State of Alaska ALASKA RETIREMENT MANAGEMENT BOARD MEETING

Location:

Fairbanks Westmark Hotel 813 Noble Street Fairbanks, Alaska

MINUTES OF September 19-20, 2013

Thursday, September 19, 2013

CALL TO ORDER

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

ROLL CALL

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

Board Members Present

Gail Schubert, Chair
Sam Trivette, Vice Chair
Gayle Harbo, Secretary
Kristin Erchinger
Acting Commissioner Angela Rodell
Commissioner Becky Hultberg
Tom Brice
Sandi Ryan
Martin Pihl

Investment Advisory Council Members Present

Dr. William Jennings Dr. Jerrold Mitchell Robert Shaw

Department of Revenue Staff Present

Gary M. Bader, Chief Investment Officer Steve Sikes, State Investment Officer Pamela Leary, State Comptroller Judy Hall, Board Liaison

Department of Administration Staff Present

Mike Barnhill, Deputy Commissioner

Consultants, Invited Participants, and Others Present

Robert Johnson, ARMB Legal Counsel

Michael O'Leary, Callan Associates, Inc.

Paul Erlendson, Callan Associates, Inc.

Micolyn Magee, Townsend Group

Oliver Williams, Hancock Agricultural Investment Group

Tom Sarno, Hancock Timber Resource Group

David Weiner, Sentinel Real Estate Corporation

David Stenger, Sentinel Real Estate Corporation

Michael Gately, Cornerstone Real Estate Advisors

Denise Stake, Cornerstone Real Estate Advisors

Charles Gallagher, Northern Region Chair RPEA

Ron Johnson, Public

PUBLIC MEETING NOTICE

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

APPROVAL OF AGENDA

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

Chief Investment Officer GARY BADER requested Item 16.E., Exercise First Year Option on the MAP Contract, be added to the agenda. With that addition, the agenda was approved.

PUBLIC/MEMBER PARTICIPATION, COMMUNICATIONS AND APPEARANCES

CHARLES GALLAGHER, Northern Region Chair of RPEA, welcomed the ARM Board members to Fairbanks on behalf of the Northern Region Retired Public Employees of Alaska. MR. GALLAGHER expressed his gratitude to the Administration for inviting his Chapter to this meeting and to last week's TPA meeting. He was pleased with the question and answer portion of the meeting. MR. GALLAGHER was astonished by the approximate number of 100,000 retirees and beneficiaries predicted to be the population of the system in 2017. He thanked the Board for their diligence.

APPROVAL OF MINUTES

MS. HARBO moved to approve the minutes of the June 20-21, 2013 meeting. MR. BRICE seconded the motion.

The minutes were approved.

REPORTS

1. CHAIR REPORT

CHAIR SCHUBERT welcomed MR. ROBERT SHAW, the new IAC member, to his first meeting.

2. COMMITTEE REPORTS

A. Audit Committee

MR. PIHL reported the Audit Committee met on September 18. The chief subject was the report from KPMG on the nearing completion of the Treasury Division June 30, 2013 audit. The Audit Committee continued discussion of GASB 67 and 68. The Department of Administration will soon release a draft paper of interpretation for review and comment. MR. PIHL noted this issue has serious implications for all employers across the state and will receive continuing attention and study.

CHAIR SCHUBERT asked if the ARM Board will receive a copy of the draft paper. Deputy Commissioner MIKE BARNHILL replied the draft paper will be sent to the Board.

B. Salary Review Committee

MR. PIHL reported the Salary Review Committee met on September 18 and was very well-attended. He commented that Comptroller Pam Leary has done an excellent job providing a good review of how the system is working. The differences in salary comparisons with the Permanent Fund for many positions and overall has narrowed significantly. MR. PIHL commented the Committee has long been concerned about the salaries for the Chief Financial Officers in both the Department of Revenue and Department of Administration.

MS. PIHL moved to authorize a letterfrom the Board to the Commissioners of Revenue and Adminsitration offering any assistance to increase the chief financial officer and comptroller's salaries; the motion was seconded by MS. ERCHINGER.

The motion carried unanimously.

C. Budget Committee

CHAIR SCHUBERT reported the Budget Committee met September 18 and reviewed the fiscal year final 2013 budget and fiscal year 2014 budget, as approved by the Legislature. The FY2015 budget was also reviewed and will be discussed further under the Treasury Division Report. CHAIR SCHUBERT expressed appreciation to Ms. Leary for the work she does and presenting the information is an easy to understand manner.

D. Legislative Committee

CHAIR SCHUBERT stated the Legislative Committee met September 18. She noted Trustee Erchinger provided a really good recap of the August 8th workshop and has included in the Board's packets a document summarizing the work session, including a good summary of the unfunded liability issue. The upcoming legislative session was discussed in detail resulting in three specific items. The first item is getting information to the Board about GASB 67 and 68.

The second item is to present a packet of information to the Legislature and the Governor addressing the unfunded liability issue, including information from Buck on the upfront contribution that would be required of the state to help close that gap and come to some resolution. CHAIR SCHUBERT stated Ms. Rodell provided a detailed presentation on the constitutional statutory budget reserve and requested MS. RODELL give a presentation to the full Board at a future meeting.

MR. BARNHILL noted, as a point of clarification, that everything the ARM Board and Mr. Pihl have requested from Buck has been provided and if there is a specific deliverable the ARM Board wants from Buck, they need to know what it is. MR. TRIVETTE stated there was an additional important item, which authorized the Chair to work with the staff to develop a plan for meetings with the Legislature before this fall, outlining the kinds of information to present and providing education to the Finance Committee.

MR. PIHL commented a motion needs to be made if Board authorization is necessary for the Legislative Committee to pursue the information request of the follow-up/research items on page 11 of the August 8 study report, particularly the question of the front-end number. MR. TRIVETTE advised he intends to offer a motion to that effect when the August 8 meeting agenda item is discussed.

E. Real Assets Committee

MS. ERCHINGER reported the Real Assets Committee met September 18. She noted much of the agenda today will involve real assets, including four presentations on timber and real estate matters, a presentation on real assets' issues, and the Committee-recommended adoption of two resolutions, which she will move during the appropriate agenda item.

3. RETIREMENT & BENEFITS DIVISION REPORT

A. Membership Statistics (informational)

MR. BARNHILL stated MR. PUCKETT is swamped at the Division of Retirement & Benefits conducting interviews and continuing the extraordinary task of transitioning to the new third-party administrator. He sends his regrets for not being able to attend the meeting. MR. BARNHILL provided the Board with a replacement membership statistics report and noted the report provided in the packet is incorrect and the membership statistics have been incorrect for a number of meetings. The total population of retirees as of June 30, 2013, was 29,695 for PERS and 11,388 for TRS.

MR. TRIVETTE inquired about the reason for the discrepancy. MR. BARNHILL stated there was a database issue within the Division of Retirement & Benefits and incorrect numbers have been given to the ARM Board. He noted the actuaries have projected the number of retirees would currently be around 42,000, which is pretty close to the actual number of 41,000.

MR. BARNHILL explained the defined contribution retiree health plan is not fully implemented and the four people listed in the DC column do not qualify for health insurance under the DC health statute. MS. ERCHINGER asked what the anticipated roll-out date is for the defined contribution health plan. MR. BARNHILL stated the defined contribution health plan work has been put on hold because they are completely devoted to a "seamless" transition from Health Smart to Aetna. He noted the focus will return to defined contribution work after the transition.

MR. PIHL asked for clarification regarding the number of retirees and beneficiaries and if that number related to the number of checks going out. MR. BARNHILL responded the 41,000 number does not include beneficiaries. The covered life population of the retiree plans, which includes beneficiaries, is closer to 65,000. MR. BARNHILL explained further that this data was erroneously being pulled from a static table, which was a snapshot in time, as opposed to a dynamic table within the database.

MS. HARBO requested the definition of "full disbursement" and "terminated" as used in the table. MR. BARNHILL directed the Board use the legend on page four for clarity. MR. TRIVETTE commented the questions he had regarding the report are no longer valid, since the data is inaccurate. He stated he will not be able to compare the two reports during the meeting, but will ask his questions after he has time to review the new data.

B. Buck Consulting Invoices (informational)

MR. BARNHILL focused the Board's attention to the 12 months ending June 30, 2013. The bulk of the work that totaled \$622,500 goes to the standard actuarial evaluations that are done every year. He noted the DCR Health Care Plan design modeling tool totaled \$32,000. The goal is to design a plan in which the HRA account will last until the retiree's early 80's or some typical time period when we might expect the retiree to pass on. The Department of Revenue and the secondary actuary GRS recommended the conclusions be measured against a population-based retiree, which means it will work for most of the population, rather than a typical retiree. Continued actuarial work needs to be performed before the DCR plan can be completed.

MR. BADER noted the current approach to the investments in the health reimbursement is long-term and as the plan matures, that approach may not meet the investment goals of all the people in the plan. He suggested the Department factor in the investment component in their planning. MR. BARNHILL stated it is well worth considering the investments be done by age cohorts.

MR. BARNHILL reported the design of Plan B Health Care Benefits has been put on hold. Plan B would have provided desired healthcare enhancements, including coverage for dependants to age 26 and preventative care coverage, such as colonoscopies, which are not covered in the current design of the defined benefit retiree health plan. MR. BARNHILL noted a set of stakeholders has emerged intending to advocate for those same enhancements in the existing retiree healthcare plan within the context of the next legislative session. MR. BARNHILL stated the focus is now on what can be done in the existing plan regarding enhancements and making some adjustments to the cost structure. This issue will be brought back to the Board.

MS. ERCHINGER requested additional information about putting Plan B on hold and possibly introducing preventative care into Plan A. MR. BARNHILL expressed his concern about the current \$3.8 billion unfunded liability attributable to the healthcare plan. There is reluctance to introduce enhancements that exacerbate the existing unfunded liability, but there may be some offsets that could make it cost neutral or some element of savings to directly adjust the unfunded liability. Any proposal would be brought to all the stakeholders with opportunity to comment.

MS. HARBO inquired about how the HRA and major medical accounts are being handled. MR. BARNHILL stated the HRA funds go to the Division of Treasury and it is invested into an aggregate account. The ARM Board annually sets a major medical employer contribution rate, which is collected from employers and goes to the Division of Treasury for investment. Since there are no retirees in the system yet, the only revenue collected for major medical is coming from employers.

MS. HARBO asked how the Affordable Care Act will affect retirees, who are considered in a Cadillac plan. MR. BARNHILL stated the Affordable Care Act does not apply to public pensions and retiree plans, but the Cadillac tax is an issue in the active plan.

MR. BARNHILL noted the other big ticket item on this list is the actuarial study regarding the Aleutian Region School District, who has brought a claim against the system to refund the two million-dollar balance of their employer account as of when we went from an agent multiple-employer system to a cost-share system. The state is defending against that right now and it is in the early stages of discovery.

MS. ERCHINGER noted, for the record, there is a charge for a 60-year projection scenario of additional state appropriation requested by the ARMB, which MS. ERCHINGER does not believe the Board ever requested a 60-year scenario for amortization. She stated the conversations have been centered around paying off the unfunded liability by 2032, and wanted to clarify that the actuaries and the ARMB are using different terminology for different purposes. MS. ERCHINGER does not want that line item to be misinterpreted.

