State of Alaska
ALASKA RETIREMENT MANAGEMENT BOARD
MEETING

Location of Meeting
Fairbanks Princess Hotel
4477 Pikes Landing Road, Fairbanks, Alaska

MINUTES OF
September 26-27, 2007

Wednesday, September 26, 2007

CALL TO ORDER

Chair GAIL SCHUBERT called the meeting of the Alaska Retirement Management Board (ARMB) to order at 9:01 a.m.

ROLL CALL

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

ARMB Board Members Present
Gail Schubert, *Chair*
Sam Trivette, *Vice Chair*
Gayle Harbo, *Secretary*
Commissioner Patrick Galvin
Commissioner Annette Kreitzer
Martin Pihl
Larry Semmens
Mike Williams

ARMB Board Member Absent
Tom Richards (absent morning of 9/26 only)

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

Consultants Present
Robert Johnson, legal counsel
Michael O'Leary, Callan Associates, Inc.

Department of Revenue Staff Present
Brian Andrews, Deputy Commissioner
Gary M. Bader, Chief Investment Officer
Bob Mitchell, Senior Investment Officer
Zachary Hanna, State Investment Officer
Steve Sikes, State Investment Officer
Scott Jones, Assistant State Comptroller
Judy Hall, Liaison Officer

Department of Administration Staff Present
Rachael Petro, Deputy Commissioner
Patrick Shier, Director, Division of Retirement and Benefits
Kevin Worley, Chief Financial Officer

Department of Law Staff Present
Mike Barnhill, Assistant Attorney General

Invited Participants and Others Present
David Slishinsky and Michelle DeLange, Buck Consultants, Inc.
Charles Gallagher, Retired Public Employees of Alaska
Jack Kreinheder, Governor's Office/OMB
Mary Zalar, member of Retired Public Employees of Alaska
Darlene Taskey, Retired Public Employees Association
Matt Johnson, Townsend Group
Eileen Byrne and Peter McNally, BlackRock Realty
Tim Cayen and Court Washburn, Hancock Timber Resource Group
Tom Johnson and Mark Seaman, Timberland Investment Resources LLC
Brian Webb and James McCandless, UBS Agrivest LLC
Jeff Conrad, Oliver Williams and Joseph Silveria, Hancock Agricultural Investment Group
Kevin Traenkle and Alexandra Hill, Colony Capital LLC
James Donald and Tony Dote, Lazard Asset Management LLC
William Irvine and Brian Langstraat, Eaton Vance Management

PUBLIC MEETING NOTICE

JUDY HALL confirmed that proper public notice of this meeting had been published.

APPROVAL OF AGENDA

MS. HARBO moved to approve the agenda. MR. WILLIAMS seconded.

GARY BADER requested that a Real Estate Committee report be added under "Committee

Reports."

MARTIN PIHL asked that the Salary Review Committee report be moved ahead of the Budget Committee report.

The amended agenda was approved without objection.

PUBLIC/MEMBER PARTICIPATION, COMMUNICATIONS AND APPEARANCES

MARY ZALAR of Fairbanks introduced herself as a member of the Retired Public Employees of Alaska and said her husband is a retired state employee. She said she recently became aware of what the ARM Board is and what it does, and she hoped a meeting in Fairbanks would be an annual event. She also recently discovered the minutes of board and committee meetings on the web site and was pleased to see the interest in health care and insurance issues through the Health Care Cost Containment Committee. She hoped the Committee would find a way to involve retired people and get their input. Finally, she suggested finding ways to let others know about the meetings because the Board might see more people attend. For example, she did not see the ARMB meetings in the local newspaper's calendar of events, whereas the railroad committee meetings and the Alaska Permanent Fund Corporation meeting were published. Meanwhile, she would think of ways to let other people know how to access the minutes and become aware of the work the ARM Board is doing.

APPROVAL OF MINUTES - June 13-14, 2007 and August 23-24, 2007

MR. WILLIAMS moved to approve the minutes of the June 13 and 14, 2007 meeting. MS. HARBO seconded.

The minutes were approved as submitted.

MS. HARBO moved to approve the minutes of the August 23 and 24, 2007 meeting. MR. TRIVETTE seconded.

MR. TRIVETTE asked for an amendment to page 3, to add a sentence to the last paragraph under "Executive Session," to read: "Executive session started at 3:05 p.m., and concluded about 3:45 p.m." He said the information was critical to reflect that the Board resumed in regular session before taking any action.

The minutes were approved as amended.

REPORTS

1. Chair Report

CHAIR SCHUBERT said she had received a letter as Chair from Mr. Bader regarding a private equity investment that Mr. Bader would cover in his CIO report.

2. Committee Reports

A. Audit Committee

Committee chair MARTIN PIHL reported that the Committee (Trustees Semmens, Williams and Pihl) met September 25 and heard a presentation by Kathy Porterfield of KPMG on the draft audit statements of invested assets and the draft management letter to the Board. A clean opinion is forthcoming on the financial statements. No matters of significance were reported in the management letter. Ms. Porterfield was complimentary about staff's cooperation with the auditors and the job they did. She pointed out the potential that past audit adjustments are accumulating to the point of stretching the auditor's ability to consider them not materially significant. These audit adjustments relate to the March cutoff on the real estate and alternative investment valuations and will be addressed with staff over the coming year. The final audit results will be presented to both the Audit Committee and the Board in late November. MR. PIHL said the Committee also received a report from the investment staff in the Treasury Division on improved monitoring of how managers value assets for real estate, private equity and absolute return. The Committee also heard an update from the director of the Division of Retirement and Benefits about the ongoing work of the revitalized internal audit section that conducts employer audits, and about an employer education seminar scheduled in November. Lastly, Brian Andrews, Deputy Commissioner of the Revenue Department, briefed the Committee on the progress in filling vacant key positions.

B. Salary Review Committee

Committee chair MARTIN PIHL reported that the Committee met August 10 in Anchorage and developed and passed Resolution 2007-27 relating to staff compensation. He said there has been a long-standing and growing concern about key employee salaries. There is a history of staff turnover and difficulty in recruiting, and Investment Advisory Council members have made comments. The Salary Review Committee met in 2004 and passed Resolution 2004-07 that was the model for Resolution 2007-27 that the Committee is recommending to the Board at this meeting. The Committee looked at Treasury Division salaries compared to similar positions at the Alaska Permanent Fund Corporation (APFC). The APFC has hired a consultant to conduct several market salary studies over the years and has adjusted that corporation's salaries to be competitive in the market. There is a major inequity between the two agencies in the salary paid to the chief investment officer, and he judged that corresponding salaries for lower positions are probably not in line either. The Committee's main thrust is to have the key position salaries adjusted to those of counterparts at the APFC and the parity maintained.

MR. PIHL thanked Commissioner Galvin for the new attention he has given to salaries, and he

thanked Mr. Andrews for his research work on salary comparisons. He said the Committee was informed that the funding is available in the budget to make salary adjustments effective July 1, 2007.

COMMISSIONER GALVIN said that he told the Committee at the August 10 meeting that he was not comfortable with being a member of a committee that was making a recommendation to the full Board, that was in turn making a recommendation to him as commissioner. So he participated in the discussion and gave input from the Department of Revenue about any concerns he had about the action, but he did not participate in the vote. He said he was requesting that the Chair remove him from the Salary Review Committee for future decision-making. He said the department recognizes the same concerns that the Committee acknowledges in Resolution 2007-27. Salaries are a statewide issue. In both his position as a trustee on the APFC board and as commissioner, he takes very seriously the need to have quality staff and that there be a system in place to attract and retain that quality of people. He believes that everyone is of the same mind in terms of the ultimate goal. It is a lot easier on the APFC board where there is a different pot of money and different rules governing salaries. This Board just has to recognize that its decision is part of a bigger issue.

COMMISSIONER KREITZER stated that the Governor's priority is to address recruiting and retention throughout all departments. It is not an issue just in the Revenue Department. The Governor signed administrative order 237, which created a working group of six commissioners and the head of the Office of Management and Budget to consider recommendations to the Governor. The goal is to first talk about some short-term recommendations and then come up with longer-term solutions. It is not enough to simply raise the salaries and say it is the fix for this year. She said she had not seen the resolution from 2004, but she had read the minutes of the Salary Review Committee's meeting. She said that because it is a broader issue she was not going to support Resolution 2007-27 today, and she had informed Commissioner Galvin of that. She would take the matter to the working group, saying that the ARM Board was so concerned that they considered and possibly passed this resolution.

