State of Alaska ALASKA RETIREMENT MANAGEMENT BOARD MEETING

Location:

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

MINUTES OF September 29-30, 2016

Thursday, September 29, 2016

CALL TO ORDER

VICE-CHAIR ROBERT JOHNSON called the meeting of the Alaska Retirement Management Board (ARMB) to order at 9:03 a.m.

ROLL CALL

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

Board Members Present

Robert Johnson, Vice Chair Gayle Harbo, Secretary Kristin Erchinger Commissioner Sheldon Fisher Commissioner Randy Hoffbeck Tom Brice Norman West Bob Williams

Investment Advisory Council Members Present

Dr. William Jennings Dr. Jerrold Mitchell Robert Shaw

Department of Revenue Staff Present

Gary M. Bader, Chief Investment Officer
Bob Mitchell, Deputy Chief Investment Officer
Scott Jones, State Comptroller
Jerry Burnett, Deputy Commissioner, Department of Revenue
Pamela Leary, Director, Treasury Division
Steve Sikes, State Investment Officer
Nicholas Orr, State Investment Officer

Judy Hall, Board Liaison

Department of Administration Staff Present

Kevin Worley, Chief Financial Officer, Division of Retirement & Benefits (DRB) Kathy Lea, Chief Pension Officer, DRB John Boucher, Deputy Commissioner, Office of Management & Budget

Consultants, Invited Participants, and Others Present

David Corris, BMO

Kamila Kowalke, BMO

Tom Letternberger, BMO

Steven Center, Callan Associates, Inc.

Paul Erlendson, Callan Associates, Inc.

Lori Lucas, Callan Associates, Inc.

James Veneruso, Callan Associates, Inc.

Stuart Goering, Department of Law, Assistant Attorney General

T.J. Duncan, Frontier Capital Management

Nick Johnston, Lord Abbett, LLC

Chris Cunningham, Townsend Group

Jack Koch, Townsend Group

PUBLIC MEETING NOTICE

JUDY HALL, Board Liaison, confirmed that public meeting notice requirements had been met.

APPROVAL OF AGENDA

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

The agenda was approved.

PUBLIC/MEMBER PARTICIPATION, COMMUNICATIONS, AND APPEARANCES

Vice-Chair Johnson welcomed the newest Trustee, Norman West.

APPROVAL OF MINUTES: June 24, 2016

MRS. HARBO moved to approve the minutes of the June 24, 2016 meeting. MR. BRICE seconded the motion.

The minutes were approved.

REPORTS

1. CHAIR REPORT

VICE-CHAIR JOHNSON noted CHAIR SCHUBERT will attend the meeting on September 30th.

2. COMMITTEE REPORTS

A. Actuarial Committee

MS. ERCHINGER reported the Actuarial Committee met the day before the Board meeting and the focus was primarily on the review of the FY 2018 contribution rates, which is in the packet for approval later in today's meeting. Buck Consultants provided an update on the healthcare cost trend and a presentation was made regarding the extent proxy data may be impacting the persistent health gains. Discussions occurred on rehire assumptions, as well as audit findings and the valuation timeline for preparing the next valuation.

MS. ERCHINGER stated the Actuarial Committee requested GRS to develop an Actuarial Committee manual outlining funding policies and memorializing processes that would help guide the decisions of the Actuarial Committee each year. GRS presented an overview of their recommendations and an action item for approval will come before the Board later in today's meeting.

B. Audit Committee

VICE-CHAIR JOHNSON reported the Audit Committee met the day before the Board meeting and productive discussions occurred with KPMB and KEVIN WORLEY, Chief Financial Officer, DRB, regarding the anticipated clean audited financial statement, to be delivered at the November 3rd Committee meeting. Other topics of discussion included concerns and mitigations against cyber attacks and reporting pursuant to GASB 68.

C. Budget Committee

MRS. HARBO reported the Budget Committee met the day before the Board meeting and reviewed the FY16 actuals, the current FY17 projected budget, and the FY18 proposed budget, which will come before the Board for approval later in today's meeting. MR. WEST is a new member of the Committee. MRS. HARBO stated CHAIR SCHUBERT joined yesterday's Committee meeting by teleconference.

D. Defined Contribution Committee

MR. WILLIAMS reported the Defined Contribution Committee met and heard presentations by KATHY LEA, Chief Pension Officer, regarding Empower's new features, and by GARY BADER, Chief Investment Officer, regarding the differences and challenges between defined contribution and defined benefits. MR. WILLIAMS indicated T.Rowe Price, Prudential, and Met Life each gave presentations on how to better meet the needs of the DC plan members by offering options like a lifetime fixed income amount in retirement, guaranteed income flow, or QLAC, respectively.

3. RETIREMENT & BENEFITS DIVISION REPORT

A. Membership Statistics

MR. WORLEY reviewed the Retirement System Membership Activity Report for FY16. The continued decrease in the number of defined benefit members and increase in defined contribution members is expected. Approximately 2,100 retirement applications were processed in FY16 and two retirement applications were processed in the DC plan.

B. Buck Consulting Invoices

MR. WORLEY reported on the Buck Consultants invoices for each quarter of the fiscal year at the request of the Board. There were no out-of-the-ordinary services provided during the year.

4. TREASURY DIVISION REPORT

A. Pension Obligations Bond Update

Deputy Commissioner of Revenue JERRY BURNETT gave members a copy of the Senate Finance Committee presentation that will be delivered today. He addressed particular concerns and answered questions regarding the complexities of pension obligation bonds (POBs). The POBs will be issued with a fixed rate debt. The unfunded liability of the pension system is listed in the same place in the Comprehensive Annual Financial Report (CAFR) as long-term State debt. The current amortization at 23 years will remain the same, but payments may be reduced in later years. The credit ratings for the POB are expected to come in this week at AA, AA, and AA3.

DEPUTY COMMISSIONER BURNETT explained the preliminary offering statement (POS) has an initial structure of \$2.3 billion. The Teachers' Retirement System (TRS) could receive a \$981 million deposit, bringing it to a 90% funding level, and Public Employees' Retirement System (PERS) would receive the remaining amount. The maximum structured size is \$3.3 billion. TRS would receive a \$981 million deposit and PERS could receive up to a \$2.25 billion deposit, bringing it to a 90% funding level. The expected savings to the State is significant over time with a net present value basis of 50%.

DEPUTY COMMISSIONER BURNETT advised the POBs do not add additional risk to the trusts because the trusts are receiving the funds in replacement of the State's on-behalf payments. The POBs do not add additional risk to the State because the State has to pay the on-behalf payment under the statute. The State would continue to operate the same as it does now with no intent of legislative changes.

DEPUTY COMMISSIONER BURNETT reviewed the aggressive financing schedule to take advantage of current interest rate trends. Because of the size and opportunity of the sale, marketing to new investors in Asia, Europe, and the United States will occur in October. Negotiations for pricing and closing will be completed by October 31, 2016. The Pension Obligation Bond Corporation has delegated the authority for the sale, subject to terms, to the Department of Revenue. Senior managers and co-managers include Citibank, Goldman Sachs, Bank of America, Merrill Lynch, RBC, JP Morgan, Key Bank, and Jefferies.

JOHN BOUCHER, Deputy Commissioner, Office of Management & Budget, requested additional information on the timing of the deposits into the funds. DEPUTY COMMISSIONER BURNETT explained the entire balance of the funds will be transferred directly to the retirement trusts on closing and the Board will decide on the investment allocations.

B. FY 18 Budget - Action

Treasury Division Director PAMELA LEARY directed the Board's attention to the FY18 proposed ARMB budget. MS. LEARY recommended the Board adopt the fiscal year 2018 proposed budget, with the understanding that components will be subject to appropriation by the Office of Management and Budget (OMB) and the Legislature.

MRS. HARBO, as Chair of the Budget Committee, moved to adopt Resolution 2016-02. No second necessary.