4. TREASURY DIVISION REPORT

A. FY15 Budget - Action

MS. LEARY directed the Board's attention to the proposed working budget for fiscal year 2015, which includes MR. BADER's request of a full year's worth of risk management contract as was discussed at the Budget Committee meeting held September 18. MS. LEARY reported the overall budget increased 7.2% over fiscal year 2014, primarily due to an increase in staff costs of about 6% and an increase in management paid projects of about 8%.

CHAIR SCHUBERT advised the Budget Committee moved at their meeting to recommend that the full Board adopt the budget. She noted as Chair, she cannot make that motion.

MS. HARBO moved to adopt the Fiscal Year 2015 Budget; the motion was seconded by MS. ERCHINGER.

A roll call vote was taken and the motion carried.

5. CHIEF INVESTMENT OFFICER REPORT

MR. BADER stated in conformance with the Board policy, on July 23rd, the Board Chair was notified of the intent to commit \$50 million to Neuberger Berman Secondary Opportunities Fund III. MR. BADER reported each of the ARMB fund allocation rebalances during August 2013. The rebalances are necessary to stay within the Board policy. A transfer of \$25 million from short-term fixed income to TIPS occurred, also due to staying within limits of the Board policy. MR. BADER requested the Board take action to remove Lord Abbett Small Cap from the watch list, since a change to Lord Abbett Small Cap Growth has already been made. MR. BADER requested the Board take action to add Relational Investors to the watch list due to sub-par investment return performance.

MS. HARBO moved to remove Lord Abbett Small Cap from the watch list and add Relational Investors to the watch list; the motion was seconded by MR. BRICE.

The motion carried unanimously.

6. FUND FINANCIAL PRESENTATION with Cash Flow Update

MS. LEARY reviewed the fund financial report for the month ending July 31, 2013. The cumulative report is the same because it is for only one month. Ending invested assets for PERS was at \$13.7 billion; TRS, \$5.8 billion; Judicial Retirement system, \$149 million; and National Guard/Naval Militia, \$35.6 million. For participant-directed plans, the Supplemental Annuity Plan was at \$2.9 billion, and the Deferred Compensation Plan was a \$705 million. For the month ending July 31, 2013, the total for all the DB and DC plans is \$23.4 billion.

MS. LEARY noted the asset classes are all within their asset allocation targets, with domestic equity being slightly above and global equity being slightly below. This is a pattern that is seen through all the DB plans.

MR. BARNHILL commented they are understaffed. He reviewed the report illustrating the non-investment changes in the fund, which are the deposits and withdrawals without showing

investment gains or losses. Normally, the numbers in the far right column of the defined benefit plans are negative because more money is being expended than being brought it. The reason it is positive is due to the SB125 state assistance payments, which are booked in July.

MS. ERCHINGER noted for the record the state assistance payment was \$312 million for PERS, \$316.8 million for TRS, and \$4.4 million for JRS, totalling \$633.7 million in July.

7. TRUST FUND LIQUIDITY

MR. BADER commented this report should be entitled "Liquidity Analysis; A Work in Progress." He noted this report is in response to comments and requests made by Trustees Pihl, Erchinger and Trivette and Deputy Commissioner Barnhill. MR. BADER emphasized there are sufficient assets to pay benefits for years to come and does not want to sound an alarm, worrying participants. He stated the purpose of the presentation is to define liquidity as the ability to pay fund benefits without material impairment of the value of the fund's assets.

MR. BADER explained the liquidity chart for a normal environment on page two and noted the total portfolio has less than one-year liquidity at about 85%. The next chart shows for a stressed environment, the total portfolio has less than one-year liquidity at about 73%. This is due primarily to potential contractual obligations to supply money to private equity investments.

MR. BADER reviewed the program's current annual cash generation from fixed income at \$64 million, public equity at \$244 million, and real assets at \$81 million. In terms of planning, no cash is included from the asset classes of private equity and absolute return. The annual cash yield of the entire portfolio is estimated at \$389 million, which is about 2.17% return of cash on the portfolio annually. The 2.17% is the number used to make the projections in the presentation.

MR. BADER noted the PERS chart on page nine illustrates in 2019, the amount of benefits paid will exceed the amount of cash earned on assets. MR. BADER estimates for TRS, 2021 is the year that the amount of benefits paid will exceed the amount of cash earned on assets. The PERS and TRS DCR plans are both cash positive. They are not mature plans yet. MR. BADER advised the Board currently pools its investments and there is a financial benefit experienced by combining all the different plans.

MR. BADER directed the Board's attention to the ARMB Liquidity Projection chart on page 13, specifically to the year 2025, when we are going to need \$1.2 billion a year in either dividends, interest, return of capital or selling assets to pay benefits. He noted a yield and/or return of capital of 3.94% is necessary to generate the \$1.2 billion. The current portfolio yield is \$2.17%. MR. BADER expressed the importance to plan ahead in terms of what the best investment program is to accomplish the needs of the fund.

MR. BADER discussed some of the implications, which include the ARM considering investments where the current yield is a larger component of annual returns, tilting away from

higher earning, but illiquid assets, and lowering the earnings assumption. MR. BADER noted he does not have a solution to propose at this meeting and believes it requires more thought. He has alerted his staff this is a priority and will evaluate strategies and report to the Board at the December meeting. MR. BADER hopes to have more information at that time regarding the budget and the intent of future funding arrangements, which is important to the investment program strategy.

DR. JENNINGS commented on the importance of getting the time period buckets correct on the chart on page three. He has had experience as the long-term bucket being anything longer than five years and the short-term buckets including daily and monthly periods. DR. JENNINGS considers a stressed environment as one when liquidity went away, but also when the portfolio experienced significant losses on the equity side. He asked if that was included in the current chart, and if not, he encouraged to roll both of those together into the stressed environment. MR. BADER responded he will do that. DR. JENNINGS stated he agreed with most of the implications going forward, but encouraged total return investing be kept in the forefront, as opposed to yield-oriented investing.

MR. JOHNSON believes the analysis presented by MR. BADER falls squarely within the mandate stating, "Consistent with the standards of prudence, the Board has a fiduciary obligation to manage and invest these assets in a manner that is sufficient to meet the liabilities and pension obligations of the system plan, program and trusts."

MS. ERCHINGER thanked MR. BADER for this very helpful presentation. She does not believe the Board can address the unfunded liability issues within the fiduciary requirements in terms of being prudent investors, unless major injections of funding into the system are obtained. She recommended the Board make a major effort to determine a more effective way of educating the Legislature regarding these issues that could become a major problem for fiduciaries on this Board within the next decade.

MR. PIHL suggested the liquidity projections be continued out beyond 2033 because the outflow continues and at some point, the projection will run out of cash. MR. BADER commented it is tough to get the returns that are in the assumptions right now, unless there are some changes in the economic environment in this country or we look offshore.

MR. MICHAEL O'LEARY from Callan Associates underscored the relevance of DR. JENNINGS' comments and how during the meltdown, the allocation to illiquid assets increased significantly as a proportion of total assets. MR. O'LEARY noted the highest performing, expected return asset category within the portfolio is private equity, but has to be limited because of anticipating liquidity needs. MR. O'LEARY commented it is entirely prudent to expect a large portion of significant liquidity needs to be met through current income production.

MR. SHAW inquired if changing the yield to 3.94% would require a radical revision to the investment policy statement. MR. BADER wanted to emphasize the seriousness of the problem if it is not addressed, but does not anticipate having to revise the investment policy statement.

MR. TRIVETTE appreciated MS. ERCHINGER'S comments. He agrees with her and believes this will come into some serious discussion.

8. REAL ASSETS

A. Real Assets FY14 Annual Plan Real Estate Guidelines Policies and Procedures

MR. STEVE SIKES, Manager of Real Assets Investments, gave a detailed presentation on the Real Assets Fiscal Year 2014 Investment Plan. As of June 30, 2013, 17.3% of ARMB's portfolio comprised of real assets, of which 9.2% is real estate, 4% is farmland, 1.5% is timberland, 2.6% is energy, and .05% is TIPS. MR. SIKES stated the role of the portfolio is to generate attractive returns, which provide diversification and inflation hedging. Many of the sectors in the portfolio have historically exhibited lower volatility and a higher income component of total return. It is a lower risk, lower return approach in these sectors with a conservative use of leverage and a focus on higher quality assets producing stable returns.

MR. SIKES noted the use of custom benchmarks to evaluate each one of the sectors. The structure of the portfolio, except for the REITs, TIPS and MLPs, are private illiquid assets requiring long-term holding periods. These assets are held in limited liability structures. The implementation of the portfolio is delegated among staff. MR. SIKES reported he oversees the real estate, farmland and timberland components. The fixed income group oversees the TIPS portfolio and the private equity group oversees the energy portfolio.

MR. SIKES discussed the pie chart on page five, which shows the breakout of the portfolio currently and stated the mix of the portfolio is primarily a function of the historical evolution of the components with the longest history being in real estate. The table at the bottom of the page indicates actual asset allocation compared to target allocation. The purpose of the target was not to compel immediate action shifting the portfolio to the target, but rather to take a long-term approach in determining the optimum mix of the assets.

MR. SIKES presented the real assets returns for the periods ending June 30, 2013. The aggregate return for the fiscal year was 10.19%. Over the fiscal year, the last quarter and the last three years, it has outperformed its target. For the last five years, it has underperformed its target, mainly due to the five-year number continuing to reflect the challenging time for the real estate portfolio in the '08/'09 period. MR. SIKES reported the real estate portfolio, as of June 30, was valued at \$1.7 billion and it represented 23 properties where the Board has a direct interest and interest in commingled funds. He believes the portfolio is well-diversified based on property type and geographic region. MS. MICOLYN MAGEE from Townsend Group will discuss the performance of real estate in more detail.

MR. SIKES stated the REIT portfolio underperformed last year, but has outperformed last quarter and over the last three years. He noted the five-year number includes a time period when a different investment strategy was used, so the tracking error suggested with the five-year number is not expected going forward. MR. SIKES noted farmland has done very well

for the Board, returning 15.5% for the fiscal year and 10.33% over the last five years. The timberland portfolio showed improving results last fiscal year at 7.17%, even though it underperformed its index.

MR. SIKES commented the farmland market continues to be a challenging market to find acquisitions that fit ARMB's minimum income requirements. The speculation is that land owners are doing quite well holding their property and are not highly motivated to sell. MR. BADER requested a description of the criteria the managers must follow regarding portfolio yield. MR. SIKES advised the minimum yield requirement is 5% at the portfolio level and 4% for individual properties.

MR. SIKES stated there are no current investments in the infrastructure portfolio sector. He noted ARMB directed Callan to perform a manager search, which has been completed and presented to staff. Staff conducted further due diligence and has invited two open-end private investment fund managers to present this afternoon. Staff's plan is to perform additional due diligence on infrastructure public strategies and bring those strategies to the Board at the December meeting, along with a proposed benchmark and guidelines for the sector. The proposed target allocation is 12.5%, which is a commitment of \$450 million, of which \$300 million is committed to private open-end funds and \$150 million to publicly traded strategies.

