proposed assumption numbers are entirely reasonable for a 20-year outlook.

DR. JENNINGS noted making a change and regularizing the Board's process for making a change is huge progress. Some of the presentations suggested the inflation range number might be lower than 2.5%. He cautioned the review of the decision in the future be focused on whether or not the bulk of the probability distribution remains below the current status.

DR. MITCHELL agreed with the motion.

MR. WEST expressed support for the motion.

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

24. PRIVATE EQUITY ANNUAL PLAN

MR. HANNA introduced and welcomed Investment Officer SEAN HOWARD, who has been with the Treasury for eight years and has recently joined the Alternative Investment Team. MR. HANNA noted he will present the private equity annual plan and MR. HOWARD will present that absolute return annual plan. The private equity plan is brought before the Board twice a year. Callan reviews the program and manager performance each December and staff brings forward the annual tactical plan for the Board's review and approval. The ARM Board's private equity advisors, Abbot, Pathway, and Callan have all reviewed the plan and the recommendations.

MR. HANNA described the attributes and structure of private equity as illiquid, long-term investments in private companies. Fund sponsors like the ARM Board invest in private equity for higher returns. The expectation is 350 basis points over the Russell 3000 Index over the long-term. The asset class has delivered results in excess of the expectations. MR. HANNA explained private equity has become much more efficient and the excess returns going forward are anticipated to decrease. Callan is in the process of reviewing all of the ARM Board's investment policies. MR. HANNA noted his discussions with Callan regarded a recommendation to lower the private equity excess return expectation to a range between 200 and 250 basis points above the Russell 3000 Index. MR. HANNA believes the excess is reasonable compensation for the illiquidity aspect of investing in private equity.

MR. HANNA discussed one of the appeals of private equity is the large market. Over 90% of domestic companies with revenues over $25 million are private. There are only half as many public companies as there were 20 years ago, which contributed to the growth of the private equity market. Companies have been able to remain private and to access capital without the distraction and expense of being a public company.

MR. HANNA described most private equity groups share common characteristics and aim to buy higher growth companies at lower valuations, create value by making operational and financial improvement, and then sell the companies at higher valuations. The negatives of the private equity asset class include its long-term illiquid nature and fairly high fee structures to access investments through private equity funds. The funds have a general partner and the fund directs the investments in the underlying portfolio companies. The fund sponsor, ARMB, makes commitments to the funds to be drawn down and invested by the general partner over a four to five-year period. Distributions are returned to the fund sponsor in terms of gains and return of capital. The fund sponsor does not control the cash flow timing. The fund sponsor can control the commitment pacing and the type of groups to which commitments are made; venture capital, buyout funds, and special situations. MR. HANNA gave a detailed description and examples of each strategy.

MR. HANNA reviewed the current private equity market. Fundraising peaked last year and has surpassed the previous peak years in 2007 and 2008. MR. HANNA believes some of this run-up is due to private markets becoming larger. This is related to strong performance and managers continuing to increase fundraising each year. Investment activity has been strong for the last four years. Pricing has reached all time highs. Leverage has remained range-bound and gets capped out at about six times. MR. HANNA emphasized the importance of being careful with investments in private equity and the importance of maintaining discipline over the cycle utilizing vintage year diversification.

MR. HANNA underlined manager selection in private equity is critical. Top quartile managers significantly outperform. The benchmarks used are Cambridge Associates and Burgiss, which compare the peer groups of professionally managed private equity portfolios. The ARMB portfolio is 150 to 250 basis points above median performance. MR. HANNA stressed the importance of careful manager due diligence and monitoring, as well as access to diversification. The ARMB has been invested in private equity for 20 years and has gone through two full market cycles. The end returns for the portfolio are measured on an internal rate of return (IRR) basis. The portfolio continues to have very strong performance with an IRR of 11.3%. This is 348 basis points over the public market equivalent return of 7.8% of the Russell 3000 Index, two basis points shy of the target. Over the life of the portfolio, the compounding performance has provided an additional $1.1 billion dollars to the portfolio.