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

MS. LEARY provided an update on the draft report produced by KPMG relating to the cost savings of the potential consolidation of the investment responsibilities for assets in the Treasury and the Alaska Permanent Fund Corporation. KPMG was requested to review the cost savings of three options; 1) transferring the Permanent Fund Corporation assets to the Treasury for management purposes, 2) transferring the Treasury assets to the Permanent Fund Corporation for management purposes, and 3) transferring the management of the constitutional budget reserve to the Permanent Fund Corporation. The report was purely cost-related and did not consider performance returns.

MS. LEARY reviewed the results of the draft reports showing there is no cost savings for Option 3. The small cost savings on both Option 1 and Option 2 ranged from zero cost savings up to 1.5 basis points of the total assets under management for the two organizations. MS. LEARY informed the staff of both organizations will meet with KPMG next week addressing specific assumptions at issue in the draft report. Staff of both organizations will submit response letters addressing areas that were not included in the draft report, such as the impact of consolidation, policy matters, performance metrics, and diversification. MS. LEARY indicated the final report is due to the Legislature in mid-October, and believes the Board will receive a copy of the preliminary report after the corrections are made. MS. LEARY welcomed engagement from Board members on concerns and issues to be included in staff's response letter.

COMMISSIONER FISHER commented on the sequencing difficulty in providing feedback when the report has not been released to Board members. He believes it is worthwhile to continue to review other options that may make sense, in terms of meaningful upgrades to systems, data warehouse, data management, and the possibility of combining back office functions that would be an intelligent way to operate the two organizations.

COMMISSIONER HOFFBECK noted the Board put forth a resolution at the last meeting in opposition to the consolidation. COMMISSIONER HOFFBECK stated he met with DIRECTOR RODELL regarding the report and several staff members are tasked to review the report. COMMISSIONER HOFFBECK feels the cost savings generated in the report are not compelling enough to consolidate. This was a good exercise to undergo during these tight budget times.

VICE-CHAIR JOHNSON stated the Board adopted a resolution at the last meeting in opposition to the statement of intent that formed the basis for the analysis. The resolution was delivered to the Permanent Fund Corporation and to legislators. It requested the Board specifically be involved as a resource if the issue moves forward.

COMMISSIONER HOFFBECK believes there is benefit to the Board providing feedback regarding the report. The hope was the report would have been available at this time, but there were enough issues associated with some of the assumptions and analysis that it is not ready for release. COMMISSIONER HOFFBECK suggested the Board address this issue again at the December meeting after the report is transmitted to the Senate Finance Committee and they have provided a response.

5. CIO REPORT

MR. BADER reported he met with members of Department of Administration and Department of Revenue to discuss best practices regarding DC plans and developing processes for the Board going forward. Department of Revenue has agreed to create a document to be reviewed and modified by Department of Administration regarding the DC best practices and processes. COMMISSIONER FISHER believes clarifying roles and responsibilities will allow accelerated progress.

MR. BADER reviewed the CIO Report provided to the Board. He clarified Item 1. should read "Rebalanced defined contribution and defined benefit plans," and included various transactions on the dates listed in the report. Copies of the specific documents are available for the Board's review. MR. BADER discussed each of the 15 transaction items provided in the CIO Report.

MR. BADER noted Wells Fargo is acquiring Analytic Investors and staff has approved the assignment of the contract to Wells Fargo. MR. BADER asked for a motion to approve the assignment.

VICE-CHAIR JOHNSON asked MR. GOERING for his advice. MR. GOERING indicated he has not had an opportunity to formally review the document. VICE-CHAIR JOHNSON requested action on this item be postponed until later in the meeting, giving MR. GOERING the opportunity to fully review the assignment. It was agreed action would be postponed.

MR. BADER requested the Board place GAM on the watch list. He noted the resignation of the CIO and terminations over the years that have changed since the original investment. MR. BADER indicated staff will return in December with a further recommendation related to GAM.

MRS. HARBO moved to place GAM on the watch list. MR. WILLIAMS seconded the motion.

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

6. FUND FINANCIAL REPORT

State Comptroller SCOTT JONES and Chief Financial Officer of the Division of Retirement and Benefits KEVIN WORLEY presented the Fund Financial Report. MR. JONES reviewed the financial statements for the year-to-date ending August 31st, 2016. The approximate numbers are: the PERS system ended with \$16.5 billion, the TRS system with \$8.1 billion, the JRS with \$181 million, the National Guard and Naval Militia (NGNMRS) with \$36.5 million, SBS with \$3.5 billion, and Deferred Comp with \$829 million, for a total of \$29.1 billion, of which \$23.8 billion is non-participant directed assets and \$5.3 billion is participant-directed assets. This is a year-to-date increase of about 3% and was largely due to investment income. All of the funds are close to targets and within the asset allocation bands. MR. JONES noted the month has been fairly flat through September 23rd.

MR. WORLEY indicated, as requested by the Board, notes for the supplement to the Treasury Report were added and provide answers to questions typically asked at Board meetings. MR. WORLEY informed the Legislature appropriated funding for PERS, TRS, NGNMRS, and others. Funding in the amount of \$99.2 million was received for PERS. Funding in the amount of \$116.7 million was received for TRS. The funding transfer for NGNMRS is expected this month. Funding in the amount of \$5.4 million was received for past service cost for the JRS. No prescription rebates were received.

7. FRONTIER CAPITAL MANAGEMENT

MR. BADER introduced THOMAS DUNCAN, Senior Vice-President and Co-Portfolio Manager, from Boston-based Frontier Capital Management. MR. DUNCAN informed the 30-year-old company has approximately \$13.3 billion assets under management. MR. DUNCAN provided an overview of the firm's organizational structure and noted the investment team is made up of nine portfolio managers, 11 analysts, and two traders. MR. DUNCAN and his Co-Portfolio Manager WILLIAM TEICHNER started the Small Cap Value portfolio in 1999.

MR. DUNCAN continued his presentation discussing the firm's fundamental investment process and philosophy which focuses on good companies that are temporarily trading below their historical valuation and that contain unrecognized earnings power. MR. DUNCAN gave two examples of companies owned in the portfolio to illustrate the buying process and the selling process for the portfolio. MR. DUNCAN reviewed the performance of the portfolio and informed individual stock picking drives performance. No company gets above a 3% weighted position in the portfolio. The allocation for cash varies because of the time it can take to both get in and get out of a position. The attempt is to have approximately 3% cash in the portfolio.

DR. MITCHELL requested additional information as to the financial services businesses which comprise eight out of the 10 largest holdings. MR. DUNCAN provided specific background stories on the top three companies. He noted the index has a large weighting in financial services and the portfolio has been reducing its bank exposure because the companies are getting expensive. MR. SHAW requested an opinion on the impact of Wells Fargo's issues to the small cap area. MR. DUNCAN noted the importance of proper oversight and review of operations for smaller banks. He cited recent discussions with the CFO of First Horizon National regarding these serious issues and their status on reviewing operations.

MR. DUNCAN continued his presentation and answered questions from the Board. MR. DUNCAN explained the initial investment into a company is typically around a half a percent and the position is built over time as the managers get to know the company and the models are designed. Part of the due diligence before an investment is made is reviewing the proxy, the directors, the CEO, and the board. Frontier is a passive investor and does not actively push at the management team.

VICE-CHAIR JOHNSON recessed the meeting from 10:45 a.m. to 10:56 a.m.

MR. BADER requested MR. GOERING report on the assignment to Wells Fargo discussed earlier in the meeting. MR. GOERING indicated he had the opportunity to review the request for assignment and the underlying investment management agreement with Analytic. MR. GOERING stated there is no legal objection to the assignment as proposed. MR. GOERING recommended the contract be amended to have Wells Fargo explicitly sign onto the obligations contained in the agreement to avoid the record-keeping issue of the contract that reads Analytic as the counter party, when in actual practice, Wells Fargo is the counter party. This amendment does not have to take place at the time of assignment.

MRS. HARBO moved to approve the assignment of contract with Analytic Investors, LLC to Wells Fargo Asset Management. Ms. Erchinger seconded.