CHAIR SCHUBERT asked MR. O'LEARY why now is the right time to invest in the infrastructure sector. MR. O'LEARY responded that the number of viable candidates has slowly increased and many of those candidates have developed some reasonable history. The listed market has also matured within the United States.

MR. SIKES stated a global strategy is being recommended for both the private and public portfolios, due to the early stage of the U.S. private infrastructure market. The portfolios will be U.S. dollar-based, but unhedged as it relates to the international investment positions, due to the long-term nature of those holdings. MR. SIKES noted the expected total returns are 10% to 12% net over the long-term, with a current yield of 5% to 7%, while providing diversification, predictable cash flows and inflation protection over time.

MR. SIKES reported the energy portfolio increased fairly significantly last year to just over \$470 million. This reflects the \$360 million investments into MLPs. The TIPS portfolio was reduced last year as a result of yields and to fund the MLP portfolio. MR. SIKES believes the economy, while choppy, continues to show improvement in GDP, non-farm payrolls, consumer sentiment, and in both sales and prices of the housing market. He feels the real estate market is back to its pre-recession levels. Debt is fairly available and yields are relatively attractive.

MR. SIKES recommends some adjustments to the target allocations of the components, primarily to accommodate the infrastructure sleeve that is being added this year. The recommendation is no change to the real estate and farmland numbers, a reduction to timberland from 25% to 15% and modify that band accordingly, an addition to infrastructure to 12.5% and modify that band accordingly, an increase to energy from 5% to 12.5% to accommodate the MLP strategy, a reduction to TIPS from 10% to 0% and modify that band to

20% to give the CIO discretion to allocate to that sector if it becomes more attractive. The proposed core/non-core target recommendation is a change from 75%/25% to 100%/0% with appropriate bands. MR. SIKES noted an error that the 25% for non-core does not encompass the current portfolio mix and he would revise that number to 27%.

MR. SIKES discussed that the staff is in the very early stages of exploring the potential of establishing one or more separate accounts to focus on the medical office sector. There is an informational item on the agenda tomorrow to discuss this issue further.

MR. TRIVETTE expressed appreciation for MR. SIKES providing clear explanations of the recommended changes. DR. MITCHELL asked if there is any interest in hard commodities and gold at the current market levels. MR. SIKES explained there is hesitancy with the gold market and it is not being considered. He noted they had looked at some futures strategies but found infrastructure more appealing than commodities.

DR. JENNINGS asked if the definitions of core real estate and core barrier cities change as investments are added into the portfolio. MR. SIKES responded that for the ARM Board it means the location needs to have a high restriction on new supply; physical, zoning, or geographic. MS. MAGEE commented core markets generally have good economic drivers, stable demand, long-term trends for good absorption of rents and occupancies, and good job growth. She noted just because an asset is in a core market does not mean it is a core asset.

MR. BRICE asked what the demand is for farmland in the marketplace now. MR. SIKES responded the current condition of the market is very much a seller's market.

CHAIR SCHUBERT recessed the meeting from 11:09 a.m. to 11:19 a.m.

B. Consultant Evaluation of Real Estate Plan: Diversification, Compliance, & Performance Measurement

MS. MAGEE gave a detailed presentation on the ARMB real estate portfolio. The portfolio peaked in March of 2008 and the trough of the market cycle was March of 2010, at which point the portfolio was down 45%. This was primarily due to the fact the portfolio is 47% leveraged. The NCREIF Index is an unleveraged index and was down 32% in March of 2010. The NCREIF Index is also a core only index, whereas the ARMB real estate portfolio is 60% core/40% non-core asset mix. That same leverage has benefited the portfolio during the recovery. The ARMB real estate portfolio is up 30% relative to the market's 24%.

MS. MAGEE noted real estate is moving closer to the 35% target allocation within the real assets portfolio. It is currently at 53%. She commented the Townsend Group will be working with staff on strategies to compose a purely core portfolio, which allows for both liquidity and an income stream. MS. MAGEE explained the performance chart, as of June 30, 2013, on page seven on the presentation. She noted that the more recent quarters, part of the one-year and three-year performance is beginning to perform well, but explained the portfolio will lag the market recovery because the real estate portfolio size has been reduced. The five-year and

since inception numbers continue to significantly reflect the global financial crisis and decline.

MS. MAGEE reported the public securities are managed internally by the staff. The three-year return and the more current returns reflect the staff's repositioning of the portfolio and they have done an excellent job of tracking the market efficiently. She believes the staff has complied during the year with the objectives established in the prior year. There are no issues regarding diversification of the assets in the portfolio. MS. MAGEE commented Townsend has focused very heavily on those asset types that are driven by demand, derived from demographics, which is consistent with the staff's interest in medical office. Medical office is part of the Other category and includes senior housing, student housing and self-storage.

MS. MAGEE discussed the equity multiples provided by each of the core managers. LaSalle is 1.5, Sentinel is 1.5, UBS is 1.9, and Cornerstone is 1.5. MS. MAGEE noted that key to the success of the core portfolio has been the selection of the open-ended funds. The open-ended funds use the ODCE, Open-Ended Diversified Core Equity Index as their benchmark. The non-core portfolio has challenging vintage year exposure, with significant amounts of investments in '06, '07, and '08. This ended up being a high risk time to be investing and virtually everybody suffered from those investments.

MS. MAGEE reported there has been a correction in the REIT market and this generally is an indicator of what the core markets might do. MS. MAGEE gave Townsend's perspectives on the world markets. They are cooling off in the U.S., believing it is fairly priced and difficult to find good opportunities. They are bearish on Europe, but becoming more neutral. They are neutral on the Asian market, with improving perspectives. MS. MAGEE noted Townsend is about to hire a third compliance person.

DR. MITCHELL stated the Callan asset allocation estimate for real estate is about 7.5%. He asked if MS. MAGEE endorses that number and believes the ARMB real estate portfolio, as it stands today, can meet that target. She commented 7.5% is a perfectly accurate number to use, but it might not be what real estate would do for the next five to 10 years, but over the long-term, believes real estate can have a cap rate of 6% to 7% and appreciation of 1% to 2%. MS. MAGEE stated the portfolio will be challenged to reach the 7.5% net, because the noncore portfolio is not recovering at that level and not making new investments also adds to the difficulty. She said Townsend will work with the staff in repositioning the core portfolio and looking for opportunities to get as close to that number as possible.

C. Adoption: Real Assets FY14 Plan & Policies Board Discussion Action: Real Assets FY14 Annual Plan, Res. 2013-15
Action: Real Estate policies and procedures, Res. 2013-16

MS. ERCHINGER moved to adopt Resolution 2013-15, Relating to Real Assets Annual Investment Plan, including revisions by MR. SIKES and the modification to the proposed band for the private core/non-core from 25% to 27%; the motion was seconded by MS. HARBO.

A roll call vote was taken and the motion carried unanimously.

MS. ERCHINGER moved to approve Resolution 2013-16; the motion was seconded by MR. PIHL.

MR. TRIVETTE asked if MR. SIKES has any issue with the new contact folks. MR. SIKES noted he was comfortable with them.

A roll call vote was taken and the motion carried unanimously.

CHAIR SCHUBERT recessed the meeting from 11:48 a.m. to 1:15 p.m.

9. HANCOCK AGRICULTUARAL INVESTMENT GROUP

MR. BADER introduced the President of Hancock Agricultural Investment Group, HAIG, OLIVER WILLIAMS. MR. WILLIAMS gave a detailed presentation reviewing ARMB's Combined Northern Agricultural Portfolio. He noted HAIG is one of three operating divisions for the Hancock Natural Resource Group, which is a wholly-owned indirect subsidiary of Manulife Financial Corporation.

MR. WILLIAMS discussed the organizational changes reflected on page four of the presentation. MR. O'LEARY requested explanations for the organizational changes. MR. WILLIAMS noted in September of 2011, the original President for the group retired and MR. WILLIAMS was moved into that position, which created a vacancy for the Director of Asset Management. This past May, the Director of Acquisitions decided to leave the firm and strike out on his own, which created that vacancy. MR. WILLIAMS, as President for almost two years, felt there was a strong case to round out the senior management team and bring in extra capacity by hiring a CIO.

MR. O'LEARY asked how business has been during this transition phase. MR. WILLIAMS responded he always looks at business from the client's perspective, which is returns. He noted the returns have been very good and farmlands have continued to perform very well. HAIG has not added any new clients this year, but are working with a number of prospects. MR. WILLIAMS advised the farmland market in some areas is relatively expensive and they are having to look at more investments in order to find acquisitions that meet the underwriting criteria.

MR. O'LEARY stated MR. WILLIAMS' coworkers are keenly interested in how successful HAIG is and asked for further perspective on that issue. MR. WILLIAMS commented people leave for their own reasons and believes it has been a fairly stable organization. MR. WILLIAMS explained HAIG's compensation structure is very competitive with the market, but is tied to clients doing well. He advised compensation is also tied to financial discipline, and finding good acquisitions that ultimately perform as expected.

MR. WILLIAMS noted when we think about farmland, there are two crop types; annual row crops, in which the crop can switch from year-to-year, and leased permanent crops, in which

you add to the land, a tree or a vine, and then that combination is leased to a third-party. Row crops have lower risk and lower volatility. Permanent crops have higher risk and higher volatility, which could provide extra return. MR. WILLIAMS reported the account was established in January 2005. The aim was to achieve portfolio diversification, optimize returns, while taking into account the assumption of prudent risk and safety of principal. This was accomplished by the allocation. The total asset allocation is 80% in row crops and 20% is permanent crops, both of which are leased. The current asset allocation is 81% row crops and 19% permanent crops, which is in line with the investment management agreement.

MR. WILLIAMS stated the total allocation is \$245.25 million, of which \$211 million has been spent, invested or committed, which leaves approximately \$34 million of available funds to utilize if appropriate transactions are found. The list of operating entities on page six of the presentation is currently investing for the plan. MR. WILLIAMS showed a chart on page seven revealing relatively equal weights of diversification in the Pacific West, Mountain States, Southern Plains, Delta States, and Corn Belt. Another way the plan looks at diversification is by commodity type grown. The plan has 13 different commodities. The highest weightings are corn, soybeans, and wine grapes.

MR. WILLIAMS noted there are two key objectives for the portfolio's benchmark returns. The first is a total return for the program over rolling five-year periods. It needs to generate a real return of 5% after fees. As of June 30, 2013, the portfolio was above that benchmark. The next benchmark is income return. It needs to have an income return that is greater than 4% net of fees. As of June 30, 2013, the portfolio was also above that benchmark.

MR. WILLIAMS explained the graph on page 10, which illustrates the portfolio's income returns, net of fees, of 2.95%, versus the NCREIF Income Index, gross of fees, of 4.81%. The portfolio trails the index in each category. The graph on page 11 illustrates the portfolio's total returns, net of fees, of 10.27%, versus the NCREIF Total Return Index, gross of fees, of 17.72%. The portfolio trails the index in each of the categories. A correction was made to the graph on the 5-year return for the index should read 12.41. MR. WILLIAMS believes the underperformance on the income side is driven by an underperformance in the Sonoma 12 region. He believes the underperformance on the total return side is mainly from the Southern Plains region, where there was depreciation in the assets as result of the drought.