MR. HANNA reviewed the cash flow activity, inflows and outflows, of the portfolio over the years. The portfolio reached essentially parity about a year ago where the inflows and outflows were equal. The simple standpoint is the ARMB has basically received all investment back and what remains on the balance sheet are the gains. The target diversifying allocations are 25% to venture, 40% to buyout, and 35% to special situations, with a wide range of 15% to 20%. The portfolio is close to these guidelines and is well diversified by sectors. MR. HANNA corrected a typographical error on the presentation. The 2017 commitment target was $560 million, not $590 million. MR. HANNA explained the plan outlined in 2016 has been to slowly build toward a long-term target of 12% allocation to private equity over the next 10 years. The program would then start to reduce exposure as the liquidity profile matures. The current allocation is at 9% and the recommendation is to maintain the asset targets. The expectation is private equity will continue to deliver meaningful premiums over public markets. Staff recommends Resolution 2018-03, approving the 2018 tactical plan for private equity.

MR. WILLIAMS requested clarification the commitment stated in the presentation of $210 million for Abbott and Pathway is actually $210 million for Abbott and $210 million for Pathway. MR. HANNA agreed.

MS. ERCHINGER asked if the resolution implies no other investors will be reviewed. MR. HANNA informed Abbott has been an advisor since inception and Pathway has been an advisor for well over 10 years. Both portfolios have performed well and have relatively efficient fee structures. There are no compelling reasons to change at this time.

Action: Adopt Private Equity Annual Plan
Resolution 2018-03 - Private Equity Plan

MS. HARBO moved to adopt Resolution 2018-03, approving the 2018 annual tactical plan. MS. ERCHINGER seconded the motion.

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

CHAIR JOHNSON recessed the meeting from 2:38 p.m. to 2:46 p.m.

25. ABSOLUTE RETURN ANNUAL PLAN

MR. MITCHELL informed it has been several years since the Board has heard an overview of the absolute return strategy. MR. MITCHELL intends to create a cycle to review each major asset class annually. MR. HANNA reported the presentation will include characteristics of the absolute return asset class, historical timeline, program and manager results, and the five-year plan and recommendations. The absolute return portfolio provides diversification with the goal of moderate returns with low correlation to traditional stocks and bonds. Absolute return characteristics include few manager restrictions with regard to short selling, leverage, and the use of derivatives. Returns are driven by sources other than traditional market beta. Investment are often less liquid than traditional asset classes. Fees are generally higher and include a performance component.

MR. HANNA discussed the ARMB target allocation to absolute return is 7%. The risk-adjusted return expectation is very efficient. Callan's capital market assumption for absolute return is projected at 5.1% with a 9.2% standard deviation. The expected correlation to equities is 0.8% and is valuable for portfolio construction.

MR. HOWARD described the current positioning within absolute return, as well as the risk and return objectives of the asset class. There are currently six managers with multiple underlying strategies. The policy benchmark is a 70/30 blend of the MSCI ACWI and Bloomberg Barclays Aggregate Bond Index. Two other benchmarks used for comparison are the HFRI Fund of Funds and the Callan Absolute Return Style Group. Both are composites of portfolios of hedge fund strategies. The risk objective is a 5% to 10% standard deviation with a beta to stocks and bonds of less than 0.5.

MR. HOWARD reviewed the net-of-fee performance numbers. Over the prior six-year period, performance was annualized at 5.8%, outperforming the composites. Over the past eight years, volatility is between the composites and below the target. This low volatility can be explained partially by the market environment post-financial crisis. The portfolio's volatility is expected to increase back to the 5% to 10% range over the longer-term.

MR. HOWARD reviewed each of the managers in the portfolio and described their net-of-fee performance, investment style, history, and long-term expectations. He discussed the plan over the next five years is to make a number of allocation changes to the portfolio.

- Continue to reduce exposure to traditional fund-of-funds mandates by phasing out a few legacy investments.
- Expand the allocation to alternative beta with the addition of one or more managers who can compliment Man and JPMorgan.
- Modestly grow idiosyncratic credit.
- Continue to search for other managers or strategies that can further diversify the program.

MR. HOWARD noted Callan is currently reviewing all investment policies and will be recommending changes to absolute return.

- Change the 0.5 equity beta risk constraint from the S&P 500 Index to the MSCI ACWI Index.
- Change the long-term benchmark from 70/30 ACWI/Aggregate Bond blend to the HRFI Fund of Funds Composite plus 50 basis points.

COMMISSIONER FISHER requested additional information regarding the liquidity characteristics of the absolute return and the possibility of a larger allocation to the asset class as a way of possibly providing stability and liquidity to the portfolio. MR. HANNA explained the liquidity profile is effectively equal-weighted with very liquid investments and illiquid investments. The very liquid investments include alt beta, fund-of-funds, equity market neutral fund, and the volatility fund. The primary illiquid investment is the idiosyncratic credit component, which typically has a liquidity profile of three to five years.