MR. PIHL said that the salary issue has been long-standing, and it gets to the point where it is frustrating. In 2004 the Alaska State Pension Investment Board, and again now the ARM Board, have offered to pay the additional costs of compensation for the Department of Revenue employees who perform substantial work as staff to the Board. It can be done with the money within the budget and not impact the general fund. He said he hoped that the two new commissioners on the Board could help with the effort.

MR. PIHL, as Salary Review Committee chair, moved that the Alaska Retirement Management Board adopt Resolution 2007-27 relating to staff compensation. MS. HARBO seconded.

MS. HARBO commented that there is an outstanding team of investment professionals in the Department of Revenue, most of whom are home-grown. It is important to keep the team of people who manage money for the pension funds in place and not lose them to competition that pays higher salaries.

MR. TRIVETTE stated that the Budget Committee also reviewed this resolution at its meeting on September 11. He indicated that he understood that Commissioner Kreitzer was between a rock and a hard place in this situation. He said, however, that from his own experience in state government he has seen issues that were studied at length and then nothing happened, and the state lost a lot of good people because pockets of concerned people did not push for action. The money is in the budget for ARM Board staff salary increases, and the Board should proceed. He said he planned to support the resolution.

CHAIR SCHUBERT reported that the Budget Committee met and looked at the resolution. They took action on it and included salaries in the budget. She said she has been around a long time and remembers going through a period when the APFC hired away staff that the Treasury Division investment section had trained. The board at that time felt they had to do something to maintain the level of staff that was needed to get the investment returns that the retirement funds have been getting. With more of the investment oversight coming in-house, it has become even more critical to ensure that the current staff is not lost and to be able to hire high quality staff for vacant positions. For that reason, she intended to support the resolution.

COMMISSIONER KREITZER made it clear that her opposition to the resolution had nothing to do with the staff working for the Board. She said she agreed that the state has been very fortunate to have Gary Bader's expertise, along with his investment team, and she was very grateful for his service. It was more for her about looking at a holistic approach and not trying to push a bubble one way or the other. She said she and Commissioner Galvin will have more discussions about positions in the Revenue Department and how to resolve the issues short term and long term.

Commissioner Galvin said he planned to abstain from voting on the resolution, but he supported the concept behind it. He has made similar recommendations within the administration for these positions, and it is consistent with what he believes is the appropriate direction for the department. However, he respected Commissioner Kreitzer's challenge in trying to address this issue statewide, and he would continue to work within that context. He said that as Mr. Trivette mentioned, each person has to push their part of this in order to get the momentum of the whole system moving in the right direction. So while Commissioner Kreitzer does not support the resolution, she recognizes that it will provide additional voices to ultimately drive toward a positive outcome.

Roll call vote
Ayes: Trivette, Semmens, Williams, Pihl, Harbo, Schubert
Nays: Kreitzer
Abstain: Galvin

The motion passed 6-1, with one abstention.

C. Budget Committee

Committee chair GAIL SCHUBERT said the Committee met September 11 in Anchorage. They

approved a budget for FY2009 that included two new investment positions and money for salary increases. The budget also included funding for an audit of the actuary that SB 141 requires be done every four years. The Committee had a budget recommendation to the full Board, which will be taken up later in the agenda.

D. Defined Contribution Plan Committee

Committee chair SAM TRIVETTE said there is a one-page memorandum that summarizes what has been happening since February 2007 when the Board had a motion to go back to the default option that the ARM Board established in October 2005. That motion was tabled, and at the April meeting the Board established the Defined Contribution Plan Committee to look at the issues and come back with a recommendation for the default option for the defined contribution plans no later than the November 28-29 board meeting. The Committee is comprised of trustees Williams, Richards and Trivette, and trustees Harbo and Semmens have attended some of the four meetings that have been held so far. The Committee heard a presentation by Great-West, which manages the current default option selected by the Division of Retirement and Benefits. There were also presentations by T. Rowe Price on target date funds; by Callan Associates; by Dr. Bill Jennings; and by investment officer Zach Hanna of the Treasury Division staff. The next meeting is scheduled for October 31, following the Board's educational conference in Seattle. At its August meeting, the Committee also recommended that the ARM Board approve changes to the building block funds and the target date fund glide paths in the Supplemental Benefit System, and that the Alaska Target Funds be offered also in the Deferred Compensation Plan and the defined contribution retirement plans. That recommendation, along with all the backup information, will be on the agenda at the November board meeting.

E. Health Care Cost Containment Committee

Committee chair MIKE WILLIAMS reported that the Committee met on July 26 with all committee members present, as well as Commissioner Kreitzer. Notable guests were Commissioner Karlene Jackson from the Department of Health and Social Services, and the state's new chief medical officer, Dr. Jay Butler. The Committee received presentations from Premera/Blue Cross Blue Shield and Buck Consultants regarding national wellness and health care cost containment initiatives, as well as heard what the Department of Health and Social Services is doing to promote healthy lifestyles in Alaska. While the Committee recognizes that the Commissioner of Administration is responsible for health care plan design and implementation, the Commissioner expressed interest in receiving recommendations from the Committee, through the ARMB, on ways to improve the overall health of the participants as well as wisely spend the health care dollars. The Committee heard about various initiatives regarding disease management and wellness programs that could be specifically tailored to the Alaska Care Plan. The Division of Retirement and Benefits has been reviewing the membership and claims data with the third party administrator to draft an action plan regarding health care costs and containment strategies. The Committee recognizes that the large volume of data will necessitate additional time to develop an action plan. Therefore, the Committee, through the Board, has no specific recommendation for the Commissioner of Administration at this time. The Committee commends the work of the Division of Retirement and Benefits and appreciates Commissioner Kreitzer's invitation to participate in this process.

F. Real Estate Committee

Committee chair LARRY SEMMENS that the Committee (Harbo, Pihl and Semmens) met September 10 in Juneau. They heard presentations by investment officer Steve Sikes and from Matt Johnson of Townsend Group. The Committee recommended adoption of the Real Estate Annual Investment Plan by resolution, as well as approval of the Real Estate Policies and Guidelines, both of which are on the agenda for Board action later this morning.

3. Chief Investment Officer Report

Chief Investment Officer GARY BADER reported on the following items:

- Barclays Global Advisors notified staff that the annual investment management fee on the Equity Index Fund in the Deferred Compensation Plan would be changed. There is $150 million of participants' money in this fund. The fee under the existing contract was five basis points, and the new fee is 2.5 basis points. Staff did not object to the change, and it saves the retirement fund about $37,000 a year.
- LaSalle Investment Management, a real estate separate account manager for the ARMB, could potentially exceed its real estate allocation due to a pending sale that requires expanding the building as a condition of the sale. MR. BADER asked the Board for authority to allow LaSalle to temporarily exceed their real estate allocation to assure completion of the sale, although that authority might not have to be exercised.

MS. HARBO moved that the Alaska Retirement Management Board authorize staff to have LaSalle Investment Management temporarily exceed their real estate allocation in order to facilitate the sale of 130 Greenwood in McDonough, GA. MR. TRIVETTE seconded.

The motion carried without objection.

- BlackRock provided notification of a management change. Ralph Schlosstein, a cofounder, plans to retire in 2008. There is a succession plan, and ARMB staff believes this is an orderly transition that occurs in the ordinary course of most businesses. So staff was not recommending any watch list action. Staff also believes that BlackRock's portfolio management is sufficiently removed from Mr. Schlosstein's day-to-day responsibilities that his leaving should not affect the ARMB investment returns.
- Barrow, Hanley, Mewhinney & Strauss, Inc., a recently appointed value equity manager for the ARM Board, announced the retirement of Rich Englander. MR. BADER said that Mr. Englander is not on the ARMB's portfolio team, and initially staff was not going to recommend watch list status for this management change. However, it is a change in the firm's senior management and may result in changes to the ARMB's investment team. So staff was requesting approval to put Barrow Hanley on the watch list because of a management change. He asked the Board to take action on several watch list recommendations once he had reviewed them all.