MR. O'LEARY asked what the implications were in the Mountain region regarding the flooding in Colorado. MR. WILLIAMS responded the flooding in Colorado has not impacted any of the portfolio's agriculture assets because the majority of the assets are in Idaho. He noted the only upside of the flooding is the recharging of the Ogallala Aquifer, which is positive for farmland in the long-term.

MR. WILLIAMS stated the portfolio is performing as expected. He reviewed the market outlook, noting the U.S. farm sector remains strong and competitive. Net income and cash incomes numbers are at highs. There is price volatility in the corn market, but the expectation is to have a normal crop. Normalized volumes are good to help maintain demand. Farm balance sheets are healthy and debt levels are at historic lows. The portfolio has some funds

remaining to invest and Hancock is busy looking to find investments that meet the underwriting criteria.

MR. PIHL noted the 5-year rolling income return for the portfolio on page nine is trending down for quite a period of time and asked if they see that turning back up. MR. WILLIAMS commented that one of the components that goes into that income is the level of income generated off the investments. As leases are reset, the net income generally trends up. There has been an appreciation in the underlying assets, in some cases increasing faster than income, causing that income number to come down. MR. WILLIAMS stated when negotiations with tenants occur, the rental rates may be set even higher.

MS. HULTBERG MR. WILLIAMS' for his perspective on the market for corn. MR. WILLIAMS responded corn is one of the staple crops in the U.S. It can be found in so many different products, ranging from consumer packaged foods to clothing and apparel, and many more. He noted there has been no recent corn price subsidy support because the prices exceed those levels. The direct payment subsidies are being replaced by revenue insurance, but the process is being held up by congressional gridlock. MR. WILLIAMS believes the food supply is going to make adjustment regarding corn syrup based on whatever the appropriate health reaction is and the corn people are going to find other uses for their product.

10. HANCOCK TIMBER RESOURCE GROUP

Senior Portfolio Manager TOM SARNO of Hancock Timber Resource Group gave a detailed presentation on the ARMB's Timberland Portfolio. He discussed the objective of the portfolio is total return, comprised of income, preservation of capital, and long-term appreciation. The performance guidelines are a minimum of 5% real total return after fees. The timberlands are to be diversified by tree species, geography, product and merchantability. The portfolio is structured with a main holding company and a series of limited liability companies. The two limited liability companies currently hold three properties. There is additional uninvested allocation, which will go into the Salmon Timberland II, LLC, once it is invested, and if there is a further need, a Salmon Timberland III, LLC will be developed.

MR. SARNO reported the total allocations to the portfolio total \$244 million over the last three or four years. Of that, \$76.9 million has been contributed and invested since inception, which leaves an outstanding commitment of \$167.1 million. To date, \$7.8 million has been returned back in distributions from operations. The current net asset value is \$86.6 million. For fiscal year 2013, the total return was 10.1%. Of that, 10.3% was appreciation and -0.1% was income. The income return is a function of accounting depletion, which is similar to depreciation in other assets. The distributions were \$1.7 million, which is a positive income, despite the negative income return on the balance sheet. This equates to a 2.1% cash yield for the year.

The portfolio is exceeding its NCREIF Timberland Index on the 1-year by 70 basis points, 3-year by 500 basis points, and Since Inception by 390 basis points. There are no 5-year numbers yet. MR. SARNO reviewed the geographical diversification of the timberland investments. The Fishhawk property is located in Oregon and is a younger plantation of

Douglas fir, hemlock, and red alder. This property has a low cash forecast in the near-term because the timber is not yet financially mature. It is growing. This is part of the diversification by age class, so timber will mature in different years. The returns since inception are 9.2% and the projected return is 10.7%.

MR. SARNO described the Elk River property as having the same species mix of Douglas fir, hemlock, and red alder, but it is a much more financially mature property. It is located in Washington. The cash flows are steady for the next seven years. About 40% of the value of the timber produced from this property is exported to Asia, primarily China. The returns since inception are 19% and the projected return is 8%. MR. SARNO noted the 19% return is a function of a very strong China market, along with some increase in the U.S. domestic market, which has led to some very good timber prices on this property.

MR. SARNO reviewed the final property Tallapoosa, which is located in Alabama and Georgia. It is comprised of middle-aged to mature pine plantations, but there is also a land sale component to this property. The returns since inception are quite low at 0.5% and the projected return is 8.1%. U.S. timberlands in the south have not benefitted from the Asian export demand and as such, are really a function of U.S. housing demand. The prices of logs coming off this property and others in the south have been very muted. During periods like these less timber is cut to allow growth. The component of land sales in the returns are in the cash yields.

MR. SARNO believes the timber market will have continuing demand from China and that will drive performance for the near and long-term. He expects housing starts to continue their recovery adding to lumber demand in the U.S. south. There is currently a very large gap of log price between the U.S. northwest and the U.S. south, which he does not believe is sustainable.

MR. TRIVETTE asked if timber begins to deteriorate as a product if it is left for a period of time. MR. SARNO stated the net present value curve of a timberland stand is relatively flattop, which means there is typically a period of time around seven to 10 years to harvest the timber without having a meaningful change to the net present value, provided the appropriate treatments, such as thinning and fertilizing, are conducted.

11. SENTINEL REAL ESTATE CORPORATION

Vice Chairman/Co-Portfolio Manager DAVID WEINER and Vice President/Co-Portfolio Manager DAVID STENGER of Sentinel Realty Advisors Corporation gave a detailed presentation for the ARMB's Sentinel Multifamily Separate Account. Sentinel has been involved with the State of Alaska working in their real estate program since 1984. MR. STENGER noted that coming out of the recession, the U.S. apartment market saw a pretty decent rebound in rents. The projections are for rents to continue increasing and to grow by 3% from 2013 to 2017, while maintaining a relatively high occupancy rate driven by apartment demand.

MR. STENGER described the three core multifamily properties owned, consisting of roughly 1,000 units. Preserve at Blue Ravine Apartments is a 260-unit apartment community located in Folsom, California, with easy access to Sacramento. The property is currently valued at \$46 million. A benefit of the Folsom market is that supply is highly constrained and there has been virtually no construction in this market and no future plans for construction.

MR. O'LEARY requested comment on the potential impact of the institutionalization of homes for rent in markets such as Sacramento. MR. WEINER stated in areas where there is a large supply of foreclosed homes of moderate price, there is generally fairly strong competition with traditional apartments. MR. WEINER noted they have not seen any problems with competition from rental housing, as much as competition from the higher-qualified people that move into the levels of this rental levels being able to qualify for mortgages and then buy homes in that community. He commented the rental housing market doesn't really affect the 18 to 30-year old that typically represents the largest portion of their renters. Those are not the people who are interested in taking on the responsibility of a house.

MR. STENGER described the next property owned in the portfolio, which is Valleybrook at Chadds Ford, located in Chadds Ford, Pennsylvania. This is near the Delaware border, which is appealing to a lot of people because Delaware has no sales tax. There are also major employers in the area and there is easy access to Philadelphia. MR. STENGER explained this property has limited competition, a great school district and very high single-family home prices, which should help facilitate income growth for the property.

MR. STENGER described the last property owned in the portfolio, which is Versant Place, located in Brandon, Florida. It has excellent access to Tampa and to the I-75 corridor. The property was acquired in 2000 and is nearing the end of the holding period. MR. STENGER noted the anticipated sale of the property after about four more years. There are 384 units and the value is \$39.8 million.

MR. O'LEARY asked what happens to the money when a property is sold. MR. WEINER responded in this particular case, they gave it back. He noted there was a previous allocation to buy the Valleybrook Apartment in anticipation of selling out of the Las Vegas market. The fund granted \$65 million and was given back \$38 million. MR. WEINER noted if appropriate investments are found in this competitive market, which fit the profile of the fund for a reasonable return, they will be brought to the Board's attention.

MR. TRIVETTE asked MR. WEINER if he was happy to see the Las Vegas property sold, mainly because it wasn't a barrier to entry kind of apartment. MR. WEINER explained this was an earlier phase of the operation and he is happy to see it sold. He believes it was purchased at the right price and actually generated a fairly decent return for what was a difficult situation.

MR. PIHL asked if the value of Valleybrook has gone down slightly. MR. WEINER advised the value as of June 30th is conservative because the cap rates have moved dramatically downward since the beginning of the year and that will be reflected in the value next quarter. MR. WEINER noted, in terms for the year, a negative is created when cost of capital to the

investment is added by continuously improving the property without raising the value. MS. MAGEE added it has been Sentinel's practice to be very conservative in their valuations, but she has not seen any downward motion realized in losses.

MR. BRICE asked if there is a certain sector or geographical area that Sentinel is foreseeing for their next property acquisition. MR. WEINER stated Sentinel has a nationwide platform that focuses on the barrier to entry market, which is typically found in major cities with difficult codes and high land costs or coastal areas where development is limited. MR. WEINER noted this is a difficult process, but it is worthwhile for the long-term safety of the account.

12. CORNERSTONE REAL ESTATE ADVISORS

Cornerstone Real Estate Advisers' Portfolio Manager DENISE STAKE and Head of Research MICHAEL GATELY gave a detailed presentation on the ARMB's individually managed portfolio. MR. GATELY believes there are still some significant risks with regard to the U.S. economy that will play out in Washington over the next month or so. The commercial property market is coming off a historically low supply growth rate and that coupled with a stead and slow recovery in employment growth really bodes well for fundamentals. This market has shown steady recovery, led by the six major Gateway markets. The apartment sector and the Gateway CBD Office sector have been attracting the most capital.

MS. STAKE advised the portfolio has a \$175 million mandate of investment across the four property types of office, apartment, industrial, and retail. The focus of the portfolio is core, barrier, and long-term hold investments in the U.S. There are three properties in the portfolio. The first is 330 North Brand, which is an office property in Glendale, California. This market has not recovered yet and the property has been dragging performance. It is currently at 75% leased. There is a fairly flat lease rollover schedule, which provides an opportunity as the market recovers.

MS. STAKE noted Arden Hills I, II & III is an industrial property purchased in 2004 with a five-year target. It was placed on the market and taken off the market during the economic downturn. Last month, it was placed back on the market with 97% occupancy and best and final bids are being delivered. Cornerstone expects to have a very strong sale in the next quarter. She does not see long-term rent growth in the industrial market and believes they are taking advantage of an opportune time to sell.

MR. O'LEARY asked what caused the spike in Q1, 2012. MS. STAKE noted that income was due to a million-dollar termination fee paid by a tenant who left the building. MS. STAKE described the next property in the portfolio, Parallel 41, which is the newest Class A apartment acquisition in Stamford, Connecticut. The location provides excellent access to New York and Fairfield County employment markets, as well as significant amenities in the Stamford downtown. This property diversifies the portfolio, allowing ARMB to have an investment in a New York-driven barrier market at a reasonable basis.