COMMISSIONER FISHER asked MR. BADER if he is comfortable with the underlying management changes. MR. BADER informed discussions occurred with the firm and no changes will be made to the operations or management in the short to intermediate-term.

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

8. LORD ABBETT, LLC

MR. BADER welcomed NICK JOHNSTON, Director, Institutional Investor Services, and THOMAS O'HALLORAN, Partner and Portfolio Manager, from Lord Abbett & Co., who manages a small cap fund and a microcap fund for the ARMB. MR. JOHNSTON expressed his appreciation for 11 years in partnership with the ARM Board. MR. JOHNSTON provided an overview of Lord Abbett's investment-led, investor-focused philosophy and noted its singular investment management focus since 1929. Lord Abbett is a privately held firm with 56 partners and approximately \$130 billion in assets under management. MR. JOHNSTON reviewed the updates on the organizational structure. The investment professionals have grown from 105 in 2010, to 148 in 2016.

MR. O'HALLORAN joined Lord Abbett in 2001, and has been in the financial services business for almost 30 years. He continued the presentation discussing Lord Abbett's rigorous fundamental research process supported through technical analysis, risk management, diversified portfolio, and a good selling discipline. MR. O'HALLORAN described the four attributes of great companies include a very good business model, great managers, healthy industry, and the first or second leader in market-share.

MR. O'HALLORAN reported the microcap strategy has had a 32% cumulative outperformance since 2011. He stressed it is important for a strategy to make more when they are right than they lose when they are wrong. MR. O'HALLORAN gave specific examples of how the portfolio benefitted from timing and selection.

MR. O'HALLORAN directed the Board's attention to the small cap portfolio, which shows a painful one-year return. He explained the timing for small cap was really good in 2013, but this portfolio was created late in 2013, and did not receive the benefits of that period. Since then, there has been the reversion effect, quantitative easing ended, and China stumbled. All of this created horrible performance for high-growth names. MR. O'HALLORAN believes those factors contributed 3/4 of the under-performance and other issues were with execution and holding large positions longer than optimal. MR. O'HALLORAN stated staff is working hard to strengthen fundamental research and technical analysis.

DR. MITCHELL commented on the cyclicality of performance within the small cap growth strategy over the years and asked if small cap growth should be part of the traded portfolio rather than a long-term investment. MR. O'HALLORAN believes tactical rebalancing is appropriate from an asset allocation standpoint, in terms of reallocating assets away from small cap growth after a big year. MR. O'HALLORAN does not believe it is beneficial to allocate funds away after the recent brutal period. He believes the portfolio is positioned to do quite well going forward, even within the anticipated low-growth in the developed world and low interest rates. MR. O'HALLORAN noted 300 basis points of the underperformance has been regained since the middle of May.

MR. BADER requested more information on stock selection in the healthcare and biotech sectors. MR. O'HALLORAN explained the four business elements to look for include trials showing drug efficacy, safety and side effects, market opportunity, and the quality of

management. Phase II trials typically provide an appropriate gauge as to the potential of the drug. Lord Abbett sends analysts to dozens of investment conferences every year involving healthcare and biotech.

MR. WILLIAMS asked for more discussion regarding the rationale and underlying causes of the big swings in small cap growth performance. MR. O'HALLORAN explained the risk-on and risk-off market appetite settings. Growth opportunity companies are rewarded in risk-on market environments when the economy is healthy and optimistic. The same growth opportunity companies swing negatively in risk-off market environments when there is angst in the economy like a threat of a government shutdown or after the stock has had huge gains, up tenfold in one year, then begins to fall and there is nobody there to buy the stock because it has gone up tenfold. Small cap growth stocks tend to get very overvalued at times and in an environment of fear, they tend to be cheap for their potential.

MR. ERLENDSON asked what portion of the companies is dependent on being acquired in order to realize their gains. MR. O'HALLORAN discussed the primary strategy for their stock selection is superior revenue and earnings growth, and not the potential for being acquired. He noted they are happy when acquisitions come along and they are able to sell out into the premium, but acquisitions is not a primary driver.

8. BMO - Small Cap

MR. BADER reported Callan was requested by the Board to review BMO for a possible small cap strategy. The review was performed and BMO is here to present their methodology. Staff is excited about the possibility and the Board will decide upon hiring BMO later in the agenda. MR. BADER welcomed BMO representatives. KAMILA KOWALKE, Director, Institutional Sales, began the presentation on the disciplined small cap core strategy by introducing DAVID CORRIS, Head of Disciplined Equities and Senior Portfolio Manager, and TOM LETTENBERGER, Senior Portfolio Manager. MS. KOWALKE stated MR. LETTENBERGER joined BMO in 2005, and MR. CORRIS joined BMO in 2008, and the two have been working together since 2008, researching, creating, launching and managing this strategy.

MS. KOWALKE showed how this strategy has demonstrated the ability to deliver excess returns versus the Russell 2000 by utilizing the comprehensive risk controls and focusing on consistency in delivery alpha. Success is based on the investment strategy, the investment process, and the investment team. MS. KOWALKE provided a background of BMO Global Asset Management and noted they managed \$234 billion for both institutional and retail clients.

MR. CORRIS continued the presentation describing the investment philosophy of the team that has been used for over 30 years. The philosophy is based on two core beliefs, which are company fundamentals and quantitative implementation. Earnings and cash flows drive stocks over the long-run and stocks become mispriced in the short-run. Research has shown that a data-driven and systematic approach to stock ranking, risk management, and portfolio construction gives the best chance to consistently and repeatedly outperform the market.

MR. CORRIS explained the managers are active in stock selection and utilize the sophisticated proprietary model to identify these companies. Risk management provides this strategy with a competitive advantage by using five different risk models to understand the risks in the portfolio from different perspectives and allowing decisions to be made regarding those risks. MR. CORRIS discussed how the process is adaptive and proactive by utilizing a data-driven approach of 80 to 90 factors that help identify when an unusual market condition is happening, at which time analysis occurs to determine the response to the condition.

MR. CORRIS provided a high level review of the process used to build the small cap core strategy and then provided an in-depth review of each step of the stock selection model. The portfolios are built to have the highest expected return, while managing risk comprehensively. The portfolios contain appropriate positions, given the market environment, while managing transaction costs.

MR. BRICE asked if BMO's model is believed to be predictive and capture the profitable gains of the market's movements on a global and macro level. MR. CORRIS agreed, but emphasized the primary driver of BMO's outperformance is stock selection across a wide variety of environments.

MR. SHAW requested a description of a market environment when this strategy will underperform. MR. CORRIS described the hardest periods for the small cap core strategy are times when fundamentals are not driving stock prices and risky cyclical companies are leading high quality companies. These are called lower quality risk rallies in the market.

MR. LETTENBERGER continued the presentation sharing more detailed processes of the fundamentals of developing the portfolio, including data validation, rates of exposures, and a thorough fundamental review of each company.

DR. MITCHELL requested additional comments on the high annual turnover and how that is connected to the models. MR. LETTENBERGER informed the models run daily, but trading does not occur daily. The biggest changes in the model scores are around quarterly earnings time. The turnover equates to about 7% a month. MR. LETTENBERGER believes this level is appropriate to the optimal exposure of the highest potential return stocks.

MR. ERLENDSON commented the track record of the strategy is impressive, but the amount of assets with a six-year history is relatively low. He asked if there is a capacity limit on the strategy itself. MR. ERLENDSON asked if BMO would be willing to hold aside a fixed amount for the ARMB, if requested. MR. CORRIS advised there is a capacity of \$3 billion. He noted BMO would be willing to reserve an amount of that capacity for ARMB.

MR. LETTENBERGER continued the presentation discussing the constraints of the diversified portfolio, liquidity and transaction costs. He reviewed performance charts in different market environments.

VICE-CHAIR JOHNSON recessed the meeting from 12:15 p.m. to 1:37 p.m.

9. ACTUARIAL RESOLUTIONS -- FY18 Contribution Rate Setting

Action: Relating to FY18 PERS Contribution Rate Resolution 2016-11

MS. ERCHINGER, as Chair of the Actuarial Committee, moved to approve Resolution 2016-11. No second necessary.