MR. MITCHELL believes staff needs to conduct a deeper analysis regarding increasing allocation to this asset class and considering its liquidity factors. He hopes to continue the examination over the next year and by the time the next asset allocation discussion occurs. MR. MITCHELL distinguished the increase to the fixed income allocation in the total portfolio is a separate focus. The determination needs to be made as to whether or not the assets come from public markets or nonpublic markets. MR. HANNA advised the absolute return portfolio is not a good source of liquidity during a crisis or severe market shocks to rebalance back into equities. The absolute return portfolio could only provide for normal ongoing liquidity needs.

26. INVESTMENT ACTIONS

MR. MITCHELL reviewed the first action item for consideration. By statute, the ARMB is required to engage in an audit of the performance calculation methodology. Staff recommends the Board direct staff to prepare an RFP for an independent audit of the State's performance consultant, as required by AS 37.10.220(a)(11).

<u>MS. HARBO moved to direct staff to prepare an RFP for an independent audit of the State's performance consultant, as required by AS 37.10.220(a)(11). MS. ERCHINGER seconded the motion.</u>

COMMISSIONER FISHER recommended staff prepare the RFP, and after the proposed investment policy committee is established, the committee can take leadership in the process.

CHAIR JOHNSON agreed with COMMISSIONER FISHER's suggestion and asked MR. MITCHELL if it would adversely impact the timing of moving forward with the RFP.

The question was called.

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

CHAIR JOHNSON requested MR. MITCHELL comment on the timing of the RFP. MR. MITCHELL anticipates the report would be generated and presented to the Board by December 2018. He believes it would be appropriate for the Board to delegate any further analysis or follow-up actions to the new policy and procedures committee.

MR. MITCHELL informed the next two action items relate to exercising one-year extensions to existing contracts with two consultants. The first one is for Callan, whose five-year contract includes the option of two one-year extensions. Last year, the ARMB exercised the first of those two one-year extensions. Staff recommends the ARMB extend the second of those two one-year extensions.

MS. HARBO moved to direct staff to exercise the second one-year contract option, extending the consulting contract with Callan Associates Inc. until June 30, 2019. MS. ERCHINGER seconded the motion.

COMMISSIONER FISHER commented he does not view this as a trivial decision and does not think the Board should get into the practice of extending the contracts. He believes it is appropriate to go out with an RFP for a broad range of options.

CHAIR JOHNSON requested clarification on the contract terms. MR. MITCHELL noted the contract is for five years and includes the provision of exercising two one-year extensions, for the possibility of a total seven-year relationship. If the Board elects not to extend the contract, the existing contract would end this year, June 30, 2018.

A roll call vote was taken, and the motion passed, with COMMISSIONER FISHER voting against.

MR. MITCHELL described the next action relates to the real estate consultant Townsend. The dynamics of the contract term and extension option are the same as the previous action. Staff recommends continuing the working relationship with Townsend and extending the current contract for the second allowable one-year extension.

MS. HARBO moved to direct staff to exercise the second one-year contract option, extending the contract with Townsend until June 30, 2019. MS. ERCHINGER seconded the motion.

COMMISSIONER RIDLE requested explanation of why consideration of these actions is only eight days before the otherwise contract expiration date. MR. MITCHELL explained staff does not have concerns about the contractor. If there were concerns, staff would have brought them before the Board earlier.

MR. WEST commented contracts should be brought before the Board with a fair amount of notice time.

A roll call vote was taken, and <u>the motion passed unanimously.</u>

MR. MITCHELL explained the next action concerns proposed changes to the Brandes mandate, as outlined by MR. CARSON during his presentation yesterday. Staff recommends modifying the mandate and contract with Brandes Investment Partners, L.P. to include emerging markets, and benchmark against the MSCI ACWI ex-Us Value Index.

<u>MS. HARBO moved to direct staff to modify the mandate and contract with Brandes Investment Partners, L.P. to include emerging markets, and benchmark against the MSCI ACWI ex-Us Value Index</u>. <u>MS. ERCHINGER seconded the motion.</u>

A roll call vote was taken, and <u>the motion passed unanimously.</u>

MR. MITCHELL informed the next action item applies to growth manager Baille Gifford. Staff recommends modifying the mandate managed by Baille Gifford Overseas Limited to be benchmarked against the MSCI ACWI ex-US Growth Index.