- Cadogan Management LLC reported the appointment of John Trammell as president of the firm in September. Mr. Trammell will work with Stuart Leaf, who has held the position of president and chief executive officer. MR. BADER said staff believes this is a positive addition to Cadogan and does not require placing the firm on the watch list.
- Staff recommends removal of LaSalle Investment Management from the watch list. The Board placed LaSalle on the watch list in September 2006 because Lyn Thurber changed from president to chief executive officer and then to chair. Staff has not seen any change in the culture of LaSalle over the past year.
- Staff recommends removal of Capital Guardian Emerging Market from the watch list, where they have remained for an extended period. Their investment performance now meets or exceeds the Board's watch list criteria.
- Staff recommends removal of Capital Guardian Non-US Equity Fund from the watch list, for the same reason listed above.
- Staff recommends removal of Lazard Global Fund from the watch list because their performance now meets or exceeds the Board's watch list criteria for getting off the list.
- Staff recommends keeping Lowe Hotel Fund on the watch list, where they were placed due to losing the person managing the hotel portfolio. Between then and now, Lowe lost their next manager of the hotel portfolio.

MR. TRIVETTE moved that the Alaska Retirement Management Board approve the watch list changes that staff recommended to the Board: Barrow Hanley on the list; removal of LaSalle, Capital Guardian Emerging Market, Capital Guardian Non-U.S. Equity Fund, and Lazard Global; and keeping Lowe on the list. MR. WILLIAMS seconded.

The motion passed by unanimous consent.

- Staff had notified the Board Chair in writing of changes in funding from different managers, either to raise money for pension payment distributions, or reflecting new cash inflows, or rebalancing the portfolio in order to stay within the Board's guidelines. All the changes are within the Board's authority given to the chief investment officer.
- Notification from the Securities and Exchange Commission (SEC) of entering into a cease and desist decree with Callan Associates, Inc. MR. BADER said today's was not the first report to the Board on this but was the conclusion. He read portions of the decree for the Board. This matter concerns an incomplete disclosure of a conflict of interest by Callan Associates, a registered investment advisor, in its Form ADV part 3. Although Callan disclosed in its Form ADV part 2 that it had a contractual relationship with the Bank of New York (BNY) that required Callan to identify BNY as its preferred or exclusive broker, Callan failed to disclose that it was receiving annual payments that were contingent on Callan clients generating a certain level of commissions from BNY, causing Callan's public disclosures to be misleading. As part of the transaction where Callan sold Alpha Brokerage to BNY, it entered into a service agreement wherein BNY agreed to pay Callan a specified amount per year for eight years, 1998 through 2006. MR. BADER said there are no penalties or fines assessed to Callan in the cease and desist order, and nothing that the ARMB did not

know about before. He said he had a copy of the cease and desist decree available for anyone who wanted to read it.

- Staff had advised Chair Schubert of their intent to engage Warburg Pincus as a private equity investment manager for the ARMB, under the authority granted to the chief investment officer by the Board earlier this year. Warburg Pincus is a well-established private equity group formed in 1966. It has about 350 employees, including 150 management professionals. It has nine offices globally, with headquarters in New York. MR. BADER said that staff and Callan both conducted due diligence visits to Warburg in New York. After reviewing the due diligence materials, staff has concluded, and Callan concurred, that a $30 million direct investment in Warburg Pincus is advisable. It is worth noting that Abbott Capital, the ARMB's gatekeeper for private equity, has also indicated its intent to invest $20 million of ARMB funds in Warburg. Staff intends to invite Warburg to address the Board in the near future.
- The investment management section at the Treasury Division has purchased FactSet software for internal staff to use to model the portfolios better and to do research in exploring other investment approaches. Staff have been trained.
- The education conference is scheduled for October 29 and 30 in Seattle. A diverse program has been compiled to advance the knowledge of Board members and staff alike. MR. BADER said that Chair Schubert asked him to invite the Alaska Permanent Fund Board trustees and some of their staff to the education conference.
- It came to staff's attention this week that some of the investment managers, Brandes in particular, may not have a tax filing agent in Taiwan. Staff will work on that.

4. Real Estate FY08 Annual Plan
Real Estate Investment Policies, Procedures and Guidelines

STEVE SIKES, State Investment Officer, made a presentation on the real estate fiscal year 2008 investment plan. *[A copy of the slides, which contain spreadsheets, graphs and other details, are on file at the ARMB office.]* He said the plan was presented in detail to the Real Estate Committee at its September 10, 2007 meeting.

MR. SIKES reviewed the purpose of real estate in the ARMB portfolio, which at June 30, 2007 represented 11.2% of the assets, or $1.8 billion. The two main reasons for investing in real estate are for diversification and inflation hedge purposes. Real estate has consistently provided an attractive real return, has low to negative correlation with the S&P 500 and the Lehman Aggregate Bond Index, and has relatively low volatility over time. Another attractive component of real estate is that a large percentage of the total return has been from income. Income is a more reliable component of total return than property appreciation over the long term. Lastly, compared to the other asset classes, real estate is very attractive on a risk/return basis. It offers the potential for higher returns due to the private market inefficiency and the value that can be manufactured by skilled real estate managers.

MR. SIKES gave a brief market update. Real estate returns in 2006 moderated somewhat from the

2005 levels but were still attractive at 16.6%. Through June 30, 2007, the NCREIF Property Index has returned just under 8.4%. This performance has been generated by a continuation of a couple of themes: (1) the low real interest rate environment and the low equity premiums in the marketplace; (2) continued strong capital interest from institutional investors; (3) the underlying economic production of the real estate properties has been improving so occupancy has been increasing, which has enable property owners to increase rental rates and improve income; and (4) cap rates continue to be low. But the weakness in the U.S. housing market and the subprime residential mortgage issues could change this environment.

MR. SIKES said the U.S. GDP has been positive, jobs have been added for some time now, which has supported real estate fundamentals. However, short-term forecasts of real GDP are generally below the 3% growth potential of the U.S. economy. The biggest threat out there right now for the U.S. economy is the housing market and how extensive the overall economic impact is going to be from that. The consequences of this are particularly acute regarding consumer spending because it represents two-thirds of GDP, and a lot of the consumer spending that has been generated over the past few years has been from home equity spending that came from the improving housing market. There have not been any noticeable price changes in the private real estate market yet, but if these conditions persist they are likely to affect commercial real estate, just as they will affect all asset classes.

MR. SIKES stated that the interest rate environment has been relatively stable, however, the Federal Open Market Committee on September 18 lowered the Fed funds target rate by 50 basis points, in response to the market liquidity issues and concerns over the U.S. housing market and the impact on growth. The interest rate environment is likely to change going forward. But as of yesterday, the U.S. Treasury 10-year nominal yield was 4.6% or approximately 2.3% real yield, the difference between the two being the suggested break-even inflation rate, which is 2.3%. This suggests that the market is not concerned about inflation going forward.

Using two graphs of risk measurements, MR. SIKES explained the possibility that investors in public and private real estate will have higher required returns going forward, which is likely to have a negative impact on commercial real estate valuations. He said a piece of good news in real estate is that generally speaking fundamentals are very strong across the four major property types. Office and industrial are at low vacancy rates and are especially low in essential business districts, office markets, and port markets for industrial (such as Los Angeles). The apartment and retails sectors are also relatively strong right now, but in certain markets they are experiencing some pressure in the apartment market from housing stock and condo supply coming back into rental inventory. The potential ramifications on consumer spending could eventually impact the retail sector and the property owner's ability to increase rents. Another positive factor about real estate is the continued maturity of the asset class and expanded interest by investors.

MR. SIKES listed the risks to real estate over the short term because of the current market conditions. The capitalization rates (the net operating income of a property divided by its market value) for commercial property are currently at historically low levels. The fundamentals are strong

right now, but strength and the growth is generally priced into current real estate values. The cost of debt capital is rising. The U.S. REIT (real estate investment trust) market has experienced a significant adjustment in 2007. The MSCI RMZ US REIT Index was down 10.3% through August 31, 2007, so a fairly negative move in the public real estate market. This is a cautionary flag for the private market, although historically there has been a very low correlation between the public and private real estate markets. The potential economic ramifications of the U.S. housing market are a great uncertainty right now, so that is a risk. All of this together is likely to reduce the transaction velocity of the commercial real estate market.

In terms of returns going forward, MR. SIKES said Cornerstone's data indicates the expected internal rate of return for core real estate is in the 7% to 9% range over the next five to ten years.

MR. SIKES next gave an overview of the ARMB real estate portfolio, broken into the major categories:

- Core separate accounts - $916 million, in 25 individual investments.
- Core open-end commingled funds - $328 million, a share in 281 investments in two large institutional mutual funds for commercial real estate. The funds give the ARMB portfolio access to the larger assets that the Board could not invest in through the separate accounts without taking significant asset-specific risk.
- REITs - $92 million, internally managed.
- Non-core commingled funds - $446 million, a share of 208 investments in 11 funds (10 of which are closed-end funds, meaning they have a finite life of five to ten years, after which the capital is returned to the investors).