MS. STAKE noted the Cornerstone Apartment Venture III is a closed-end fund with a balance of investment of \$27 million. The fund started in 2007, consisting of nine apartment developments. Five have been sold, including one this past July, and of the remaining four, one is currently on the market. The term of the fund expires December 2013 and Cornerstone has the intent to utilize the one-year option to extend. MS. STAKE believes all the assets will be sold by midyear 2014. The portfolio produced top quartile performance of 6.2% IRR since inception and the fund has operated within its parameters. Only 65% of investor committed capital was invested because the economic environment did not produce investments which met the disciplined objectives of the account.

CHAIR SCHUBERT recessed the meeting from 2:44 p.m. to 3:01 p.m.

13. MANAGER SEARCH - INFRASTRUCTURE

MR. O'LEARY described the process Callan followed during their extensive search for the infrastructure managers who will be presenting today. MS. ERCHINGER inquired if the recommendation about open-end funds or closed-end funds would be different if the DB plan were 90% fully-funded. MR. O'LEARY noted the disadvantages of a closed-end fund would be significantly less meaningful if the plan was 90% funded. He advised the emerging liquidity needs for the system is an important consideration in the structure of infrastructure manager candidates. He encouraged the Board to view this as they would an active REIT portfolio.

MR. O'LEARY explained that infrastructure is inherently illiquid and there are queues for investment and withdrawal from the funds. These provide an orderly process for the reduction in exposure within a reasonable timeframe, given the illiquidity inherent in the asset class.

MR. BADER commented he worked diligently with MR. SIKES in reviewing the open-end and closed-end fund recommendations brought forth by Callan. The recommendations for the public fund firms will be brought before the Board in December. MR. BADER stated he and MR. SIKES talked with JP Morgan and Infrastructure Fund Management and are very impressed with their management. He believes they have a good understanding of how the firms' financials, offering memorandums and operations.

MR. BADER explained closed-end funds see losses as they book their start-up costs, which is called a J-curve in their performance. He encouraged the Board not to be overly concerned about the long-term returns of JP Morgan and IFM because they have already experienced the J-curves and we should be looking forward, not backward. MR. BADER recommended both of these funds today in different amounts, mainly because one firm has higher fees than the other, even though fees are still being negotiated. MR. BADER believes both firms compliment each other in their portfolio size and diversification in the asset class. The target is to be invested within the next year.

A. Industry Funds Management

RENA PULIDO, Director of Business Development - North America, and ALEC MONTGOMERY, Head of Infrastructure, for Industry Funds Management gave a presentation describing the company and the Global Infrastructure Fund. IFM is a global investment management company, wholly owned by its investors, with offices in New York, London and Melbourne. MR. MONTGOMERY manages the existing portfolio and oversees the sourcing and execution of investment opportunities in North America. He sits on the Board of Essential Power, an IFM business owned in the Global Infrastructure Fund.

MS. PULIDO noted transparency is a critical part of IFM's process, giving investors access to independent valuation reports, investment papers to the investment committee, as well as the methodology used to pursue assets. MS. PULIDO commented fees have a direct negative impact on performance returns and for this reason, IFM's fee program is designed to capture the accretive value of scale that is built in the business and directly return that scale back to the investors. MS. PULIDO highlighted that IFM's investment team is purely focused on acquiring and managing infrastructure assets and they do not manage separate accounts for infrastructure equity. IFM has an independent Board of Directors, who by charter can have no affiliation with the pension fund owners.

MS. PULIDO stated IFM manages \$42 billion across four different product strategies; debt and fixed income investments, listed equities, private equity, and infrastructure equity. Infrastructure equity is core to the business comprising of \$14 billion. The infrastructure equity is managed across two funds; the Australian Infrastructure Fund and the Global Infrastructure Fund, which is the one ARMB is considering. The Global Infrastructure Fund is an open-end fund, \$8 billion in size, consisting of eight assets. It was started in 2004 by Australian investors and was opened to international investors in 2009.

MR. BRICE asked where the eight assets are located. MS. PULIDO stated the assets are currently in the U.S., U.K., Germany, and Poland. MR. MONTGOMERY noted the map on page 14 of the presentation depicts the current portfolio. MS. PULIDO described the strategy as focusing on core infrastructure businesses, primarily in developed markets that are fundamentally underpinned by stable and strong current yield. Since 2009, MS. PULIDO stated the fund has generated a net return of 10.4%, which is represented by the green line on page 8 of the presentation. The performance is benchmarked against a three-year rolling average total return expectation of 10% per annum back to investors. The cash yield target in the fund is 6% to 8% per annum and because there is an existing portfolio, this yield will be enjoyed once the capital is drawn.

MR. BRICE asked for an explanation of how the cash yield is distributed, whether it is a dividend or has to be requested. MR. MONTGOMERY explained the structure of the cash yield, whether distributed or reinvested, is determined by each investor. He further described the attributes which makes infrastructure interesting for pension funds. He noted this is a long-term asset class, remaining relatively stable generating cash flow through economic cycles, and ideally have an inflation link inherent in its longer-term returns.

MR. MONTGOMERY advised the portfolio diversification is sophisticated and determined by the risks and the returns within the portfolio. It is roughly 50/50, North America/OECD

Europe. He noted the investment team's compensation is linked to fund performance over the long-term. MR. MONTGOMERY walked through the extensive business steps of sourcing the deals, executing the transactions and then, as a long-term owner, managing those investments for the best long-term value.

MR. TRIVETTE asked who from IFM would be involved on a day-to-day basis with the ARM Board. MR. MONTGOMERY noted those communications would be with Director of Investor Relations Jojo Granoff, Executive Director Brian Clarke, or Ms. Pulido.

MS. RODELL requested explanation of how the fund finds investment opportunities. MR. MONTGOMERY described that is the most challenging part of the business. He stated they work with investment banks, like everyone else, but their main approach is developing true strategic relationships. He commented the real art is anticipating where the deals are going to be and then working today to establish those relationships in order to ideally bid on the asset when it comes to market. MS. RODELL followed by asking where they believe the biggest opportunity is. MR. MONTGOMERY responded in North America, the focus is more on the energy sectors. He noted because of municipal debt, North America has been challenging the traditional public/private partnership approach to privatizing infrastructure.

PAUL ERLENDSON requested an explanation of how the underlying currency exposure to OECD Europe is managed so that it doesn't become disadvantageous as part of the return stream to a U.S. investor. MR. MONTGOMERY stated their conclusion is that most investors are probably in a better position to manage that currency exposure within their broader portfolio. He noted as much information as necessary, in terms of currency exposure, will be provided to factor into the pension fund's global currency exposures.

MR. SHAW asked who on the team listed on page 16 of the presentation sits on the decision-making bodies. MR. MONTGOMERY explained the deals first go through the Investment Sub-Committee, listed on page 15, Kyle Mangini and the three regional heads. Then it gets reviewed by the Board Investment Committee, which is headed by the CEO of IFM, Brett Himbury. A final check is completed by a Board subcommittee, which is a two-member board, chaired by Murray Bleach.

MS. MAGEE asked if, on page 13, the link to inflation and the inherent hedge means if the asset is in Europe, it is hedging European inflation because that is the denomination of the fund. MS. PULIDO commented MS. MAGEE is correct because it is hedging inflation within the specific region of the asset. She noted it is also important for that reason to have a diversified portfolio. MR. MONTGOMERY commented that theoretically, inflation will come through in the currency.

DR. MITCHELL asked for an explanation of the fee structure on page 23, particularly the management fee and the total expense ratio. MS. PULIDO commented there has been a recent fee reduction from 125 basis points to 97 basis points for commitments less than \$300 million, and then 85 basis points for commitments at \$300 million and above, which will take effect on January 1, 2014, for all capital drawn from that date. The 2.62% includes the 1.25% management fee and the balance relates to third-party expenses at the fund level, including

third-party valuists. MS. PULIDO added there is a performance fee, which is 20% above an 8% with no catch-up, and 50% of any performance fee earned is held back to ensure the valuations true up the following year.

MR. O'LEARY asked how long it would take to get money invested and if a scenario came up in three years where ARMB needed to disinvest, how long would it take to get the money back. MS. PULIDO stated there are three years from the time of the commitment where the capital is committed to the fund. Based on historical draw down of capital and the opportunities in the pipeline, she anticipates the capital to be drawn down between 12 to 18 months from the time of commitment. Once the capital is drawn, there is no lock-out and ARMB has the ability to withdraw all or part of the investment within a 90-day notice period. MS. PULIDO noted every investor has the preemption right to acquire other investors' units.

MR. MONTGOMERY explained further that there is a queue for redemptions and when that queue reaches 5%, all investors are informed to ensure everyone is treated equally. If the queue reaches 10% redemption, then the queue collapses and it is no longer first in/first out. It becomes pro rata. If the queue reaches 25% redemption, then a proposal would be made to the investors as to how to address the problem. MR. MONTGOMERY noted this is generally an illiquid asset class. The fund structure provides a lot of liquidity, especially with investors reinvesting their dividends, but when there is a liquidity crisis, IFM cannot guarantee liquidity.

B. JP Morgan Asset Management

Executive Director AMY CUMMINGS, Client Portfolio Manager with JP Morgan's Global Real Assets Group, Executive Director Chris Hawkins, the Relationship Manager across all of JP Morgan's Asset Management products, Managing Director PAUL RYAN, CEO of the OECD Infrastructure Equity and Debt strategies, and Managing Director MARK WEISDORF, Portfolio Manager of Infrastructure Investments Fund (IIF), gave a detailed presentation on JP Morgan's Infrastructure Investments Fund. MS. CUMMINGS stated over the last seven years, MR. WEISDORF has assembled a portfolio of nine assets providing great diversification and predictable, stable income with low volatility in the returns. She noted that built into these assets are increases in the income stream over time, which is a great inflation hedge and also provides long-term liability matching.

MR. RYAN gave an overview of JP Morgan Asset Management. He explained the Global Infrastructure Investments Platform stands within Global Real Assets. The IIF is an OECD focused core equity fund delivering a cash yield over the last two years of around 5.5% to 6%. MR. RYAN explained the fund actively manages the assets, in terms of governance positions, board of directors, qualified management teams, investors' interests, and asset management decisions.

MR. RYAN described JP Morgan's platform investment strategy, which is supporting the management team to grow organically and provide attractive opportunities for expansion. This requires a long-term view and a structure that facilitates a long-term approach to

delivering value. He noted the open-ended structure of the IIF fund is consistent with achieving the goals of a diversified and stabilized portfolio.

MR. WEISDORF continued the presentation reviewing the basic elements of the core strategy for the IIF fund. Investments are only in OECD member countries, principally in North America, Western Europe, Australia, and New Zealand. The asset diversification is along sector and subsector, of which 17% is in contracted power generation, 56% is in regulated utilities, and 27% is in transportation. The intended focus now is on adding transportation assets to the portfolio. There was a deliberate decision not to add transportation to the portfolio prior to the financial crisis. MR. WEISDORF noted his excitement about the tremendous opportunities in the U.S. to add assets to the portfolio.

MR. WEISDORF commented that control and active asset management is critical in delivering the promises made to regulators and communities, and in generating the returns targeted for the investor. MR. WEISDORF noted the IIF fund has access to deep and global resources. There are 93 institutional investors, of which about 70% are pension investors and the balance is comprised of insurance companies, endowments, and foundations. The net asset value is \$3 billion and the gross asset value is \$7.3 billion.