<u>MS. HARBO moved to direct staff to modify the mandate managed by Baillie Gifford Overseas Limited to be benchmarked against the MSCI ACWI ex-US Growth Index.</u> <u>MS. ERCHINGER seconded the motion.</u>

A roll call vote was taken, and <u>the motion passed unanimously.</u>

MR. MITCHELL described the next action item is the first of several that involve the emerging market equity area. He noted this would instruct Callan to engage in a search for an emerging markets growth manager with the purpose of hiring a manager that would represent a style that is currently absent in the overall structure. Staff recommends the ARMB direct staff to engage Callan Associates to conduct a search for one emerging markets equity growth manager. Additionally, ARMB direct staff to evaluate the Callan search results and bring the recommendation to the Board at a future meeting.

<u>MS. HARBO moved to direct staff to engage Callan Associates to conduct a search for one Emerging Markets equity growth manager. Additionally, ARMB direct staff to evaluate the Callan search results and bring a recommendation to the Board at a future meeting.</u> <u>MS. ERCHINGER seconded the motion.</u>

A roll call vote was taken, and <u>the motion passed unanimously.</u>

MR. MITCHELL explained the next motion also relates to emerging markets. It is the recommendation to terminate the Parametric mandate. Parametric has a systemic underweight to areas in emerging market staff believes will have higher growth, specifically China.

<u>MS. HARBO moved to direct staff to terminate the Parametric Emerging Markets mandate and reallocate those assets within the merging markets pool.</u> <u>MS. ERCHINGER seconded the motion.</u>

VICE-CHAIR CHAIR SCHUBERT asked what the original investment amount was in Parametric. MR. MITCHELL did not have the number available. A June memorandum was shown listing approximately $308 million in ARMB assets.

CHAIR JOHNSON asked if Parametric was on the watch list. MR. MITCHELL confirmed Parametric is currently on the watch list.

A roll call vote was taken, and <u>the motion passed unanimously.</u>

MR. MITCHELL explained the next action item is to engage Callan to conduct a search for a China-only manager who would have the latitude to invest across various types of securities, as described by MR. CARSON in his presentation yesterday. Staff recommends the ARMB direct staff to engage Callan to conduct a search for an investment manager to invest a dedicated China equity mandate. Additionally, ARMB direct staff to evaluate the Callan search results and bring a recommendation to the Board at a future meeting.

<u>MS. HARBO moved to direct staff to engage Callan Associates to conduct a search for an investment manager to invest a dedicated China equity mandate. Additionally, ARMB direct staff to evaluate the Callan search results and bring a recommendation to the Board at a future meeting</u>. <u>MS. ERCHINGER seconded the motion.</u>

CHAIR JOHNSON commented it seems the number of fairly narrow investment manager mandates is increasing. He asked if there is a threshold as to how thinly sliced the allocation pie should be. MR. MITCHELL understood the concern and believes areas should be considered in which staff believes a difference can be made within the broader portfolio. A significant motivation for the strategy is the recognition of having more differentiated active exposures within emerging markets that can provide better relative performance to the benchmark with less risk, and maintain less correlation with developed market returns.

CHAIR JOHNSON requested the IAC provide commentary on this concept at a later date.

A roll call vote was taken, and <u>the motion passed unanimously.</u>

MR. MITCHELL reported the next two action items relate to proposed investment guideline changes for two fixed income oriented managers located within the opportunistic asset class that were discussed in presentations today. Staff recommends the ARMB approve Resolution

2018-05, amending the Guidelines to change the High Yield Fixed Income mandate to a BB-rated High Yield Fixed Income mandate.

MS. HARBO moved to adopt Resolution 2018-05, amending the Guidelines to change the High Yield Fixed Income mandate to a BB-rated High Yield Fixed Income mandate. MS. ERCHINGER seconded the motion.

MR. WILLIAMS expressed he support the motion. He has concern with the language under the Status that states BB-rated high yield bonds have performed in line or have outperformed the broader high yield market, because the table shows performance of outperformance in the 5-year and 20-year, same performance in the 10-year, and underperformance in the 15-year results. MR. MITCHELL understood and is happy to entertain changes in the action memo.

MR. WEST moved to amend Resolution 2018-05 under Status to add the word generally, so it reads, "BB-rated high yield bonds generally have performed in line or have outperformed the broader high yield market but with significantly less volatility." MS. WILLIAMS seconded the motion.