Regarding performance, MR. SIKES stated that as of June 30, 2007, the real estate portfolio earned 21.0% net of fees. The three-year return was 19.1% annualized, and the five-year return was 15.5% net of fees annualized. Over all those periods the numbers exceeded the ARMB benchmark return, which is a composite of 90% the NCREIF Property Index and 10% the NAREIT Index. Another benchmark in the real estate policies and procedures is to exceed a 5% net real return over rolling five-year periods. In the early years of the portfolio it was below that target, but the return has exceeded that target for the last ten years.

MR. SIKES stated that the portfolio is well diversified by property type and by geographic location. There is also the concept of economic diversification, which measures whether the local economies where the ARMB is making real estate investments are well diversified. It does not matter whether the Board is invested in office, retail, apartment or industrial: if the local economy tanks, all property types are going to go down. Cornerstone performed an analysis of the economic diversification, and the conclusion was that the portfolio is well diversified on an economic basis. Also, the majority of the portfolio is in markets with high barriers to entry, meaning a lower threat of new supply coming onto the market. That is an appealing attribute, and Cornerstone's research indicates that those markets have outperformed other markets over the long term.

MR. SIKES briefly reviewed the history of the REIT portfolio, which he manages in-house. The

strategy is that 50% of the portfolio is invested in REITs with the largest market capitalization in NAREIT Equity Index weights. The other 50% is invested in REIT securities that have the deepest discount to NAV, with the idea that the public market will revert to their underlying private real estate value in the future. As of June 30, 2007, the trailing six-month return was essentially index-like. While the overall cumulative return at 44.86% since November 2004 is very attractive, the portfolio has underperformed the NAREIT Index by 2.56% over that period.

MR. SIKES explained that there are target weights established within the real estate portfolio: 60% for core and 40% for non-core. Currently, the portfolio is overweight core at 73.6% and underweight to non-core at 26.4%. The overall real estate portfolio is 11.2% of pension fund assets, above the Board's 10% asset allocation target but within the +/-4% bands established for this asset class.

Regarding the core separate account activity, MR. SIKES said it has been a relatively quiet year. LaSalle was the only advisor that had buy/sell activity. Consistent with the 2007 Real Estate Plan, LaSalle sold two industrial properties in secondary markets and are currently selling a third asset. LaSalle also invested in a two-story office building in Sunnyvale, California, which is considered a barrier to entry market.

MR. SIKES next reviewed the fiscal year 2008 real estate plan. He said the forecast is for real estate as a percentage of total pension fund assets to decline over the next five years from the current 11.2% allocation — assuming no new investments are made. The main dynamic is the return of capital from the closed-end commingled funds, because that capital is not automatically reinvested. The investor has to make a new commitment to the advisor's next fund. The other dynamic is the 60%/40% target to core and non-core strategies. The actual core number of 73.6% is expected to decline slightly in FY08 and FY09 as a function of the non-core closed-end capital being called. But as it comes back, the core number will start to rise again in FY10 through FY12.

The recommended strategy for the core category is to not add any new allocations, primarily because core at 73.6% of the real estate portfolio is overweight its 60% target. Advisors are being encouraged to continue selling non-strategic assets to take advantage of attractive prices. However, staff recommends two modifications to the current policies and procedures.

- The first is to remove the requirement that all investments when purchased have a three-year yield projection that exceeds the 10-year Treasury by at least 150 basis points. Initially, this provision was to ensure that the core investments produce strong income. Staff believes that the investments, because of their core nature, will produce a strong amount of income without this requirement. In today's market, the requirement has been a very prohibitive constraint for the ARMB real estate advisors for at least a year and probably longer. The concern is that in order to satisfy this requirement the advisors will be forced into secondary markets or properties that have higher risk (which typically come with higher income when purchased to compensate the investor for the higher risk). That is not necessarily consistent with what the Board wants the core advisors to do. The ARMB will continue to expect the advisors to meet the minimum 5% net real return over rolling five-year periods.
- The second recommended change to the policies and procedures is that the advisor

allocations be allowed to increase for any realized gains that are produced at the time of an asset sale, net of any realized or unrealized losses in other areas of the portfolio, subject to CIO approval. Currently, when an asset is sold, an advisor is only permitted to reinvest the initial capital and is not permitted to invest any appreciation that was realized. The CIO approval is recommended in order to acknowledge any unique circumstances at the time that might suggest that an advisor's allocation should not be increased.

MR. SIKES stated that the FY08 recommendations for the individual core advisors are essentially all the same — use the remaining allocations or proceeds from asset sales to invest in core properties in markets with high barriers to entry.

The recommendation for the non-core strategy is to continue making commitments to attractive real estate opportunities that complement the ARMB's current portfolio. Staff anticipates making about $300 million in capital commitments during FY08, most of which will be to existing real estate managers. New investments keep the capital invested in the closed-end fund environment. Staff will continue to look at new fund offerings, one of which is with INVESCO, a former advisor for the Alaska State Pension Investment Board (ASPIB). The relationship with INVESCO was terminated because the mandate was a value-added separate account, and the rules and parameters did not permit efficient portfolio construction. However, INVESCO did a good job for ASPIB.

MR. SIKES explained that the $300 million of new commitments recommended for FY08 is expected to bring the non-core allocation closer to its 40% target in FY09 and FY10. This also stabilizes the total real estate percentage of the pension fund at about the 11.5% mark over the coming five years.

MR. SIKES said no additional allocations to the REIT portfolio are recommended in FY08, other than what the CIO might determine are necessary for rebalancing the overall real estate allocation. Finally, a new delegation of authority to the CIO is recommended regarding giving advisors permission to reinvest sale proceeds including realized gains.

MR. SIKES indicated that the appendix included overviews of all the properties and funds in the portfolio, as well as a glossary of real estate terms.

DR. MITCHELL requested staff comment on the international real estate market. MR. SIKES said the international real estate market appears to be an area of great growth, in terms of more funds, more advisors, and more opportunities. The ARMB's approach to international is to have two advisors that are global real estate advisors. These are institutions that have a track record and a footprint that can evaluate the global risk/return opportunity and determine where the best locations are to invest. There are region-specific strategies, such as India funds, China funds and Brazil funds, where the universes for those managers are just those markets. If something bad happens in a market, the manager cannot go out of that market. So the global strategy that the Board has embarked on is the best approach.

MR. SIKES next summarized the proposed changes to the ARMB Real Estate Investment Policies, Procedures and Guidelines that were recommended by staff and the ARMB's real estate consultant:

- Minimum going-in yield requirement removed. (discussed earlier).
- Ability for a separate account advisor's allocation to increase by the amount of realized gains on a sale, less any losses that might exist on other properties or from prior sales. (discussed earlier).
- Adjust the diversification basis to reflect the greater of the projected real estate allocation or the target allocation. Currently, the policies and procedures have several constraints that the portfolio cannot exceed, and those limits are based on applying a percentage to the target real estate allocation. Because the current real estate allocation is slightly above the target and is projected to be above the target for the next few years, the constraints based on the target are more restrictive than they are intended to be.
- Adjust the appraisal cycle for the separate account assets from once every three years to a one-year cycle. The motivation is the increased focus on fair value in private markets in general, and an overall best practice trend. The CFA Institute global investment performance standards currently recommend annual appraisals, and typically recommended standards become required standards over time.

CHAIR SCHUBERT called a scheduled break from 10:35 to 10:48 a.m.

5. Consultant Evaluation of Real Estate Plan Diversification, Compliance and Performance Measurement

MATT JOHNSON with the Townsend Group, the ARMB's real estate consultant, appeared to present the portfolio and manager performance report. *[Mr. Johnson used slides, dated September 10, 2007, as part of his report, and these are on file at the ARMB office.]* He began by saying that the real estate portfolio is meeting its objectives. It has exceeded the return target of 5% net and net real returns over rolling five-year periods. It has outperformed the benchmark over the one-, three- and five-year periods. The portfolio has also provided competitive risk-adjusted performance versus its peers. The ARMB portfolio uses very low leverage, while some other funds in the peer universe take on significant leverage and have riskier portfolios. The real estate portfolio remains in compliance with all the investment policies, procedures and guidelines.