MS. ERCHINGER informed this resolution will establish the fiscal year 2018 actuarially determined contribution rate attributable to employers participating in the PERS at 25.01%, composed of the contribution rate for the DB Pension of 17.27%, the contribution rate for healthcare at 3.11%, and the contribution rate for Defined Contribution Pension of 4.63%.

MS. ERCHINGER noted the Actuarial Committee previously recommended funding for healthcare be set at zero percent and the total contribution go into pension. After discussion at the Actuarial Committee meeting yesterday and at the recommendation of the Department of Administration, the Actuarial Committee is not recommending the zero percent healthcare funding this year. The proposed split contribution rate is recommended.

COMMISSIONER HOFFBECK requested additional reasoning as to the decision for split funding. MS. ERCHINGER explained the Committee wants to create a funding policy for the future that addresses when it is appropriate to set a zero percent contribution rate. She stated the Administration recommended contribution to healthcare based on recently revealed statistical information. VICE-CHAIR JOHNSON commented the discussions that underpin the setting of the various contribution rates through the resolutions offered at today's meeting were extensive and thorough by members, Buck, and GRS. He recommended listening to the record of the meeting or reading the minutes for further review.

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

Action: Relating to FY18 PERS RMMI Contribution Rate Resolution 2016-12

MS. ERCHINGER, as Chair of the Actuarial Committee, moved to approve Resolution 2016-12. No second necessary.

MS. ERCHINGER informed this resolution establishes the fiscal year 2018 employer contribution rate for the Retiree Major Medical Insurance for PERS DC plan at 1.03%.

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

Action: Relating to FY18 PERS ODD Contribution Rate Resolution 2016-13 MS. ERCHINGER, as Chair of the Actuarial Committee, moved to approve Resolution 2016-13. No second necessary.

MS. ERCHINGER informed this resolution establishes the fiscal year 2018 employer contribution rate for PERS Occupational Death and Disability Benefits at 0.43% for peace officers and firefighters, and at 0.16% for all other PERS DC employees.

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

Action: Relating to FY18 TRS Contribution Rate Resolution 2016-14

MS. ERCHINGER, as Chair of the Actuarial Committee, moved to approve Resolution 2016-14. No second necessary.

MS. ERCHINGER informed this resolution would establish the fiscal year 2018 actuarially determined contribution rate attributable to employers participating in TRS at 26.78%, composed of the contribution rate for the defined benefit pension of 19.16%, the contribution rate for the postemployment healthcare of 2.59%, and the contribution rate for defined contribution pension of 5.03%.

MS. ERCHINGER noted there were previous discussions regarding this resolution having the potential of a zero contribution rate to healthcare. Buck Consultants provided two exhibits at the Actuarial Committee meeting showing the actual dollar contributions under both rate scenarios. These are available for members to review.

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

Action: Relating to FY18 TRS RMMI Contribution Rate Resolution 2016-15

MS. ERCHINGER, as Chair of the Actuarial Committee, moved to approve Resolution 2016-15. No second necessary.

MS. ERCHINGER informed this resolution establishes the fiscal year 2018 employer contribution rate for the retiree major medical insurance for TRS DC at 0.91%.

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

Action: Relating to FY18 TRS ODD Contribution Rate Resolution 2016-16

MS. ERCHINGER, as Chair of the Actuarial Committee, moved to approve Resolution 2016-16. No second necessary. MS. ERCHINGER informed this resolution establishes the fiscal year 2018 employer contribution rate for TRS ODD benefit at zero percent for all TRS DC employees.

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

Action: Relating to FY18 NGNMRS Contribution Rate Resolution 2016-17

MS. ERCHINGER, as Chair of the Actuarial Committee, moved to approve Resolution 2016-17. No second necessary.

MS. ERCHINGER informed this resolution establishes the fiscal year 2018 actuarially-determined contribution amount for the State of Alaska Department of Military and Veteran's Affairs to the NGNMRS be set at \$907,231, composed of the contribution amount for normal costs of \$603,495, past service cost of \$71,736, and expense load cost of \$232,000.

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

Action: Approval of extending the GRS contract

MS. ERCHINGER, as Chair of the Actuarial Committee, moved to approve extending the GRS contract up to \$30,000 for first and second draft work in preparing an Actuarial Committee manual. No second necessary.

MS. ERCHINGER informed GRS would assist the Actuarial Committee in preparing a manual to establish practices around issues including funding policies, review of earnings assumptions and mortality assumptions. GRS prepared an estimate of the total proposal fee of \$25,000, with an additional fee of up to \$5,000 for a final second draft of work.

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

Information: JRS Contribution

MS. ERCHINGER informed the Department of Administration determines the contribution rate for JRS and the ARMB is not requested to provide a vote. For information purposes, the JRS contribution rate is recommended at 74.21%.

DEPUTY COMMISSIONER BOUCHER recommended continuing the discussions at some point regarding the funding policy contribution rates of the placement of the potentially large POB sales to pension and healthcare, including zero percent allocations to healthcare. MR. BADER believes the stated allocation promise to the purchases of the bond is required to be followed. If the bond does not contain an outlined allocation, he believes the allocation recommendation would come from Department of Administration and the actuaries for the Board to act upon.

MS. HARBO noted she was under the impression from the presentation that any funding from the Pension Obligation Bonds would go into the pension funds and not the healthcare funds. MR. WILLIAMS believes it is important for the POB sales to go toward pension and not healthcare funds.

COMMISSIONER HOFFBECK advised the official statement will be reviewed more closely to ensure these issues are addressed appropriately. COMMISSIONER FISHER noted a special telephonic meeting in early November may be necessary to review prepared recommendations.

10. REAL ASSETS FY17 ANNUAL PLAN

A. REAL ESTATE GUIDELINES POLICIES AND PROCEDURES

MR. BADER introduced STEVE SIKES, State Investment Officer, and NICHOLAS ORR, State Investment Officer, who provided the presentation on the real assets portfolio. MR. BADER stated gradual changes to staff assignments within the portfolio group include MR. SIKES being responsible for active investment management in the equity space and MR. ORR taking over the previous responsibilities of MR. SIKES.

MR. SIKES indicated he will first present the 2017 Investment Plan, then Townsend Group, the Board's real estate consultant, will provide comments about the plan and an overview of the market, and lastly, MR. SIKES will come back before the Board for the adoption of the plan and approval of the investment guidelines.

MR. SIKES noted real assets is a fairly meaningful part of the overall portfolio at an 18.1% allocation, with the major components being real estate, farmland, timberland, energy, infrastructure, and TIPS. The purpose of the real assets portfolio is to generate attractive returns and provide diversification and inflation hedging. Historically, the assets exhibit lower volatility and have a higher income component of total return. The return expectation is a 5% net real return over rolling five-year periods. The benchmark is a blend of the component assets.

MR. SIKES reviewed the real assets group manages real estate, farmland, timberland and infrastructure. The fixed income group manages the TIPS portfolio, and the private equity staff manages the energy assets. MR. SIKES reported the total real assets allocation is within its target. He detailed the individual sector target allocations and noted their underweight or overweight.

MR. SIKES stated the real assets performance for the one-year period ending June 30, 2016, came in at 4.81%. He continued with the component returns for the same time period. Real estate was strong with the overall real estate at 13.8%, private real estate at 11.38%, and public REITS at about 24%. Farmland was slightly below the target at 6%. Infrastructure produced attractive results above its benchmark at 7.31%. Timberland and energy portfolios both underperformed their benchmarks. The negative performance of the energy sector impacted energy funds and MLP investments.

MR. SIKES gave an overview of the real estate portfolio as of June 30, 2016. The total \$1.8 billion of assets is comprised of three separate accounts and two open-end funds in the core portfolio and 16 comingled funds in the non-core portfolio. MR. SIKES reviewed the graphics illustrating return components over time and current composition.