MR. RYAN discussed the team of 25 investment professionals listed on page seven of the presentation. They are based in London and New York with deep experience in financial and operational skills relevant to each asset class. They are responsible for finding new investment opportunities, structuring investment opportunities and managing the assets within the portfolio. MR. RYAN commented an important philosophical point in their strategy is the acquisitions group and the asset managers are the same people. There is not a sense that someone can buy the asset and someone else manage it. The team is supported by accounting, finance functions, and a very strong research department providing fundamental optimization analysis.

MR. WEISDORF gave an overview of the current portfolio as described on page 10 of the presentation. MR. O'LEARY asked for an explanation of why the total leverage line on page 10 is 59%. MR. WEISDORF responded the core infrastructure strategy invests in assets that are pure outright monopolies, such as electricity, gas, and water. Rates are based on an allowed rate of return and the allowed capital structure imposed by a regulator. The regulators know higher levels of debt of 60% to 70% is not unusual for a regulated utility.

MR. WEISDORF noted IIF has been meeting its cash distribution and total return targets for the last three years and believes there is a particularly attractive opportunity going forward to continue to grow the cash flows. MR. TRIVETTE asked if foreign exchange fees are a big issue, as reflected by the graph on page 11. MR. WEISDORF responded the foreign exchange fees were a big issue in the fourth quarter of 2008 when the portfolio was young and developing because over 60% of the portfolio at that time was in the U.K. MR. WEISDORF noted the portfolio today has less than 43% concentration is in the U.K. and investments are continuing to grow in the U.S., which will contribute to less currency volatility going forward.

MR. ERLENDSON asked how capital is raised in order to complete the fairly large transactions. MR. WEISDORF stated IIF is an open-end perpetual fund and as such, they are constantly meeting with investors to make the case for opportunities to invest their money prudently. There is currently a comfortable \$300 million of dry powder, with additional commitments expected this quarter. MR. RYAN added they are seeing an increasing demand for co-investment, particularly by large U.S. pensions and insurance companies, to achieve the portfolio construction goals and have access to larger pools of capital.

MR. WEISDORF noted there are two withdrawal periods per year, March and September quarters, and a three months' notice is required. MR. BRICE asked if there are limits, in terms of withdrawal amount. MR. WEISDORF stated there are no amount limits, only the redemption queue period. MR. BADER requested disclosure regarding the four-year redemption period. MR. WEISDORF explained if an investor wanted to redeem its commitment within the first four years of investment, there would be a redemption fee. It is normally 6%, of which 2/3 goes to the remaining investors in the fund and 1/3 goes to JP Morgan. MS. CUMMINGS advised staff has already negotiated hard and that fee is now 4%, none of which would go to JP Morgan. Then after the first four-year period, there is zero redemption fee. The redemption fee is designed to discourage any investors who might have a short-term investment strategy.

MR. WEISDORF underscored the importance of risk management for the core strategy portfolio. Risk registers are built for each company, which are 100 of the biggest risks, value drivers, and mitigants. Those are updated monthly by the asset management team. MR. RYAN noted Phase One of infrastructure investing ended with the financial crisis. Currently, we are in Phase Two, which he believes is incredibly exciting in terms of the opportunities on the radar today.

MR. TRIVETTE asked what assets the fund is reviewing in terms of transportation. MR. WEISDORF believes the port opportunities on both coasts are tremendous. MR. RYAN commented they are seeing some fantastic opportunities in surface transportation, ranging from standalone toll roads to managed lanes to transit systems.

DR. MITCHELL asked if the hurdle return listed on page 24 was an IRR and for an explanation of the cap. MR. WEISDORF responded the hurdle return is an IRR and the cap is in place to ensure there is no incentive, financial or otherwise, to consider taking more risk in order to generate higher returns than was designed for the strategy.

C. Board Discussion and Selection

MS. HARBO moved to authorize the staff to invest up to \$300 million in infrastructure investments with managers IFM and JP Morgan, after successful contract and fee negotiations; MR. TRIVETTE seconded the motion.

DR. MITCHELL stated his believe that infrastructure does belong in a real assets portfolio and believes these two firms are very capable. He noted the fee structure is pretty stiff for the

return being compared to an income fund. DR. MITCHELL advised in favor of the investment because it is an important part of what ARMB is trying to do with real assets.

MR. SHAW agreed with DR. MITCHELL's comments and found the holdbacks on the preferred returns above the hurdles compelling and comforting.

MR. TRIVETTE clarified that ARMB is not directing the allocation of the funds, but leaving that to the discretion of the staff. MR. BADER agreed. MR. TRIVETTE verified that fee negotiations were included in the motion and on the record.

A roll call vote was taken and the motion carried unanimously.

RECESS FOR THE DAY

CHAIR SCHUBERT recessed the meeting at 4:33 p.m.	

CALL BACK TO ORDER

CHAIR SCHUBERT reconvened the meeting at 9:00 a.m. Trustees Trivette, Harbo, Erchinger, Hultberg, Brice, Ryan, and Pihl were present.

14. REVIEW OF ACTIVE DOMESTIC ASSET MANAGEMENT

MR. BADER began his presentation with a story illustrating that some things are based upon preferences, style and the moment in which they are addressed. He stated he was asked to talk a little bit about active and passive investing and why the target of 65% in large cap passive was chosen for the fund. MR. BADER described it as a combination of timing, preference and objectives, all of which shift over time.

He said Callan was asked to give staff as much information as they could about similar sized public funds in their database and the constitution of their large cap passive allocations. MR. BADER explained the graph on page one of his presentation illustrating this comparison and noted any manager that a fund was calling SMid cap, which is small and mid cap, was treated as a large cap and any manager that a fund was calling a small cap was indeed treated as a small cap. The ARMB is within target at 64.7% large cap passive. The eight funds to the left of ARMB on this table are larger in fund size. Four of those have a higher percentage of passive large cap allocation. Of the 13 smaller fund size portfolios to the right of ARMB on the table, only three have a higher percentage of passive large cap allocation.

MR. BADER stated he uses this table to say there is no perfect answer in this and that ARMB is typical of many large public funds in terms of asset allocations. He believes the Board can feel comfortable with the current allocation.

MR. PIHL asked if it was possible to know the names of the two public funds that are allocated at 100% large cap passive. MR. BADER answered Callan did not reveal that information and believes they probably felt it should be confidential, but he thinks that Fund F, who is at 100%, is the state of Washington. MR. O'LEARY added this issue may seem like a simple question between active and passive, but it is more complex than it seems because each fund has a unique way of characterizing its policies and it depends on the type of management structure the fund has. For instance, a fund may have U.S. domestic large cap equities which are part of a global portfolio that is actively managed. MR. O'LEARY does believe the charts on page one and two are reasonably accurate in giving a sense that among large public funds, the majority of their domestic equity assets are passively managed.

MS. ERCHINGER requested to have some dialog over time on the issue of how the ARMB's closed-end fund liquidity concerns, beginning in less than a decade, will impact the thinking relative to active versus passive management allocation and the fees associated with both. MR. BADER responded he does believe it takes analysis and not just preferences and style

like his story illustrated. He noted the strategy used by each manager is important to consider when focusing on this issue.

MR. HARBO inquired if more capital will be contributed to the Dow Jones 100 Index fund currently owned in the portfolio, because it seems to be doing well and has no fees, other than the fund fees. MR. BADER answered there would be no additional fees, because the existing staff would provide the active investment management and he believes the more management brought into Alaska, the better off the fund is. MR. BADER noted the current fees are for proxy services and are insignificant. He reported that right now, the domestic returns are outperforming its index. The return for the alternative equity strategies is also outperforming its index.

MR. SHAW commented there is an exposure issue of the active managers, who won't cover the entire landscape and may be focused on certain areas. The passive benchmark investments will get exposure to all areas. He believes it makes sense to have a good chunk of passive investments to have exposure to certain areas within the domestic and international assets.

15. PERFORMANCE MEASUREMENT - 2ND QUARTER

CHAIR SCHUBERT invited MR. O'LEARY and MR. ERLENDSON of Callan Associates, Inc. to give their presentation. MR. O'LEARY noted many of the graphs presented were taken from JP Morgan's Quarterly Guide to Markets. He commented since we are currently so far from the end of June, the data and projections have been revised, but he believes the pattern is still the same and is important for the outlook of both stocks and bonds.

MR. O'LEARY said we have been buffeted in calendar 2013 with concern about the emerging economies' strength and the graph on page three shows at midyear, the expectations were still that emerging economies would be significantly stronger. Another issue is the Fed's balance sheet and what becomes of it. MR. O'LEARY thought that taper was happening and was happy because it seemed to be the way to bring interest rates gradually back into the real world and reduce the probability of a bubble emerging somewhere.

MR. O'LEARY noted in June, July, and August rates increased a little, but then backed off again with the recent Fed announcement. We are still at extraordinarily low levels of interest rates. He stated liquidity across the board in bond markets is significantly lower than it has been in most of modern history. He referred to members' previous comments regarding ARMB's closed-end plan and liquidity concerns and advised the Board to be mindful that liquidity in fixed income obligations has become comparatively expensive.

MR. O'LEARY explained graphs in his presentation showing yield curves changes and rates of return and implications of a rise in interest rates. MS. ERCHINGER stated she is a finance director and noted her city invests in mostly fixed income because it is allowed and the idea is to maintain diversity and reduce risk. She posed the question of why not just completely get out of fixed income, since it is known fixed income has extreme risk because rising interest rates is a matter of when it will happen and not if it will happen.

MR. O'LEARY responded he, Mr. Bader and MR. Erlendson have spoken quite a bit about that issue in trying to formulate an asset allocation recommendation. He advised the most prudent way to structure that recommendation, which was adopted and became effective July 1st, was to have extraordinarily low exposure to fixed income. MR. O'LEARY stated some other major plans have made moves in the same direction. Given the current level of interest rates, it was not a justifiable policy to have significant exposure to inherent negative real returns.

MR. BADER added the duration of the fixed income in the portfolio has been shortened considerably. There is a large cash allocation and also intermediate treasuries. MR. O'LEARY explained the graph on page eight, noting the example of the 20-year treasury, given the yield curve change that occurred during the quarter, there would have been a negative total return of about 7%. The norm is more in the five-year range, but this provides a useful perspective to the change in values that can occur.

MR. O'LEARY discussed the charts on page 10 and noted the U.S. is the largest single economy and the U.S. has a 49% weight in MSCI All Country Wold Index. Emerging markets account for about 11% of the world. MR. JOHNSON commented this seems like a categorization issue, because at what point has China emerged or Korea emerged, in terms of the placement in the emerging markets index. MR. O'LEARY advised Korea has emerged and been moved into the developed market index for S&P, but not for MSCI. Whereas, Greece is no longer in the developed market index for MSCI. There is fluidity because of the definitions for emerging markets and developed markets and the generalizations can be very deceptive. These numbers do suggest emerging markets are not grossly overvalued.