MR. JOHNSON reviewed the FY07 strategic objectives:

- That core advisors continue to focus on high quality properties in markets with high barriers to entry. Only LaSalle made any changes to the portfolio during the year, and they added an office property in Sunnyvale, California, which is in Silicon Valley, a high barrier to entry market. LaSalle also sold two industrial properties, one in Atlanta, Georgia, and one on Louisville, Kentucky. Those are considered to be non-barrier to entry markets, so that is consistent with that objective.
- Continue to make commitments to attractive real estate investments. The portfolio invested in the BlackRock Diamond Property Fund, Colony Investors VIII - a global opportunistic fund, and Cornerstone Apartment Venture III - focused solely on apartments.

- Perform additional analysis on adding global real estate securities as a way to enhance the overall portfolio. To date, ARMB staff has decided not to make an allocation to global real estate securities. The global REIT market is relatively new and still developing, and a number of countries are beginning to pass REIT legislation similar to that in the U.S. When investing overseas you are largely getting real estate operating companies, many of which are deriving a significant portion of their revenue from non-real estate related activities. Statistical data shows that there is not an overwhelming case right now on a diversification or volatility basis for adding global real estate securities. Townsend's view is that as the market matures over time there will be diversification benefits and the volatility in those markets will come down. But a region like Asia has experienced very high volatility over the last several years, due to the currency crisis as well as the SARS scare (international outbreak of a respiratory disease), etc.
- To allow the CIO to make investments or coinvestments with existing managers. ARMB did make one $50 million investment in Cornerstone Apartment Venture III.

MR. JOHNSON stated that the majority of the core managers outperformed the benchmark over the one- and three-year periods, with the exception of LaSalle, which was the only manager that did not exceed the NPI over three- or five-year periods. The non-core portfolio performed very well and generated a 44.1% gross return over the last year. The non-core investments are relatively new, so there has not been a lot of equity placed to date. Therefore, Townsend would expect those returns to come down going forward as more capital is called.

MR. JOHNSON reviewed a spreadsheet showing the remaining unfunded commitments, commenting that the portfolio has plenty of capital to take advantage of opportunities. Townsend sees some distress going on in the real estate market so there will be good opportunities for the ARMB non-core managers to take advantage of that.

MR. JOHNSON said that two open-end commingled funds make up approximately 26% of the core portfolio — the JP Morgan Strategic Property Fund and UBS RESA. Both outperformed the NPI (NCREIF Property Index) for the most recent year. The ARMB's REIT portfolio underperformed the NAREIT by about 40 basis points.

MR. JOHNSON next reviewed the core separate account manager performances:

- UBS - current market value $363 million, with $32 million left in their allocation. They have outperformed the NPI over one-, three- and five-year periods. The overall leasing for the portfolio is 95%. There is a net unrealized gain for the 12 properties in the portfolio of $10.4 million as of June 30, 2007. A minor issue is that the portfolio has underperformed the NPI since its inception, but it includes assets that UBS took over from PM Realty. Townsend is very satisfied overall with the performance of the UBS portfolio.
- LaSalle - current market value $253 million. This was the one account that had acquisition and sale activity in 2007. Townsend believes this transaction activity should benefit the portfolio because it added a supply constrained asset and removed two non-barrier to entry market assets. The one issue is that the portfolio has underperformed on the one-year, three-

year, and since-inception basis, so Townsend will continue to monitor LaSalle's performance.

- Cornerstone - current market value $215 million. This portfolio has outperformed the NPI for the one-year, three-year, and since-inception periods. There is a vacancy issue at 330 North Brand Boulevard. However, during Townsend's annual budget and management meetings with Cornerstone they were optimistic that the asset will move from its 82% occupancy up to 95% occupancy by June 2008.
- Sentinel - current market value $85 million, with $50 million left in their allocation. This has been the best performing separate account overall and has outperformed the NPI over the three-year, five-year and since-inception periods. It did underperform the NPI over the most recent one-year period. In the short term there is some expected repricing in the apartment market that could adversely impact Sentinel's portfolio. But over the long term Townsend does not see any major issues.

DR. MITCHELL asked if Townsend believed there was anything missing from the ARMB real estate portfolio when compared to other portfolios they consulted on. MR. JOHNSON replied that there is nothing missing, however, he has talked to staff about including some more leverage. That would be one way to diversify and decrease the exposure to the core assets. Unfortunately, because of the interest rate environment, the use of positive leverage is not as available as it was a few years ago. Townsend has been very bullish on international investment opportunities, and particularly Asia over the last three years, so the ARMB's adding Colony and Lehman Brothers investments were good moves, in their opinion.

DR. JENNINGS remarked that the idea of barrier markets has an intuitive appeal on the first order. He asked for comment on the second order appeal, if it is still there, because the ARMB is probably not the only institutional investor interested in barrier to entry markets, and that appeal might already be priced. MR. JOHNSON replied that there is some pricing, but there won't be near the same level of volatility that is seen in the lower barrier to entry markets. It is very easy for people to put up new product in lower barrier to entry markets like Denver or Atlanta, so the liquidity is not there when it is time to get out of an investment. But assets in CBD Manhattan are very attractive and will always continue to be attractive to core buyers.

MR. PIHL asked if Townsend has noticed any slips in the advisors' quarterly valuations. MR. JOHNSON said no. He added that the assets are going to start being appraised annually by a third party, so that would mitigate any impact of advisor valuations.

MR. SEMMENS inquired if LaSalle's underperformance was related to appreciation or income, or if it mattered. MR. JOHNSON said it is appreciation at this point. He explained that historically two-thirds of real estate returns have come from income and about one-third has come from appreciation. It has been the exact opposite over the last several years — the income stayed relatively the same, but there have been massive increases in appreciation due to the cap rates coming down. So LaSalle's assets are performing fine on an income basis, but they have not seen the same appreciation as some of the other markets.

6. Board Discussion and Action on Real Estate

MR. SEMMENS, as chair of the Real Estate Committee, moved that the Alaska Retirement Management Board approve Resolution 2007-28 which adopts the Real Estate Annual Investment Plan for fiscal year 2008. MR. PIHL seconded.

The roll was called, and the motion passed unanimously, 7-0. [Commissioner Galvin was absent from the room.]

MR. SEMMENS, as chair of the Real Estate Committee, moved that the Alaska Retirement Management Board approve Resolution 2007-29 which adopts the changes to the Real Estate Investment Policies, Procedures and Guidelines. MR. PIHL seconded.

MR. TRIVETTE asked if there was any down side to removing the minimum going-in yield requirement of 150 basis points over the U.S. Treasury 10-year yield for new acquisitions. MR. PIHL said it was a good rule in the early years of developing the real estate portfolio, but as things have matured it is prudent to remove the requirement and rely more on staff.

MR. BADER stated that he was chair of the Real Estate Committee when the previous Board decided to invest in real estate and helped draft the policies. His thought then was why would the Board want a real estate yield that did not offer a good premium to what the pension fund could get from a 10-year Treasury. So he did not give up the going-in yield requirement easily, but he was persuaded that the change would provide the real estate portfolio with more diversification.

At MR. TRIVETTE's request, MR. SIKES explained that the policies contain maximum exposures to different classifications of real estate. The numbers are mathematically applied to the target real estate allocation, which is 10% of the pension fund. But the real estate portfolio is actually 11.2% of the pension fund now and is expected to be above the 10% target going forward. So to calculate a maximum exposure based on the 10% target is more constraining than it is intended to be. The recommended change is to apply the target or the actual allocation, whichever is larger, when calculating maximum exposures.

On a roll call vote, the motion passed unanimously, 7-0. [Commissioner Galvin was absent from the room.]

On behalf of the Real Estate Committee, MR. SEMMENS thanked Mr. Sikes and Mr. Johnson for their efforts.

7. BlackRock Realty

BlackRock's EILEEN BYRNE, Managing Director, and PETER McNALLY, Senior Portfolio Manager, presented a report to the Board on the BlackRock Diamond Property Fund that the ARMB

invested in. *[BlackRock's slide presentation is on file at the ARMB office.]* MS. BYRNE first gave a quick overview of the BlackRock organization and services. She said the firm is known for the strength of their research and the way they integrate the research, the portfolio analytics, and portfolio construction. They are also known for being able to actually execute acquisitions once they have a strategy. As an example, she described how a couple of years ago BlackRock determined that New York City was going to be an area they wanted to overweight because they believed it was going to significantly outperform the nation. So every portfolio manager looked at their portfolios to see how they wanted to execute a New York strategy and sent that shopping list out and got the acquisition and joint venture platform working to actually implement those acquisitions. New York City is a market that is notoriously difficult to make acquisitions in, but BlackRock was able in an 18-month period to move quickly and implement its New York strategy.