MR. SIKES profiled the farmland portfolio as of June 30th, 2016. The total NAV is \$814 million with two separate account managers, investments in 92 properties and approximately 160,000 acres. The construction of the portfolio is relatively conservative and focuses on row crops. The portfolio is within its target allocation. MR. SIKES commented water and drought issues continue to be major factors for farmland and the managers have undertaken an effort to shift some of the exposures. He noted the wildfires in California have not impacted the properties. One of the recommendations that will be made later in the meeting to the Board is to increase in the UBS separate account commitment.

MR. SIKES described the timberland portfolio, which started in 2008, has grown to \$384 million in two separate accounts with 16 properties and approximately 191,000 acres. The returns were lower this year, primarily due to sluggish growth in housing starts and the portfolio's geographic exposure. The remaining separate account allocation for timberland is \$183 million and it has been very challenging to deploy capital in this sector. This will be addressed later under investment recommendations.

MR. SIKES stated the infrastructure strategy focuses on core infrastructure investments, which are characterized by long-lived assets with high barriers to entry, often having regulated or contracted cash flows, including airports, toll roads, utilities, and electric transmission assets. The structure is comprised of two managers that invest in public stocks and two managers that invest in private open-end funds. One of the later recommendations relates to increasing investment to one of the open-end funds.

MR. SIKES commented the transaction flows and liquidity in real estate equity and debt are still at very healthy levels historically. Real estate fundamentals are very strong. Timberland and farmland have been challenging to get invested. USDA projects a declining U.S. farm income over the next few years, given the weaker commodity prices and lower exports.

MR. SIKES enumerated the investment recommendations for the real assets. Overall, there are no recommended changes in terms of components or new strategies. Real estate will continue to focus on high quality assets located in markets with high barriers to entry. To address the weighting between private and public real estate, the recommendation is to move \$100 million from REITs to the UBS Trumbull Property Fund. Staff will continue to evaluate higher risk/higher return strategies throughout the year.

MR. SIKES stated the two recommendations for the timberland portfolio. The first recommendation is to decrease the target allocation from 15% to 10%, by reducing Hancock's allocation by \$150 million. The current portfolio is attractive and well-diversified. The allocation to Hancock has been challenging to deploy. No investments have been made since 2011. Hancock has been very disciplined in not chasing the market. The business model of

this portfolio will become more reactive and opportunities will be considered when they come forth, rather than leaving a large amount of allocation uninvested.

MR. SIKES stated the second recommendation is to add to the guidelines the requirement for separate account managers to get CIO approval for reinvestment of capital. This requirement is part of the real estate guidelines and staff is recommending it be added to timberland and farmland processes. Currently, the reinvestment of capital is automatic. No additional authority to the CIO is requested. The CIO already has the discretion to add or reduce allocation. This component provides the opportunity to discuss reinvestments and make adjustments, if necessary.

MR. SIKES reviewed the recommendation for infrastructure is to increase the allocation from 12.5% to 17.5%. The proposal is to add to the current investment in the IFM Global Infrastructure Fund by \$50 million.

MR. SIKES stated the two recommendations for farmland. The first recommendation is to increase the allocation to UBS by \$100 million. UBS has a specific client allocation queue for sequencing client capital commitments and building portfolios. UBS believes it could take 12 to 24 months to build the portfolio if the intent to increase commitment was made now. No monies would be transferred until the actual purchase of properties. The second recommendation is to add to the guidelines the requirement for separate account managers to get CIO approval for reinvestment of capital.

MR. SIKES noted there were no recommended changes for the TIPS and energy portfolios.

B. CONSULTANT EVALUATION OF REAL ESTATE PLAN: DIVERSIFICATION, COMPLIANCE, & PERFORMANCE MEASUREMENT

VICE-CHAIR JOHNSON welcomed CHRIS CUNNINGHAM, Vice-President, and JACK KOCH, Manager Global Advisory Services, of Townsend Group. MR. CUNNINGHAM noted he has been working with ARMB for several years and wished MR. SIKES good luck in his new role. MR. CUNNINGHAM reported the previous real estate consultant to the ARMB, MICOLYN MAGEE, has taken a leave of absence from Townsend. MR. CUNNINGHAM will assume her ARMB account responsibilities. MR. CUNNINGHAM is confident Townsend has adequate staffing and resources dedicated to the ARMB portfolio. MR. KOCH acknowledged he will be providing additional service and support for the portfolio.

MR. KOCH gave a broad overview of the real estate market and noted it has been a very strong performer across the globe over the last eight years with double digit growth and double digit returns. Net operating income and asset valuations have increased in all property types during this time period. The average cap rate is about 5.5%.

MR. KOCH described the primary view of the real estate market over the next three years is a period of uncertainty. This is consistent with the uncertain economic and monetary policy across the globe. Political uncertainty is also a factor, including the new Prime Minister in the

UK, elections occurring in United States within the next couple of months, and national elections for Germany and France next year.

MR. KOCH explained the ARMB portfolio has shown strong income generation even through times of distress, due to the core stabilized properties located in good locations across the United States and globally. The expectation is real estate will continue to perform squarely in the middle between bonds and equities. MR. KOCH does not believe the recent double digit returns will continue, but will normalize to 6% to 8% on a gross-of-fees basis. Fundamentals are beginning to diverge, putting downward pressure on pockets of oversupply and making investment selection more imperative.

MR. KOCH explained the preference in today's market is looking at both retail and industrial, with a second tier of apartments and office space. The focus is to capitalize on the changing spending habits of consumers, evolving from brick-and-mortar sales to E-commerce sales. The attractive hybrid strategies in real estate debt come with a very strong income component, return capital at a faster rate, and provide good opportunities. MR. KOCH believes particular sectors in real estate will continue to be attractive as interest rates rise slowly.

MR. CUNNINGHAM continued the presentation detailing the performance of the \$1.8 billion real estate portfolio. The portfolio is well-positioned for the goals of capital preservation, inflation hedging, diversification, and steady income. The current portfolio allocation is approximately 70% core private real estate, 10% non-core, and 20% REITs. The portfolio is in compliance with all required metrics and has been above the 5% real benchmark on a five-year rolling basis for the last several years. MR. CUNNINGHAM expressed his agreement to all of the portfolio recommendations proposed by staff for this year. He explained there will be additional focus next year on current cash flow and conservative non-core investments that are defensive in nature, in style, or in structure, similar to the current Almanac investment.

VICE-CHAIR JOHNSON recessed the meeting from 3:16 p.m. to 3:28 p.m.

C. ADOPTION: REAL ASSETS FY17 PLAN & POLICIES

Action: Real Assets FY17 Annual Plan Resolution 2016-18

MS. ERCHINGER moved to adopt Resolution 2016-18. The motion was seconded.

VICE-CHAIR JOHNSON asked if Townsend reviewed, vetted, and agreed with the annual plan proposal. MR. SIKES confirmed Townsend reviewed, vetted, and agreed with the annual plan proposal.

COMMISSIONER FISHER inquired about the effects to real estate when interest rates begin to rise and if the changes to the portfolio positioning will mitigate the effects. MR. SIKES believes the adjustments at this time in the cycle are necessary to focus on high quality existing cash flows, as opposed to growth. He noted the adjustments are consistent with the long-term targets the ARMB has created.

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

Action: Revised Investment Guidelines Resolution 2016-19 - Real Estate

MR. SIKES informed Resolution 2016-19 relates to the adoption of the Real Estate Revised Investment Guidelines. The adjustments in the guidelines are updating addresses, dates, and those types of administrative changes.

MS. ERCHINGER moved to adopt Resolution 2016-19. MRS. HARBO seconded the motion.

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

Action: Revised Investment Guidelines Resolution 2016-20 - Farmland

MR. SIKES informed Resolution 2016-20 relates to the adoption of the Farmland Revised Investment Guidelines. The substantial change is the additional language requiring CIO approval for the reinvestment of capital. Other adjustments in the guidelines are administrative in nature.

MRS. HARBO moved to adopt Resolution 2016-20. MRS. ERCHINGER seconded the motion.