A roll call vote was taken, and the motion to amend Resolution 2018-05 passed unanimously.

A roll call vote was taken, and the motion to adopt Resolution 2018-05 as amended passed unanimously.

MR. MITCHELL described the next action relates to the recommendation to make investment guideline changes to the existing International Fixed Income Guidelines. Mondrian is the only portfolio managed against those guidelines. Staff recommends the ARM Board adopt Resolution 2018-06, amending the International Fixed Income Guidelines from an unhedged blend to a hedged blend, as described in the action memo.

MS. HARBO moved to adopt Resolution 2018-06, amending the International Fixed Income Guidelines from an unhedged blend to a hedged blend. MS. ERCHINGER seconded the motion.

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

MR. MITCHELL explained the last action regards the 50% intermediate treasury fixed income allocation in the National Guard and Naval Militia Retirement Systems (NGNMRS). Staff feels it is appropriate to invest a bit more aggressively and allocate a portion of the fixed income mandate to the broader US aggregate fixed income passive mandate. MR. MITCHELL noted approximately 12% of the portfolio is needed to be accessible to facilitate rebalances.

Staff recommends ARMB, regarding the NGNMRS, implement a 12% allocation to the US Treasury Fixed Income Pool. Additionally, the Board direct the remainder of the Fixed Income allocation be invested in a US aggregate bond portfolio benchmarked against the Bloomberg Barclays US Aggregate Bond Index. Additionally, the ARMB direct staff to hire

BlackRock Institutional Trust Company to manage a passive fixed income strategy for the NGNMRS that is benchmarked against the Bloomberg Barclays US Aggregate Bond Index.

<u>MS. HARBO moved regarding the National Guard and Naval Militia Retirement Systems (NGNMRS), the Alaska Retirement Management Board implement a 12% allocation to the US Treasury Fixed Income Pool. Additionally, the Board direct the remainder of the Fixed Income allocation be invested in a US aggregate bond portfolio benchmarked against the Bloomberg Barclays US Aggregate Bond Index. Additionally, the Board direct staff to hire BlackRock Institutional Trust Company to manage a passive fixed income strategy for the NGNMRS that is benchmarked against the Bloomberg Barclays US Aggregate Bond Index. MS. ERCHINGER seconded the motion.</u>

A roll call vote was taken, and <u>the motion passed unanimously.</u>

UNFINISHED BUSINESS
None

NEW BUSINESS
None

OTHER MATTERS TO PROPERLY COME BEFORE THE BOARD
None

PUBLIC/MEMBER COMMENTS
None

INVESTMENT ADVISORY COUNCIL COMMENTS

DR. MITCHELL expressed appreciation to the Board for his appointment to another three-year term. DR. MITCHELL noted he has been associated with the ARMB and its predecessor, either as a manager or as an IAC member for over 25 years. He believes the Board and staff is as strong as it ever has been, and sees this demonstrated by the performance numbers Callan reviewed earlier. DR. MITCHELL encouraged the staff and Board to continue the discussion regarding liquidity, de-risking, and the different ways to prepare to retain the gains that have been made should times change.

DR. JENNINGS commented the asset class reviews conducted in the last two meetings contributed to understanding the context of many of the managers. The external review of the internally managed portfolios today provided good validation. He feels it was efficient, but risks glossing some important questions Trustees may have for these complex and large portfolios. There was one slide on a $2 billion portfolio and although there are no concerns with the portfolio, DR. JENNINGS encouraged reflection on the comfort level with the oversight. He noted the IAC is standing by for guidance on the suggestion to be more involved.

MR. SHAW stated this is the second longest bull market in US equities. He believes the system does a very good job of rebalancing back to benchmarks, as part of its risk management perspective. He noted many of MR. MITCHELL's comments focus on risk and risk adjusted returns. MR. SHAW believes risk management and risk controls will play a larger and larger role, given the current rich valuations in the market.

TRUSTEE COMMENTS

MS. HARBO expressed appreciation to MS. ERCHINGER for her work on the Actuarial Committee, her excellent guidance through the complex topics discussed, and her assistance in helping the actuaries work together.

MS. ERCHINGER reminded Trustees the approval of the tentative recommended economic rates today were solely for the purpose of evaluation. She encouraged Trustees to keep the great reference materials in the packet. A formal adoption of economic assumptions is anticipated to come before the Board in September.

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 22, 2018, on a motion made by MS. HARBO and seconded by MS. ERCHINGER.

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

____
Corporate Secretary