MS. BYRNE next addressed BlackRock's view on real estate and capital market conditions. In general, the U.S. market today is quite mature in terms of its position in the real estate cycle, and the returns have peaked. The U.S. is just behind the U.K., which is the most mature market globally. Europe, Asia and Australia are still in the growth phase. BlackRock has been anticipating and planning for this portion of the cycle. Pricing risk has increased in the market and is probably now the most significant risk they see. BlackRock has about $2 billion of real estate that they are selling, and they are still seeing that the market is liquid — investors and buyers are able to get financing. They are seeing no significant slow-down in pricing, and certainly no major retrading. But they have seen a not unexpected movement in cap rates in the U.S., and cap rates are up about 25 basis points so far this year, which is well within the margin. BlackRock is expecting a total of about 75 basis points of movement in cap rates, so they believe there is still more to come. They are building that so far on a base of strong market fundamentals in the U.S. and globally, where demand is still strong and supply is relatively controlled.

MS. BYRNE said this cycle has not gotten into an oversupply mode in any form of real estate. It is a result of the very high cost of construction and the inability of rents to support that new construction so far. Although apartments and retail nationally appear to have peaked in terms of rent growth, they are still seeing rent growth in office and industrial. They are still seeing some markets in the U.S. continue to outperform, and BlackRock has been focused on those large major markets for the last couple of years at least, especially the business-to-business markets (as opposed to markets that are driven by demographic growth and housing). New York City, Los Angeles, Washington, D.C., San Francisco and Seattle are examples where BlackRock is focused, rather than Dallas, Denver, Atlanta, and Orange County. This is BlackRock's conscious strategy to avoid the worst impact of any down turn. Their expectations of the possibility of impact on demand have risen. They are in the camp of investors who think there is about a 40% chance of a recession. But the fundamentals at this point continue to be sound in the market.

[Commissioner Galvin was excused at 11:25 a.m. and was absent for the remainder of the day.]

MS. BYRNE described what BlackRock anticipates in terms of the impact of the subprime "influenza" on the real estate market. They are looking at three major probability scenarios for

evaluating the subprime situation - low, medium and high. Low would be the equivalent of Y2K, medium being similar to the long-term capital event in 1998, and high being like the 2000-2001 dot-com bubble. BlackRock believes things have already passed the low scenario, which would be a temporary blip with no impact on pricing. The probabilities are now focused primarily on a medium scenario in the markets, meaning a return to more normal spreads in the capital markets. Under a medium scenario, the impact would be about a 10% decline in real estate pricing in the spot market. The spot market has been outpacing appraised values, so in most portfolios the appraised values are 5-7% less than the spot market would have them. So in markets where the appraisal lag is about 7%, a 10% drop in spot market pricing would result in about a 3% drop in actual values on the books. It is not actually showing up in pricing yet, but the response of appraisers to what is going on in the market and how dramatically they move in this quarter is going to be significant to watch.

MR. McNALLY thanked the Board and its staff for the trust they have placed in BlackRock, and the Diamond Property Fund in particular. He provided an overview of the Diamond Fund - BlackRock's flagship, open-end, value-add real estate product. The fund is about $2.5 billion in size and holds about 60 properties. It is moderately leveraged with a current loan to value of 58%. There are two over-arching themes for Diamond Fund: (1) focus on high-quality properties, and (2) growth investment strategy. They look for waterfront or water-view properties, or something where there is a central business district location and a mispricing opportunity or a value-creation opportunity. Unlike some value type funds that go into out-of-favor markets that are cheap, the Diamond Fund is looking for demographic growth, income growth, and value growth.

Regarding the subprime capital market turmoil, MR. McNALLY stated that the Diamond Fund is in good shape and is having no stress right now. There is no subprime exposure in the fund, no margin calls, and no recent acquisitions that they regret in light of the turmoil that has ensued over the last few months. Cash reserves are close to a billion dollars, so they see the market environment as an opportunity that they will exploit.

Reviewing the second quarter and year-to-date returns, MR. McNALLY said the Diamond Fund would like to see the one-year return in the high teens or possibly 20% for 2007. The portfolio is positioned for outperformance, in light of the capital markets.

MR. McNALLY said the Diamond Fund investment process is focused on markets that are more knowledge-based economies, more business to business, and that tend to be higher income. These markets are often high barrier to entry where it is difficult to construct new buildings. He went into detail about the Fund's sub-strategies:

- The New York strategy: the rental market is underserved, so Diamond does aggressive renovations and repositioning in locations and buildings where they believe there will always be strong demand.
- The L.A. boulevard strategy: buying well-located smaller apartment buildings in cool, hip neighborhoods off the boulevards - Melrose, Whilshire, Santa Monica, Hollywood - because there is a strong demand from upper income residents, and renovating the buildings to the Los Angeles look and lifestyle.

- Distressed owners strategy: they believe there will be more stress on the market in the future.

MR. McNALLY stated that today the Diamond Fund is looking for the stress points in the capital markets. BlackRock is an active seller across its platform, and there is still a fair amount of liquidity in the market from advisors, private owners, etc., but it has slowed down. So the Diamond Fund is not seeing the stress yet in the traditional asset purchase side, but they are always looking for the easy money, if there is an imbalance between buyer and seller. Right now that is in the B-note and mezzanine debt market. They are finding very attractive properties that they believe are low risk and would produce mid to high teen returns. The Diamond Fund will be deploying $100-$200 million of capital in the coming 30 to 60 days in this space. Regardless of what happens with the economy and the capital markets, they do not think these opportunities will be long-lived because the investment banks will have to get these loans off their books, and these banks are not originating any new loans. So there is a real mispricing, and the typical structured finance players do not have the liquidity to buy these opportunities.

MR. McNALLY said that BlackRock is looking for signs that the debt market is stabilizing, and they have not seen that yet. When that comes, that will be their cue to re-enter the asset purchase market. The Diamond Fund is well positioned, and they believe it will outperform.

MR. BADER commented that Eileen Byrne served the ASPIB for several years as its real estate consultant, after which she moved to the Townsend Group and then later on to SSR Realty, which became part of BlackRock. He said some in the room have a long relationship with Ms. Byrne and a deep respect for her ability in the real estate field. He said that BlackRock was on today's agenda to demonstrate to the Board the type of manager that staff tries to select when the Board grants the discretion. He related that on his and Steve Sikes' visit to BlackRock's offices, they were impressed with Peter McNally's intellect and experience but especially by his competitive nature when he was describing going after desirable properties. MR. BADER said that staff believes their confidence in BlackRock will be rewarded over time and hopes the Board will appreciate the selection of this manager.

CHAIR SCHUBERT said that she was glad to see Ms. Byrne working for the Board again in a different capacity, and that she had a lot of confidence in Ms. Byrne's abilities. She wished her well in her future endeavors.

MS. BYRNE stated that the Alaska pension fund has been a big part of her professional career, and she has been pleased to watch the growth of the fund and the excellence of its investments over the years.

LUNCH BREAK

CHAIR SCHUBERT recessed the meeting for lunch at 11:55 a.m. When she called the meeting back to order at 1:15 p.m., Trustees Trivette, Harbo, Kreitzer, Pihl, Semmens, Williams and Schubert were present.

REPORTS (Continued)

8. Update - SBS Plan Fund Change

Deputy Commissioner BRIAN ANDREWS thanked Bob Mitchell, Zach Hanna, Mike Barnhill, Rachael Petro, Pat Shier, Great-West and Barclays for making the transition out of the State Street Government/Corporate Bond Fund in the Supplemental Benefit System Annuity Plan (SBS) as smooth and professional as it came off. The Board's quick action saved the participants quite a bit of money because the Govt/Corporate Bond Fund was completely liquidated on September 5, 2007 at a price 5.65% lower than when the ARMB got out. The Treasury Division has received both positive and negative phone calls from SBS participants after the State Street Government/Corporate Bond Fund termination. Some common themes in the phone calls were: (1) what action was the Alaska Department of Law going to take to recover losses; (2) why there was no money market or short duration fund in the SBS; (3) confusion about what the Stable Value Fund is; and (4) some confusion about why there are two bond funds (the income fund and the government credit fund) in the selection. MR. ANDREWS said the Board might want to look at providing a money market fund option for SBS participants. He asked everyone to keep any notes they might have written, in case the Department of Law needs them in the future.