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

Action: Revised Investment Guidelines Resolution 2016-21 - Timber

MR. SIKES informed Resolution 2016-21 relates to the adoption of the Timber Revised Investment Guidelines. The substantial change is the additional language requiring CIO approval for the reinvestment of capital. Other adjustments in the guidelines are administrative in nature.

MRS. HARBO moved to adopt Resolution 2016-21. MRS. ERCHINGER seconded the motion.

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

Action: Revised Investment Guidelines Resolution 2016-22 - Infrastructure

MR. SIKES informed Resolution 2016-22 relates to the adoption of the Infrastructure Revised Investment Guidelines. The adjustments in the guidelines are administrative in nature.

MRS. HARBO moved to adopt Resolution 2016-22. MRS. ERCHINGER seconded the motion.

VICE-CHAIR JOHNSON inquired about the reasoning behind repealing and replacing a previous resolution if there are no substantive changes.

MS. ERCHINGER stated the changes include effective dates of the policies and contact information. This is the time for the Board to reaffirm the guidelines.

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

11. PERFORMANCE MEASUREMENT - 2ND QUARTER

VICE-CHAIR JOHNSON introduced PAUL ERLENDSON, Senior Vice President, and STEVE CENTER, Vice President, of Callan, who provided the review of the performance measurement for the second quarter 2016. MR. ERLENDSON outlined his presentation starting with a broad overview of the markets as of June 30th, asset allocation of the PERS fund, as a proxy for the pension plans, as well as a discussion of some of the managers and asset classes.

MR. ERLENDSON reviewed the real GDP growth in the U.S. over the last 10 to 15 years averaged close to 2%, which is down from the long-term 55-year average of about 3%. The Federal Reserve Board Open Market Committee met on September 20th and 21st. The expectations are for moderate economic growth going forward, but not robust enough to begin raising interest rates. The U.S. inflation target is at 2%.

MR. ERLENDSON continued his presentation describing the current environment of global rate expectations. Nearly 36% of all outstanding global government debt currently pays negative interest rates and almost 75% are paying rates less than 1%. Capital markets will continue to be challenged until these rates begin to increase. The foreign exchange markets experienced turbulence due to the Brexit vote uncertainty, but have stabilized since then. The dollar has strengthened against many currencies. The currency effect has become a critical issue because of the erosion of returns upon repatriation of the assets. The magnitude is quite significant for stock investors and even more so for bond investors, because the return potential is lower, but the currency impact is just as great.

MR. ERLENDSON described the September 23, 2016 year-to-date performance returns. The Russell 3000 returned 8%. The S&P 500 returned 7.6%. The Russell 2000 returned 11.6%. The EAFE Index returned 2.4%. The Emerging Markets returned 17.8%. The Aggregated Bond Index returned 5.7%. MR. ERLENDSON explained the importance of diversification and good managers within a portfolio. He noted staff has been rigorous in maintaining market exposures close to the strategic targets.

MR. ERLENDSON discussed historic yield curves and commented the ARMB's dividendoriented investment strategy within the equity portfolio provides a higher dividend yield than the 10-year Treasury. Staff had the foresight to implement such a strategy a couple of years ago and it is now becoming popular with other investors for the same reasons.

MR. ERLENDSON examined the ratio of workers to retired people in the U.S. in 2015 was four-to-one. The U.S. projection for 2050 is 2.5-to-one. On a global basis, there are approximately seven working-age people for every retired person, which is expected to decrease by 2050 to three-to-one. In the U.S., 70% of retirement funding assets in 1974 were dedicated to defined benefit plans and has decreased to about 35% in 2014. The shift is occurring toward individuals funding all of their own retirement risk. A Federal Reserve Board study from 2013 showed the average level of the combination of 401(k) assets, IRA assets, and Keogh plans for households with the head of the household between 56 years and 61 years is \$17,000. MR. ERLENDSON commented defined benefit plans are socially good because they diversify the risk for individuals to fund their retirement.

MR. ERLENDSON reviewed the funded status of public pension plans data from the Center for State and Local Government Excellence. Before the telecom bubble burst in 2001, the typical public pension plan was fully funded. Since that time, the funding ratios have decreased. In 2012, the Governmental Accounting Standards Board (GASB) issued new calculations about measuring funded status. The projection as of 2015, is the typical public pension plan is funded at a ratio of a 72%. According to the exhibit published by JP Morgan, Alaska is within the boundaries of a manageable debt and does not require disproportionate use of state revenues in order to meet future obligations.

MR. CENTER continued the presentation focussing on the PERS plan as a proxy for all of the plans. Asset allocation is in-line with the long-term strategic targets. The target fixed income allocation for PERS is 12%. The median fixed income allocation for the public fund database is 27%. Fixed income was the strongest performer last year returning 6%. The laggards last year were ex-U.S. equity. The target global equity ex-U.S. allocation for PERS is 25%. The median global equity ex-U.S. allocation for the public fund database is 18.6%. These two tradeoffs are what caused the performance for the PERS plan to lag peers last year. PERS' performance versus the total plan benchmark is in-line. The longer-term performance versus peers is above median for the last three, five, seven, and 24-year time periods.

MR. CENTER reported the performance of the portfolio over the last quarter returned 1.64% versus the target of 1.53%. The key driver of performance was excess return from the real asset portfolio and a little drag from domestic and international equities. Over the last year, the total portfolio returned negative 0.36% versus the target of 0.05%, primarily due to an underperformance from real assets, along with negative performance from the absolute return portfolio. The net-of-fee net return last year came in at negative 0.55%, which is approximately 20 basis points of fee impact. MR. CENTER commented the fee level is very competitive. Performance of the plan versus the target actuarial return has been very much in-line, yet experiencing some difficulty catching up with the actuarial return targets since 2008.

MR. CENTER discussed the difficult period active equity managers faced over the last year. All of the large cap active managers underperformed their benchmark. The plan contains 2/3

of the U.S. large cap equity in passive allocations and the passive portfolios have performed as expected. MR. CENTER believes active managers still add value in the small cap area and have performed better than small cap passive portfolios over longer time periods. Last year, the small cap portfolio beat its benchmark, although both came in negative, negative 6.56% versus negative 6.73%. The two microcap managers outperformed their benchmark last year. The alternative equities portfolio performed well last year, returning 3.54%. The in-house equities yield portfolio and the REIT allocation both performed well last year.

MR. CENTER reviewed the above median performance of the fixed income portfolio last year. The absolute return portfolio returned a negative 4.45% last year, which is better than its benchmark at negative 5.4%. This has been a very difficult near-term period for hedge funds to add value. MR. CENTER described the stoplight page representing the Balanced and Target Date Fund options within the Defined Contribution plan. He noted the red-colored cells trailed their peer group in the near-term because they have a lower allocation to fixed income. Callan staff will provide a detailed Defined Contribution plan review tomorrow.

12. INVESTMENT ACTIONS

A. BMO SMALL CAP MANAGER

MR. BADER stated the Board approved the portable alpha strategy at the February 2016 meeting, which would entail utilization of small cap managers as an alpha source. Callan conducted a due diligence review of BMO and provided a favorable opinion. The report did not make it in today's meeting packet. MR. BADER believes BMO's earlier presentation addressed issues of interest to the Board and highlighted the consistency of their returns. BMO classifies themselves as a quantitative manager. Staff believes it is important to have a blend of several different styles of managers. The intent is that part of or all of the BMO allocation may end up in the portable alpha pool. The portable alpha structure will develop as more components are available.

Staff recommends the Board authorize BMO to manage \$75 million in their Disciplined Small Cap Core Strategy, subject to successful contract and fee negotiations.

MRS. HARBO moved to authorize BMO to manage \$75 million in their Disciplined Small Cap Core Strategy, subject to successful contract and fee negotiations. Mr. West seconded.

VICE-CHAIR JOHNSON inquired if the GAM part of BMO is related to the GAM that was put on the watch list earlier in the meeting. DR. JENNINGS stated there is no relation.

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

RECESS FOR THE DAY

VICE-CHAIR JOHNSON recessed the meeting at 4:48 p.m.

Friday, September 30, 2016

CALL BACK TO ORDER

CHAIR SCHUBERT reconvened the meeting at 9:00 a.m.