MS. HARBO requested clarification regarding frontier markets. MR. O'LEARY explained the definitions are not clear-cut, but there are certain things that can keep a country out of an index, for example, if there are no publically traded securities, if there are real problems with property rights, and the major differentiator is the level of income per capita. The best a poor country could hope for is to be an emerging market.

MR. O'LEARY explained some of the differences by sector in several of the major emerging markets as shown on the graph on page 11. MR. PIHL asked what Russia's commodities are besides oil and maybe timber. MR. O'LEARY stated oil and gas are the primary drivers. Timber is not significant in terms of dollars because of the cost to transport and the extreme weather.

MR. O'LEARY showed the chart on page 12 in which value outperformed growth in the U.S. for the fiscal year ending June 30, 2013. As far as global and international equity index returns, the real drag on performance was emerging markets. MR. O'LEARY noted the greater exposure in emerging markets, the poorer the performance. The table on page 15 shows hedge fund-of-fund index returns over various time periods. MR. O'LEARY explained there have been pockets where the returns have been competitive.

MR. O'LEARY reported most countries appear to be selling at valuation levels that are below their own average, with the exception of the U.S. and Switzerland. MR. BRICE asked if there are some opportunities in Canada and Japan because their current valuation seems to be lower than the average. MR. O'LEARY believes that is partly due to oil, and financials have not been great. He stated he is open-minded about reviewing Canada.

MR. O'LEARY took the Board through an exercise of determining whether the S&P 500 is overvalued or undervalued using forward earnings. He believes stocks are not cheap, but are more exciting than bonds. The Employees' Retirement Plan, ERP, had a great second quarter relative to the target and most of this was attributable to managers doing better than their targets. The return was 12.5% for the year. The trailing three-year return is 11.05%, which is a tad below the target of 11.32%. For PERS and TRS, the return numbers look pretty good for the quarter, fiscal year, two years, and three years, but the the five-year number still looks terrible because of the real estate and private equity meltdown that hit the portfolio in 2009.

MR. O'LEARY stressed that the focus of how the portfolio is doing is always relative to the target. The pattern of the bond performance in the portfolio is good and it has been comparatively conservative in aggregate. The intermediate treasury portfolio performed better than the index. The Mondrian portfolio had poor performance in both the absolute and the relative sense, largely due to what happened to the currency in Japan. The five-year and longer returns for Mondrian are still extraordinary and MR. O'LEARY stated he has no concern with regard to Mondrian as an investment manager. The MacKay Shields fund returned 9.28% for the fiscal year compared to the index of 9.57%.

The total domestic equity returned 21.23% for the fiscal year, which is essentially at the Russell 3000 Index and better than the S&P 500. The large cap managers in aggregate returned 20.92% for the fiscal year. The small cap managers in aggregate returned 26.77% for the fiscal year. The Other Equity category returned 9.01% for the fiscal year. This category will change to include the Relational portfolio, the internally managed yield-oriented portfolio, the converts and the BuyWrites portfolios. The international equity return for the fiscal year was 15.01%, which was better than the ACWI Index. The International ex EM returned 16.73% for the fiscal year, which was below the EAFE Index of 18.62%. The EMonly pools provided returns just above the benchmark. MR. O'LEARY noted Lazard has been managing the global portfolio for ARMB for 20 years and they have continually beaten their two benchmarks, ACWI and the MSCI World.

The chart on page 44 shows the Real Assets Category. The absolute returns for farmland have been very attractive and significantly better than timber. The five-year returns for real estate are negative, which is still showing the lingering effect of the meltdown. The past three years have shown pretty competitive performance for real estate, just a tad below the target. Private real estate has suffered in the same way, but the REITs have actually done better. MR. O'LEARY noted since the REIT portfolio has been internally managed, it has performed much more like the index, with only small variances. The TIPS portfolio is also internally managed and the performance has been slightly better than the benchmark. The Absolute Return Composite gave higher than benchmark returns for the fiscal year.

MR. ERLENDSON explained the Individual Account Option Performance chart on page 49 noting the green boxes essentially mean the managers have been ranking well versus peers and they have been beating their benchmarks. MR. ERLENDSON noted it is important to frame how the Alaska Balanced Fund and Long Term Balanced Fund are viewed and why they are in the red and yellow zone. Both have fund returns above their benchmarks. These are custom-constructed balanced funds which have a risk profile that is more risk-adverse than its index. The Alaska Balanced Fund ranks in the 96th percentile because is has more of a fixed income allocation and over the last three years, the S&P was up 18.5% and the fixed income was up 3.5%, which is a 15% difference in return and that is why it ranks lower. Back in the 2008 period, this fund would have been a top performer because of its allocation. The two balanced funds are beating their benchmarks and doing exactly what they are supposed to be doing.

MR. ERLENDSON discussed the chart on page 51 and stated Brandes has been a disappointment and has underperformed their benchmark for the last three years. He advised this is a manager characteristic because they are not trying to mimic the benchmark and when their ideas come into favor, it should make up for any underperformance experienced. MR. ERLENDSON stated he is still very confident in Brandes for the long-term. MR. O'LEARY added one of the issues with managers who use a non-benchmark type of approach, is determining whether it is appropriate for the needs of the DC plan. Many participants have benefitted from Brandes' long-term approach, but increasingly today, there are a number of participants who may not have that familiarity.

MR. ERLENDSON explained why RCM Socially Responsible is ranked in the 59th percentile over the last three years. The benchmark used does not have the same constraints imposed on RCM. Active share is how much a manager is dissimilar to their benchmark and so benchmark selection is critical for a manager like RCM, who has a unique investment strategy. MR. ERLENDSON encouraged the Board to listen to staff's recommendation regarding the benchmark for RCM.

MR. ERLENDSON gave an update on a possible revision of money market fund rules, which are being considered in a House subcommittee with the SEC. Instead of carrying the money market funds at a dollar unit value, they would be carried as a floating net asset value. There is also discussion about a rule allowing money market managers to gate their funds in the event of a market crisis. There is a big debate about the nature of the problem and what some of the proposed solutions are. Callan is on record with the SEC as saying defined contribution plans should be exempted from any of these kinds of rules that come forward. MR. ERLENDSON stated the rules have not been revised yet and Callan is following this issue very closely and will continue to keep the staff and Board apprised.

MR. TRIVETTE asked what kind of perspective should be taken in viewing charts, such as on page 38, where there are two different indexes on the same chart. MR. O'LEARY explained that originally the EAFE was the official international benchmark and then changed to ACWI ex US. He noted there may still be a manager who is operating with an EAFE mandate and does not want to inadvertently hurt the perception of the managers' relative results by eliminating their index.

CHAIR SCHUBERT recessed the meeting from 10:24 a.m. to 10:32 a.m.

16. INVESTMENT ACTIONS

A. Global Ex-US Manager Search

MS. HARBO moved to direct staff to engage Callan to conduct a search for one or more global ex US investment managers; the motion was seconded by MS. RYAN.

DR. JENNINGS asked if this is a movement away from indexing or would the intent be to retain some portion in the index fund. MR. BADER believes it would more likely be a reallocation among managers and doesn't have any plans for using much, if any, of the index, but the determination is really dependent on what the search reveals.

The motion carried unanimously.

B. Benchmark Change Allianz RCM ESG Fund

MR. TRIVETTE moved to authorize staff to work with Allianz to amend the investment management agreement to change the Allianz ESG Fund's performance benchmark to the MSCI USA ESG Index effective October 1, 2013; the motion was seconded by MR. PIHL.

MR. O'LEARY commented sustainable investing has received more attention in recent years and believes the MSCI index will be a good choice to use for this program.

The motion carried unanimously.

C. Investment Guidelines: Municipal Taxable Bond Funds Resolution 2013-17

MR. BRICE moved to adopt Resolution 2013-17; the motion was seconded by MR. TRIVETTE.

MR. TRIVETTE asked if the portfolio constraints outlined is Section E of the resolution will be a workload burden to the staff. MR. BADER answered no.

The motion carried unanimously.

D. Information-Medical Office Separate Accounts

MR. BADER reported there is a closed-end fund coming up for termination, which manages the medical office investments. The Board has given staff authority to make investments with separate account managers where there is a longstanding and satisfactory relationship. MR. BADER advised the Board of the intent to investigate that possibility with some of the current real estate investment managers.

E. Exercise First Year Option on the MAP Contract

MS. HARBO moved to approve the one-year extension to the MAP Alternative Investment contract; the motion was seconded by MR. BRICE.

The motion carried unanimously.

17. RECAP - AUGUST 8 TRUSTEE WORKSHOP

CHAIR SCHUBERT stated the Board was given a copy of the detailed notes taken at the August 8th trustee workshop, which includes an excellent summary of the issue. She noted there should be an action item with regard to the follow-up/research items on page 11 of the summary.

MR. BRICE commented he is prepared to make a motion the ARM Board pursue the follow-up and research, but believes there is a more articulate or intelligent way to frame the motion. MR. BADER asked if the ARMB would be directing the Department of Revenue to conduct the follow-up/research bullet points noted on page 11. MR. TRIVETTE noted his motion will address that question.

MR. TRIVETTE moved to direct the Department of Revenue to address the bullet points listed in the follow-up/research summary of the August 8, 2013 unfunded liability work session and to work collaboratively with the Department of Administration to gather the information and provide that information to the Legislative Committee in a timely manner; the motion was seconded by MS HARBO.

MR. BARNHILL commented he believes the motion is unnecessary and the request could be easily fulfilled the same way requests have been fulfilled for years with MR. PIHL. MS. ERCHINGER believes these bullet point items will require involvement and a collaborative discussion from the Legislative Committee, the Department of Revenue, and the Administration. MS. HARBO stated she is more comfortable passing a motion, so it is part of the minutes. MR. BRICE assumed that part of the motion was for the information to be presented to the Legislative and Finance Committees.

MR. BADER commented the work obviously takes collaboration between departments, but in order to move the process forward, the Board needs to clearly establish who will produce a work product for the Board's consideration.

MR. PIHL added the Board is authorized to obtain actuarial work and the Legislative Committee would be working with the Department of Revenue to get this follow-up information. MR. TRIVETTE noted the intent is to get this process moving so the information could be brought to the Legislative Committee as soon as possible, within the next couple of weeks. MR. BARNHILL expressed the Department of Administration has no objection whatsoever to working with the Department of Revenue, the Legislative Committee or with the Board to facilitate obtaining actuarial information. MR. BARNHILL withdrew his

earlier objection to the motion and made it clear it has always been the policy and will continue to be the policy to provide actuarial information.

CHAIR SCHUBERT restated the motion and added that after receiving the information, the Legislative Committee will create the report for the Governor and the Legislature. MR. TRIVETTE commented the Legislative Committee tasked itself with developing a plan to educate legislators and the public regarding this issue and that plan cannot be developed until this information is brought to the Committee.

MS. HULTBERG made a comment, which she said is indirectly related to the motion, that there is a bit of a conflict between access to the actuary by this motion and the previous open access to the actuary over the last three years. She noted the Board reviews actuarial costs and highlighted a recommendation for the Board to consider how to manage the relationship with the actuary because it has been handled in two different ways.

The motion carried unanimously.