MR. TRIVETTE thanked staff for their handling of the whole process.

COMMISSIONER KREITZER said the state may hear more public reaction because people will get their next account statement in about three weeks. She said the Division of Retirement and Benefits is prepared to deal with the next wave of calls at that time.

[Commissioner Kreitzer excused herself at 1:21 p.m.]

Assistant Attorney General MIKE BARNHILL stated that the Department of Law is reviewing transaction data that Great-West supplied, in an effort to establish precisely how much money was lost. He said he did not want to say anything further without going into executive session.

MR. TRIVETTE moved that the ARMB go into executive session to discuss matters that may have immediate financial impact on the fund, or alternatively to discuss attorney/client privileged communications as well. MR. SEMMENS seconded.

The motion passed on a voice vote, 6-0. [Commissioners Kreitzer and Galvin were out of the room, and Tom Richards was absent.]

The Chair asked staff and the IAC members to remain, that the recording devices be turned off, and that everyone else leave the meeting room. The Board met in executive session starting at 1:24 p.m.

When the Board reconvened in regular session at 1:47 p.m., CHAIR SCHUBERT stated that no

action was taken in executive session. Commissioner Kreitzer rejoined the meeting again at this point.

9. Timber Manager Review

MR. BADER stated that IAC member George Wilson previously gave the Board a presentation about investing in timber. The Board considered investing in timber when it reviewed asset allocation in March 2007. At its April meeting, the Board authorized Callan Associates and staff to conduct a manager search for a potential investment in timber. Timber was understood to be part of the "Other" asset category that the Board approved. The "Other" asset category currently contains some farmland and some energy investments. At one time, TIPS (Treasury inflation protected securities) were going to be included in the Other asset category. But at a subsequent meeting the Board moved the TIPS allocation (0.5%) to its own separate allocation for the Public Employees' Retirement System (PERS) and the Teachers' Retirement System (TRS), and the Other category was reduced to 2.5% of total pension fund assets.

MR. BADER briefly reviewed the manager search process. He said that he and Steve Sikes visited five of the semi-finalists, and he and Bree Simpson visited one, to do due diligence on the firms. The basic investment thesis for timberland is to look for a 5% real rate of return over the long term, that the investment class has low correlation with stocks and bonds, and that it is a good hedge against inflation. After the due diligence work, staff believed that five of the six were excellent investors. But they think that the two managers invited to talk to the Board are the best combination to invest in.

MR. BADER gave a summary of Hancock Timber Resource Group and Timberland Investment Resources LLC *(which is contained in staff's September 26, 2007 action memo in the meeting packet).* He said that if the Board approved the selection of Hancock and Timberland Investment Resources after listening to the presentations, staff was recommending that the Board hire them for $100 million separate account timberland mandates, subject to successful fee negotiations, policy and procedure development, and contractual legal review. The mandate would be for the U.S. only, and there would be no leverage on the accounts. Staff might later explore a commingled fund to get some international timberland exposure.

CHAIR SCHUBERT commented that the Board has been hearing from timberland managers periodically over the last 15 years, so she wondered why now was the right time to invest. MR. BADER said he did not necessarily think the Board should do this because it was the right time but because it was the right thing to do for the long run. Timberland seems to be a very popular asset class with a lot of other institutions, although he does not necessarily want to be part of the pack. He said he recalled that the ASPIB considered this asset class at one time, approved proceeding to investment, and then later on decided not to pursue it and to do other investments instead.

CHAIR SCHUBERT indicated that was her recollection as well. She asked what would happen if a forest's growth was stunted or it died off because of climate change or a forest fire. MR. BADER

replied that that illustrated why the ARMB would want to diversify firms and why the firms diversify the investments by location. He explained that staff asked about fire during the due diligence process and was told that timber is too expensive to insure, and that geographic diversification is the answer. The firms said that they do not experience large percentage losses of the portfolio, but there will be losses of that nature. Timberland is also an asset that, if the market is not particularly good, the trees can be left to grow and increase in value and be harvested when the time is right in the market.

[Tom Richards arrived at the meeting at 1:50 p.m.]

MR. BADER stated that the asset class has traditionally given a 5% or better real rate of return over the years, and that is what a pension fund is looking for. Timber will not be the greatest returning asset class, but it is an asset class that will be an anchor to windward if and when public markets start to decline.

MR. WILLIAMS remarked that timber was a longer-term investment, so he wondered how it would fit into the overall portfolio, given the expected ever-increasing demands on cash flow from the retirement funds. MR. BADER stated that staff looked at the cash flow projections from Buck Consultants, and the funds were going to grow past the year 2020 before they started to decline. The growth would come from a combination of contributions and investment earnings, minus benefit payments. So in the aggregate there is more than ten years of pension obligation to pay. Timber is not all that illiquid and can be sold, but not in a day like stocks and bonds. He said he did not think the pension fund was in any liquidity jeopardy with the timberland asset class any more than with real estate. Later in the meeting, staff will be presenting to the Board an asset allocation for the health trust, and that asset allocation does not have any real assets in it (real estate, timber or farmland).

9(a). Hancock Timber Resource Group

TIM CAYEN, Director of Business Development, and COURT WASHBURN, Chief Investment Officer, spoke to the Board about Hancock's management in the timber asset class. *[A copy of the Hancock Timber Resource Group presentation slides is on file at the ARMB office.]*

MR. CAYEN said he was a forester who started with Hancock in 1993, and now he spends most of his time educating people about the timber asset class.

MR. WASHBURN stated that he was a forest economist by training and began work at Hancock in 1990. As CIO, he oversees portfolio management, client relations, equity capital raising, and economic research activities.

MR. CAYEN gave an overview of Hancock Timber Resource Group, which is a division of the Hancock Natural Resource Group and owned by Manulife Financial Corporation. Manulife is a strong supporter of the timber asset class and has invested a fair amount of money in an individually

managed account. Hancock is the largest timberland investment manager and also started about when the asset class began in 1985. They manage close to $7 billion of timberland across every region in the U.S., as well as assets in Australia, New Zealand, Canada, and Brazil. The firm is vertically integrated, meaning they have their own foresters, their own research group, as well as the investment professionals. There is a full alignment of interests from the foresters right through the investment people. Most of the investment people are forestry professionals with business backgrounds. Of the 300 employees, the vast majority of them are the foresters operating the assets on the ground. Performance over time has been very good.

MR. CAYEN stated that Hancock is looking to develop a core domestic timber portfolio for the Alaska pension fund, with no use of leverage.

MR. WASHBURN listed the key investment strategies that Hancock uses to boost returns and manage risk of the timberland portfolios:

- Diversification among geographic regions.
- Acquiring large properties, often in relatively complex structures, that they believe lessens competition and allows them to acquire timberland at a lower per-acre cost than if they were acquiring smaller timberland properties.
- Forest management is done internally at lesser cost than if they were employing third parties.
- Use prudently intensive forest management to boost the growth of the forest plantations.
- Pay a lot of attention to forest stewardship. Hancock's properties are certified as being sustainably managed according to recognized standards of sustainability by third-party auditors.
- Active portfolio managers. They have sold over the past decade about $3 billion of timberland properties, more than most managers have purchased.
- Try to base investment decisions on sound research activities.

MR. SEMMENS asked what a "large" acquisition was in dollar terms. MR. WASHBURN said generally $500 million-plus up to $1.5 billion. He added that Hancock can acquire those large properties for portfolios that might be $100 million in size because the timberland properties are often comprised of numerous scattered tracts that can be divided into smaller ownership units that largely mimic all the characteristics of the larger transaction. So Hancock might buy a $500 million timberland property and divide it into five ownership units. One unit might be $200 million in size that could go to a $1 billion portfolio capable of taking that big an investment. Another piece might be $25 million in size that would be more appropriate to a portfolio of $100 million. The smaller properties are divided so that they are smaller mirror images of the larger acquisition so that all the investors are treated fairly. The divided parcels are all priced to generate the same rate of return so that no investor is paying more for their property than any other investor. Hancock is able to acquire that $25 million property at a lot lower per-acre cost, as a piece of a $500 million acquisition, than if they were buying that $25 million property on a stand-alone basis.