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

13. DEFINED CONTRIBUTION PLAN REVIEW

MR. ERLENDSON introduced LORI LUCAS, Practice Leader, and JIMMY VENERUSO, Senior Member, of Callan's Defined Contribution group. MS. LUCAS has been with Callan for 10 years and previously was Director of Research at Hewitt Associates. She is the current Chair of the Defined Contribution Institutional Investment Association and a very active member of the National Association of Governmental Defined Contribution Administrators' Organization. MR. VENERUSO has been with Callan for nine years and previously was in Tonga with the Peace Corps.

MR. ERLENDSON stated the Defined Contribution Plan Review was conducted by Callan's Defined Contribution group, as well as a peer review committee within Callan. MS. LUCAS noted the project began in March and has extensive objectives to review all aspects of the Defined Contribution plan, including record keeping, administration, participant communication, investment fund line-up, target date funds, managed accounts, and plan delivery. Follow-up will be conducted once decisions are made concerning the investment policy statement and an enhanced performance report.

MS. LUCAS reported discussion today will cover primarily the executive summary, which comes out of the full comprehensive report that can be referenced as needed. The four plans that are administered by Empower are the Supplemental Annuity Plan, the 457 Deferred Compensation Plan, PERS, and TRS. There is a total of 89,500 participants accounting for \$6 billion in assets across the plans.

MS. LUCAS explained Empower has clearly indicated its commitment and dedication to record-keeping by gaining marketshare through its recent merger with Putnam and recent acquisition of JP Morgan Retirement Services. These consolidations have resulted in conversions from various platforms, changes in management, personnel, and the participant website. Currently Empower is respected for their capabilities and are the record-keeper for 24 out of the 50 state plans in the country.

MS. LUCAS informed Callan's normal course of business includes record-keeper searches, RFIs, fee reviews, and data in various databases updated annually. Callan also met numerous times with staff to collect specific data on the services that were provided to the plans and to the participants, and to discuss different aspects of the findings. MS. LEA requested the names of the staff Callan met with because to her knowledge, the Division of Retirement and

Benefits (DRB) were not contacted. MS. LUCAS informed the contacts were primarily with MS. HALL and SHANE CARSON on the ARMB side.

MS. LUCAS explained the gathered knowledge was used by Callan to score Empower's record-keeping services based on 21 categories compared to its competitors using the ranking scale of below average, average, and above average. The categories were weighted according to importance for Alaska participants. Empower received a total weighted score of above average. Callan believes Empower can make the improvements in the areas that scored average and below average.

MS. LUCAS reviewed the graphics illustrating the scoring and weighting of each category. The highest weighted categories that received an above average score were record-keeping processing, record-keeping functionality, communications, and participant website. The highest weighted category that received an average score was investments. The main reason for the average score for investments was Empower does not have a lot of clients with custom funds. Empower has an open architecture and is clearly able to handle the portfolio's current custom target date funds. The question is around future investments and resources devoted to custom fund solutions. MR. ERLENDSON added he believes there will come a time when the portfolio offers highly customized funds.

The highest weighted categories that received a below average score were advice/managed accounts and fees. The main reasons for the below average score for advice/managed accounts were participants have been defaulted into the product and it was challenging to get good information on the participant experience in these products to ensure participants receive value for their money.

The fee of \$44 per participant across the plan is within the range of competitors in between 50th and 75th percentile of sample database bids. From a percentage basis, Empower receives 0.0675% of assets across the plans, which puts them between the 75th and 90th percentile of the sample database bids. These are the main reasons for the below average score for fees. However, a RFI or RFP was not conducted by Callan and the disclaimer is included regarding complexities that could make the Alaska experience more expensive than the Lower 48. The recommendation is to continue to monitor the fees to ensure they remain competitive.

MS. LEA requested clarification on the per participant administrative fee. She stated the per participant administrative fee is \$35 plus four basis points and does not go to Empower. The administrative fees go through the plan, but are paid to the Division to meet administrative expenses between the two departments. MS. LUCAS clarified 0.0675% revenue to Empower has been separated out. The total asset-based fee participants are paying is higher at 0.11%.

CHAIR SCHUBERT commented it would be helpful for Callan to talk to DRB before the recommendations are finalized and before they are brought back to the Board.

COMMISSIONER FISHER requested a discussion of the list of record-keepers who had overall weightings higher than Empower. He stated those discussions could occur offline.

MS. LUCAS agreed and commented the weighted rankings are based on the needs of the portfolio's participants and may not be the areas other plan sponsors would rank the most highly.

MR. WILLIAMS requested additional information on the stated concern over representatives' compensation structure and potential for promoting managed accounts. MS. LUCAS explained there was a lack of transparency into how the representatives are being compensated for the managed accounts and a lack of transparency around the participant utilization experience. Seventy-five percent of the participants in managed accounts from the PERS and TRS DC plans were defaulted into the program prior to 2010. The default now is the target date fund.

MS. LEA informed that when the default option changed, the Division requested Empower provide all the defaulted managed accounts participants with the necessary information to get value from the managed account option. The Division has instructed Empower not to push manage accounts and it is to be an education model that gives members an opportunity to make their own decisions. There are not large numbers of new enrollees in managed accounts. MS. LUCAS believes there are many potential advantages to the managed accounts if the participants are tailoring their portfolio to their unique circumstances and specific needs. She noted the portfolio's target date funds are very strong and if a participant's managed account information essentially puts them in the same allocation as a target date fund, they would be paying a premium for a product that is not adding value.

MR. ERLENDSON requested a broad overview of the different needs of 401(k)s and public sector DC plans and why it is important Empower is significantly committed to the public sector. MS. LUCAS explained the requirements for the plans are very different. ERISA informs the 401(k)s. Public plans have unique considerations and the differences in the demographics of participants. It is very common for a public plan to have one-on-one dedicated representative support. This is uncommon on the corporate side. The differences are primarily in the participant experience, legal and regulatory environment. There are fewer differences strictly on the investment side.

MR. BADER commented these discussions are beneficial to the Board. Staff suggested the process going forward include identifying the areas of concern by Callan, addressing those areas with the various responsible agencies, returning to the Board and readdressing the areas one-by-one in a sequenced fashion. MS. LUCAS informed the summary of conclusions is at the end of the executive summary and includes possible next steps.

MS. LUCAS provided an in-depth description of the proposal from Empower to utilize their Retirement Solutions Group (RSG) service for distribution counseling. Reports from Empower state 75% of government plans and 99% of mega-corporate plans are using this service. MS. LUCAS noted Indiana as a state example and will provide members with a list of other participating states. One concern the RSG addresses is plan leakage. The objective is to prevent people from cashing out of their program and to ideally keep the money in the best possible solution for them, whether it is in the plan or in an alternative IRA. There is no additional direct cost to the plan participant for the RSG service. If funds remain in the plan,

the participant fees remain the same. If the funds get rolled into an Empower IRA, normal account fees would apply.

MS. LUCAS explained Callan had concerns with the RSG compensation structure of bonuses paid to representatives according to asset retention, and/or rolling assets into an Empower IRA. The data provided by Empower since the RSG rollout in 2014 showed participants who did not use RSG would rollover into an outside IRA 80% of the time. Participants who used RSG would rollover into an outside IRA 58% of the time. The concerns are ensuring the incentives are aligned with participants' best interest and how the Department of Labor's recent fiduciary rule subject to rollovers is assessed.

COMMISSIONER FISHER advised the State retirement plans are not using Empower's RSG service because of the potential conflict of interest and other issues highlighted. MS. LUCAS explained the two basic options for distribution counseling are outside providers or in-house retirement educators. Outside providers would need to include measures in the service level agreements to prevent conflicts of interest. Determinations for in-house educators would need to be made regarding licensing and advice fiduciary requirements.