MR. BADER stated unrelated to this report or anything, he requests authority from the Board to confer with the actuary to do further work on liquidity analysis, unrelated to this agenda item. He explained he can develop spreadsheets, but needs the actuary's help in order to perform stress tests. MR. BADER believes this would greatly enhance the work he can provide at the December meeting regarding liquidity analysis.

MS. HARBO moved to authorize MR. BADER to confer with the actuary to do further work on liquidity analysis; the motion was seconded by MS. RYAN.

MR. BADER said he brought this motion before the Board because of the resolution the Board passed saying that access to the actuary, to spend money with the actuary, had to be approved by the Board.

MR. BRICE asked MR. BARNHILL if the actuaries would be able to handle the extra workload currently. MR. BARNHILL responded, capacity has definitely been an issue for the actuaries. There are two sets of actuaries, the pension actuaries and the healthcare actuaries. They are both employed by Buck. The capacity issues have been more on the healthcare side recently. If there are many requests during the legislative session, there will be a backup. MR. PIHL believes the question of upfront contribution can be run by Buck relatively quickly by pushing a few buttons.

The motion carried unanimously.

MR. TRIVETTE requested MS. ERCHINGER give a short presentation on a meeting she had with the Senate Finance Subcommittee on Education, as a result of the August 8th Unfunded Liability Work Session, which may provide guidance to the Board and Legislative Committee on how to better approach the issues. MS. ERCHINGER stated she gave a presentation to the Senate Finance Subcommittee on Education in Anchorage the week after the trustee workshop. The presentation is available for anyone to view. It provided some of the history

of the differences between the mandates of the previous boards and the limited role the Board has on the ability to impact the unfunded liability. MS. ERCHINGER reported she also gave a portion of the presentation from the workshop that was held with the stakeholders as it relates to the actions the Board has taken over the last few years to try to impact the unfunded liability, as well as a recap of current recommendations resulting from the stakeholder meeting.

MS. ERCHINGER stated that educating members of the Legislature regarding the unfunded liability issues is going to be an uphill climb because they are very busy and have many important issues on their plate. She suggested the Board's message has to be succinct, but not shy away from the complexity of the issue. MS. ERCHINGER said she does not believe the current path the Board is on, as individual trustees educating legislative committees, is the most effective way to get the message across. MS. ERCHINGER stated she does not know whether hiring a consultant or a lobbyist is the best way to engage with the Legislature so that they are hearing the Board's message, but the message is very important and the Board needs to consider a more effective way to educate the Legislature.

MS. RYAN noted the task of educating the Legislature is daunting and recommended the consideration of an outside entity, whether a lobbyist or a consultant, to help with the education process by being a consistent voice and updating information as quickly as possible. MS. HARBO stated she would second MS. RYAN's comments and hopes the Legislative Committee would come with a recommendation to the Board.

MR. BADER said he understands the desire to want to communicate information to the Legislature, but he does not believe he has ever heard of a state agency or a committee hiring somebody as a lobbyist and he fears the reaction to that would detract from the message being delivered. MR. BADER stated he does not think the Legislative Committee is going to say, "We are in debt, underfunded, and the ARM Board is hiring this person when they have staff at the Department of Revenue and the Department of Administration to carry the message." MR. BADER advised the Board to take some time to think about the impacts of that decision and revisit it. MR. PIHL agreed with MR. BADER's comments and feels this is a job the trustees of the retirement system must take on.

CHAIR SCHUBERT stated she was going to comment along the same lines as MR. BADER's comments and is not prepared to entertain any sort of action at this meeting. CHAIR SCHUBERT understands the intent of the communication, but believes it is a really unusual move and suggested it be added as a discussion item for the next meeting to determine a way to move forward.

MR. TRIVETTE does not believe hiring an outside person to carry the message is going to work and agrees with the comments of MR. BADER and CHAIR SCHUBERT. MR. TRIVETTE noted the Legislative Committee has already been tasked with developing a plan on how to move forward, which might include hiring somebody to assist with some writing, but a plan on how to approach committees and individuals needs to be devised within the next two to three weeks, because there are too many things going on for legislators once the session begins.

MS. ERCHINGER appreciated MR. BADER's comments and stated she had those thoughts yesterday and then forgot them today. She believes this is a collaboration and wants to stay clear of political land mines and unintended political consequences that may arise from any of the Board's actions. She stated it would be helpful to have folks who understand the political process advise and caution the Legislative Committee as the plan develops.

CHAIR SCHUBERT noted the issue of hiring a lobbyist is entirely separate from the issue of getting the information and preparing a report. She stated the she heard MR. BADER volunteer to pull the information together in a format the Legislative Committee can use. There is a sense of urgency to this task and she believes the staff understands that.

MS. HARBO appreciated MR. BADER's comments and believes the most important task is to educate. MR. PIHL recommended the Legislative Committee meet for an hour to get a follow-up from MR. BADER and the Department of Administration while everyone is in New York for the conference. MR. BADER responded he will not have a report by the New York conference because there are too many time demands between now and then. He said the Committee could meet, but noted the New York agenda is full.

MR. BRICE believes the purpose is to position the ARM Board in a supportive role of what might come out of the Governor's budget release in mid-December, and at the same time develop a plan to address the issues in the Legislature.

UNFINISHED BUSINESS

1. Disclosure Report

MS. HALL stated that the disclosure report was included in the packet and there was nothing unusual to report.

2. Calendar

MS. HALL added an Audit Committee teleconference meeting on October 16th to the calendar. CHAIR SCHUBERT noted it was agreed to delete the October 28th meeting from the calendar.

3. Legal Report

MR. JOHNSON believes the Board is complying with the directives from the Legislature in educating the stakeholders in order to achieve the goals set out by statute. This view is consistent with the memorandum submitted to the Board prior to the August 8th meeting and the discussions at the meeting. MR. JOHNSON stated there is no directive prohibiting the Board from hiring a lobbyist and it probably falls within the Board's general authority. He advised the choice on that issue is in regard to what is best and what is wisest, rather than a legal issue.

NEW BUSINESS

None

OTHER MATTERS TO PROPERLY COME BEFORE THE BOARD

None

PUBLIC/MEMBER COMMENTS

MR. RON JOHNSON, retired faculty member from UAF School of Engineering, informed the Board that several people from the Northern Section of the Retired Public Employees Association will conduct a class at the University in October dealing with the state retirement plan, discussing the pension and healthcare parts, with special emphasis on the unfunded liability. Currently there are 55 people registered. The aim is to get people involved, similarly to educate the Legislature as to the issues.

MR. RON JOHNSON stated in his experience during the past two years testifying to the Legislature, he has heard very little discussion in terms of public testimony about dealing with the unfunded liability. He believes just a few people testifying publically to Senate Finance, House Finance, et cetera, could have a very positive impact on getting the Legislature to move forward and taking a proactive step to address the liability, such as the advocated one-time infusion of money.

INVESTMENT ADVISORY COUNCIL COMMENTS

DR. JENNINGS noted the IAC is meeting next week for their main work session. DR. JENNINGS requested the Board provide any information they want the IAC to particularly review. In the past, many things discussed in this main work session have come before the Board, either as education sessions or as portfolio investments.

DR. MITCHELL shared a few words about stock and bond returns. He stated when the world was in the midst of its financial crisis in 2008, a number of market observers appearing on television and in the papers said that we were now in the new normal, where there was going to be tremendous volatility in the financial markets and we were entering a very low return environment.

DR. MITCHELL explained what really happened, if we look at the Callan periodic table of investment returns and look at the stock market, it was up 26% in 2009, 15% in 2010, 2% in 2011, 16% in 2012, and 19% this year. Mathematically, that was not volatile because it only goes up and it is not a low return environment. Then looking at the bond market, which didn't do as well, but it was up in the same time periods of 5%, 6%, 7%, 4%, and has given back a little this year, but again, not very volatile.

DR. MITCHELL commented his observations of returns in the past five years, combined with MR. O'LEARY's slide on U.S. market valuation leads him to believe we can't expect returns

like this is go on forever. DR. MITCHELL applauds the efforts of the Board and staff to diversify the portfolio further, so that when the inevitable day comes when the stock market goes down, we are ready for it.

MR. SHAW expressed his thanks to the Board for making him feel so welcome to his first meeting. He appreciated the conversation MR. O'LEARY and MR. BADER had about what to do when interest rates eventually do rise. MR. SHAW noted San Francisco is suffering through the same complicated issue. They are short on duration, but the challenge is finding places to put the money to adjust for the fact they strongly believe rates will rise.

TRUSTEE COMMENTS

MR. TRIVETTE shared his reason for agreeing to back off of the planning meeting next month, which is to spend effort right now working on the legislative issue for the upcoming session. He is willing to put the regular planning meeting on the side until after the next legislative session. He definitely believes a planning meeting is necessary, and if he remembers correctly, there has only been one planning meeting as a board since coming into existence in 2005.

MR. TRIVETTE stated Administration has a number of respected, extremely dedicated and hard-working staff, many of them with longevity, who have been swamped with the workload. He knows the Administration has not given out bad information on purpose and felt horrible when MR. BARNHILL had to provide the new information and did not mean to give him a hard time. MR. TRIVETTE believes there is a strong commitment in the department to do what is best for retirees and has heard many comments and most of those comments are very positive feedback.

MR. TRIVETTE added he is committed to making sure the Legislative Committee meets as often as needed by teleconference to work on the planning process. He and MS. ERCHINGER met with REPRESENTATIVE MUNOZ, at her request, and she indicated a willingness to get meetings set with House Finance. These are the kinds of decisions the Legislative Committee will be working on. MR. TRIVETTE encouraged MR. BRICE and others, who have experience working with the Legislature, to provide their expertise and knowledge. He said it is clear from reading MR. JOHNSON's letter in late July, the Board has an obligation to provide ideas to the Legislature, not only written reports. MR. TRIVETTE expressed his appreciation for everyone's support for heading in the right direction to better communication.

MS. HARBO thanked the Department of Revenue for their great investment team. She thanked the Department of Administration for the health fairs they have given around the state and believes they are beneficial and very well attended. MS. HARBO commented the problem of where to invest, as an alternative to bonds, is a problem faced by every senior and every retiree. She said when her mother was still living, she lived on laddered CDs, which cannot be done anymore.

MS. RYAN expressed her gratitude to everyone for a great year. This is her year anniversary sitting on the Board. She thanked the Board for helping her through possible political problems. She said she is an educator and will try to educate at all costs.

CHAIR SCHUBERT advised she will not attend the education conference because she has an annual meeting on that Saturday and it is requiring more work than anticipated, but she is hoping to tie-in telephonically to some of the presentations. She believes it is an excellent agenda and the trustees will benefit greatly.

MS. HULTBERG noted she will not attend the education conference, but MR. BARNHILL will be in attendance. MS. HULTBERG will be speaking at the Healthcare Conference, which is one of the primary strategic issues in the department.

FUTURE AGENDA ITEMS

None

ADJOURNMENT

There being no objection and no further business to come before the Board, the meeting was adjourned at 11:35 a.m. on September 20, 2013, on a motion made by MS. HARBO and seconded by MR. BRICE.

Chair of the Board of Trustees Alaska Retirement Management Board

ATTEST:

Corporate Secretary