MS. LUCAS provided an overview of the plans' retirement income solutions and proposed offerings to help members with managing the draw-down phase within retirement. This is an area where the regulators and legislators have spent much time and attention because the concern is people are faced with an even more daunting prospect in retirement of drawing down their assets than was faced in the accumulation phase. Proposals include both guaranteed products, such as variable annuities and in-plan Qualified Longevity Annuity Contracts (QLAC), and non-guaranteed products, such as the current Morningstar Spend Down Tool.

MR. VENERUSO continued the presentation giving a detailed representation of the investment structure evaluation and the proposed changes to mitigate shortcomings of investment decisions based on known behavioral biases. MR. VENERUSO discussed the specifics of behavioral finance, including explanations of inertia, momentum market timing, framing effects, and overwhelming choice. He noted the scale of the Alaska plans can impact participant outcomes and benefit participants by bringing down costs and lowering fees.

The structure of the DC plan is divided into three main tiers. The first tier is asset allocation. The second tier is core options. The third tier is specialty options, including a brokerage window. MR. VENERUSO explained the slide showing the recommended options for each tier division. A recommendation for the first tier asset allocation is to eliminate the balanced funds and move those participants to the target date funds. A recommendation for the second tier core options is to eliminate the money market fund, offer a consolidated stable value fund, and build out multi-manager funds. A recommendation for the third tier is to merge the allocations with the second tier multi-manager options and add a retail brokerage window for the small subset of members who will utilize it. MR. VENERUSO explained the goal is to have the minimum core number of exposures needed to build out a diversified portfolio.

MR. BADER commented one of the reasons there are currently 17 fund options is to provide managed accounts with a more robust selection from which to create an appropriate investment program. MR. VENERUSO agreed the decisions made on the investment structure will impact the managed account side.

CHAIR SCHUBERT recessed the meeting from 10:27 a.m. to 10:49 a.m.

CHAIR SCHUBERT called the meeting back to order and requested MR. VENERUSO continue his plan review presentation. MR. VENERUSO provided a detail review of the target date suitability analysis, which revolves around the DOL framework of best practice for target date funds. The asset roll-down of the target date funds are in-line with lowering allocation to growth assets as a person increases in age.

COMMISSIONER FISHER requested more information on the breakdown of the assets in the target date funds. MR. BADER informed the target date funds are based on T.Rowe Price's asset allocation recommendations to staff and uses the four T.Rowe Price investment pools for the glide path. MR. VENERUSO stated the asset allocation is the main driver of results and T.Rowe Price has a more aggressive philosophical orientation, believing in the equity risk premium, which provides the potential for more upside and the risk of more downside.

DR. JENNINGS inquired if the consensus of the target date funds is becoming more aggressive. MR. VENERUSO agreed the consensus has gotten more aggressive over the years. He believes the increase in equity allocation is due to a favorable equity environment and providers that were more conservative did not look as favorable compared to their more aggressive peers.

MR. VENERUSO showed the fees for the target date funds are well below the median. The equity funds are generally passive. The bond allocation does contain an active component. The funds were then ranked on four criteria of risk. Shortfall risk is the risk of not accumulating sufficient balance at the beginning of retirement. Downside risk is the risk of volatility, particularly the risk of a market downfall upon retirement. Inflation risk is the eroding of assets in retirement. Longevity risk is living a longer life than actuarially anticipated.

The target date funds' glide path ranked lower on shortfall risk and inherently higher in downside risk because of the increased exposure to growth. T.Rowe Price has a strong historical performance and is committed to this area of the market. The fees are extremely competitive.

MR. VENERUSO provided a deeper review of the managed account program evaluation. The managed account work is performed by the Advised Asset Group (AAG), a wholly-owned subsidiary of Empower. AAG leverages Morningstar's philosophy. The fee schedule is well within the market range for managed account providers. The underlying investment management also receives a fee. Managed accounts pay a range of 45 to 77 basis points compared to target date funds which pay a range of 13 to 16 basis points.

COMMISSIONER FISHER requested feedback from Board members regarding the order of priority the Board should evaluate Callan's recommendations and concerns. He believes the primary issue to review is the members who were defaulted to the managed accounts and if next steps need to be taken. The other concerns can be addressed sequentially. VICE-CHAIR JOHNSON agreed with the focus on members who were defaulted to managed accounts. He also suggested reviewing the viability of the recommendation to reduce the 17 funds because it may be necessary to have the 17 funds as building blocks for members.

MR. WILLIAMS is not convinced the fees are an issue because the RFP went out and fees came in higher from other vendors. There is no ethical issue of concern regarding incentives because Empower is not offering their proprietary IRAs and the managed accounts are no longer the default. He believes website layout is important because of the choices available.

MR. WEST agreed the decision to reduce the number of investment options needs further review. He believes the concerns regarding fees have been addressed and the service level agreements can be developed individually.

MR. BRICE believes the Defined Contribution Committee needs to address the score rankings of average and below average, as well as the number of investment options to offer. He commented making retirement decisions as a new employee is difficult because of stimulus, stress, and the enormity of paperwork a new employee is required to complete. The whole process of employee interface with Empower and employee education could be reviewed.

MRS. HARBO expressed her appreciation for the presentation and for the selection of target date funds available for members. Her concern over fees has been addressed. MRS. HARBO believes education of the participants is important and work with employers is necessary.

DEPUTY COMMISSIONER BOUCHER commented on the importance of educating members and employers. He informed the employer conference next week is a step in the right direction in the education process.

CHAIR SCHUBERT commented the original ASPIB Board had concerns about the education component when first rolling out the investment choices decades ago.

Action: Direction to Staff

MR. BADER informed the action memo before the Board directs staff to work with the Department of Administration and the Defined Contribution Committee and to return with assessments of the recommendations contained in the report.

MRS. HARBO moved to direct staff to work with the Department of Administration and the Defined Contribution Committee and to return with assessments of the recommendations contained in the report. MR. BRICE seconded the motion.

The motion passed unanimously.

14. EXECUTIVE SESSION: 11:30 a.m.

<u>VICE-CHAIR JOHNSON</u> moved to go into executive session for purposes of obtaining attorney/client privileged information from Counsel. MR. WEST seconded the motion.

The motion passed unanimously.

CHAIR SCHUBERT called the meeting back to order at 11:40 a.m. and informed the Board agreed with the recommendations of the Attorney General.

UNFINISHED BUSINESS

1. Disclosure Reports

MS. HALL indicated the Disclosure Report was included in the Board's packet. There was nothing unusual to report.

2. Calendar

MS. HALL stated an Actuarial Committee meeting was added to the calendar on December 7th, 2016.

3. Legal Report

MR. GOERING reported the procurement regulations adopted by the Board have been filed with the Lieutenant Governor and will be published in the next register. MR. GOERING advised the Petrobras securities fraud litigation is pending in the Southern District of New York. It is unknown if the case will be tried. An update will be given at the next Board meeting.

MR. GOERING informed outside counsel intended to file the case this week brought on behalf of the Board against Volkswagen and Porsche in Germany related to the securities fraud involving the emissions scandal. Updates will continue to be provided.

NEW BUSINESS

None

OTHER MATTERS TO PROPERLY COME BEFORE THE BOARD

None

PUBLIC/MEMBER COMMENTS

VICE-CHAIR JOHNSON brought it to the attention of the Board that RICH KRONBERG of NEA Alaska stated he was online yesterday during the public comment period, but was not able to communicate because of electronic reasons. MR. KRONBERG subsequently has sent a letter enumerating the comments he would have given yesterday opposing HB 256 legislative intent language regarding consolidations and standing forth in opposition on behalf of NEA Alaska. VICE-CHAIR JOHNSON proposed submittal of MR. KRONBERG's letter on behalf of NEA into the record as a communication received. There was no objection.

INVESTMENT ADVISORY COUNCIL COMMENTS

None

TRUSTEE COMMENTS

None

FUTURE AGENDA ITEMS

None

ADJOURNMENT

There being no objection and no further business to come before the Board, the meeting was adjourned at 11:46 a.m. on September 30, 2016, on a motion made by MRS. HARBO and seconded by MR. BRICE.

Chair of the Board of Trustees

Alaska Retirement Management Board

ATTEST:

Corporate Secretary