MR. WASHBURN stated that the bulk of the investable timberland universe is in the United States — the South, Northwest, and the New England states. A quarter to a third of the investable universe

is located outside the U.S. Diversification makes sense because timberland in different regions is producing different timber products that are sold into inter-related but at least somewhat distinct markets. So the returns for timberland property in the U.S. South do not move in lock-step with the returns for timberland property in the U.S. West. Hancock can diversify between regions and generate a given target return with less risk than if they were focusing on any one region in isolation.

MR. WASHBURN explained that a lot of Hancock investors begin with a core U.S. portfolio, with a geographic mix of 50% targeted for the U.S. South, 40% targeted for the U.S. West, and 10% targeted for the U.S. Northeast. After they establish a core portfolio, some investors will look to complement it with some exposure outside the U.S. That can boost returns a bit and reduce risk a bit, as well, but really the key diversification is diversifying between the U.S. major timber producing regions.

MR. WASHBURN stated that besides Hancock's own foresters providing the best possible forest management, they can add value by deferring timber harvests when the cycle is low and storing timber on the stump at very little cost. Having foresters on the ground also enables Hancock to participate in a variety of university research co-ops. Some co-ops specialize in tree-breeding activities, so this gives Hancock access to the latest technologically advanced and improved seedlings that grow fastest on particular sites.

Responding to a question from MR. PIHL, MR. WASHBURN said that Hancock may purchase some leases as part of a large ownership that gives rights to harvest timber on land that is held by some private individuals. That is the closest Hancock comes to landowner assistance activities.

MR. CAYEN stated that as a very large landowner Hancock is not only managing timber but other resources, such as water quality, fisheries, wildlife, and landscape. They have independent certification in the U.S., Australia and New Zealand that they are managing the properties in a sustainable manner. Hancock works cooperatively with various environment groups to make sure their activities are not degrading the properties.

MR. CAYEN explained that portfolio results come from harvesting timber, which has averaged 3-6% annually, and from Hancock selling land. They sell for four reasons: (1) ongoing operational sales - they may sell small parcels close to recreational areas for higher and better use opportunities and at a profit; (2) portfolio rebalancing - regions can get over-valued, and they do an annual hold-sell analysis of the properties; (3) closed-end fund liquidation, and, (4) to meet client cash requirements. All the properties are independently appraised annually, and every three years Hancock tries to rotate appraisers to get different views.

MR. CAYEN reviewed the Hancock U.S. timberland returns compared to the NCREIF index for timber, pointing out that Hancock has done very well relative to other firms managing timberland in the U.S. He said that Hancock has probably added 100+ basis points of return on the acquisition side, 50-100 basis points on the management side, and then 100-150 basis points on making the right decision of when to sell. A combination of all those things has turned out well for Hancock over the

20-plus years they have been involved with the asset class.

MR. O'LEARY said the wholesale purchase of a large property that can be divided is great because it give an investor diversification within a region quickly and at a reasonable price. But the one negative he saw, using Hancock's example, was that the $25 million piece would be very much a minority relative to the $500 million combined property. He asked what sort of flexibility existed if, because of the pension plan's condition, it needed to exit the area in seven years, and the other investors in the property had no desire to sell.

MR. WASHBURN replied that Hancock's preferred strategy is to create distinct ownership units for different investors. So the smaller $25 million property that was created as part of a larger $500 million acquisition is a distinct set of acres that is owned only by the $25 million investor. It is easily large enough to be managed as a stand-alone ownership unit. So the same foresters in the region may be overseeing the $25 million property as overseeing the rest of the acquisition, but its ongoing management from that point forward is not constrained by it being originally a piece of the larger acquisition opportunity. Oftentimes, investors can have different objectives, so after Hancock has created the distinct ownership units they may be managed with different constraints - say, cash flow requirements. When it is time to liquidate the smaller $25 million unit, the disposition is not constrained at all due to it being part of the larger acquisition.

MR. O'LEARY asked how Hancock apportioned the cost of the purchase among the divided properties. MR. CAYEN said the cost is pro rata at the time the large acquisition is separated into units. Once a unit is defined and has its own title and is in the ARMB portfolio, then Hancock manages that property independent of the others. However, they may try to leverage the market scale to get higher prices for the wood or lower costs for fertilizer. It is in Hancock's contracts that the property management costs are at or below market. They get independent review on their costs and fees, and they can provide the ARMB with the result of that at the end of the year. Hancock is usually 10-20% below on costs, which, hopefully, helps generate more favorable type returns.

MR. SEMMENS said his concern was that it was up to Hancock to decide a fair allocation of a large property, but apparently that works well or Hancock would not be able to attract any new clients. He asked if there was a range of returns among the clients.

Regarding fairness of subdivision, MR. CAYEN said they have data on all the tracts that make up an acquisition, and before they actually allocate it to the individual client accounts, they have third party review of the parcelization fairness. There is a formal policy for the dividing process. There may be differences within the acquisition itself, because sometimes Hancock does not have the same appraiser appraising all the properties, but over the years, the valuations among the properties are very, very close. The differences in appraised value can occur because of the parcel size, because there might be some higher and better use, but the spreads are rarely that big. If Hancock's process did not work, they would not be using it today.

About the range of returns, MR. WASHBURN stated that in 2006 the portfolios returned about 5%

to 30%. But there are some investors who invest only outside the U.S. For example, a client may only be invested in Australia. Hancock has only one large investment in Australia, so if Australia generated 5% in 2006, the client's portfolio would earn 5%. Some investors are invested only in the U.S., a few others focus on just part of the U.S. If you were to discard the tails of the range and look at the investors who had a core global domestic performance, he guessed the range of returns would probably be 15% to 25%. The variation in performance would come more from different geographic targets and, to some extent, different vintages of acquisitions, and not a lot owing to Hancock's parcelization strategy.

MR. CAYEN said another piece of that is the use of leverage. Hancock has some accounts that are levered as high as 50%, while a host of accounts are at zero. All those factors play a role, so it is hard to make an apples-to-apples comparison. The best way is to look at how properties that were parcelized performed over time, and that is a fairly tight range.

ROB JOHNSON said he understood that the ARMB would possess the title to a particular tract of property, and the performance on that land would take into account Hancock's ability to fairly manage it and also presumably take into account the actual performance of the growth on the "shady side of the gulch." MR. CAYEN confirmed that the performance was based on what the property produced and how Hancock managed it.

MR. WASHBURN stated that sometimes, owing to operational constraints, Hancock is not able to employ the parcelization process, so they can create acquisitions where different participants own shares of an undivided interest in a property. So the rule is to parcelize and allocate particular acres to portfolios, but maybe 10% of the U.S. ownership is comprised of properties that are jointly held by several investors. MR. CAYEN said the ARMB would have that flexibility when designing its timber program with Hancock. The key points Hancock can work with the ARMB on are the geographic location, the use of leverage, and whether the Board wants to be in any shared operating type company with other investors. Portfolios can be designed in many different ways.

MR. PIHL said he assumed most of the holdings were not old growth. MR. CAYEN said the properties were second and third growth and were primarily plantations. By policy, Hancock is not looking to buy or cut old-growth timber.

MR. PIHL commented that large timber companies, at times, tend to sell timber holdings. He asked if Hancock would look to acquire those. MR. CAYEN stated that historically most of the acquisitions in the U.S. have come from other timber type companies. Outside the U.S., acquisitions have come from timber companies or governments that have privatized. For example, New Zealand has privatized its forestland, and Australia has started that way. Timberland comes from a variety of holders. There is a transition in the U.S. from timberland being owned primarily by forest products companies toward institutional investors like the ARMB. That has created more trading in the market, which has supported some of the appraised values. On the sell side, they are selling back to the forest product companies, loggers, mill owners, individuals, conservation groups, or other institutional investors — a deep type market.

MR. TRIVETTE inquired if the risk for the high end of the 5%-30% return range that Mr. Washburn mentioned was that much greater than for the portfolios getting the lower returns. MR. WASHBURN stressed that that variability was in the performance for a given year, such as 2006. The variability for annualized returns in portfolios over the last ten years would be tremendously lower — more on the order of 10-15% for core portfolios in the U.S. Specifically to the question, the variability in a one-year return is probably more owing to random chance as opposed to risk differences of the core portfolios. It could just be the vintages of when properties were acquired.

MR. CAYEN stated that an investor wants to be diversified by geographic region, if nothing else. That is the key, because there is relatively low correlation between the different regions. Markets may be great in the West and down in the South, so diversification has tended to reduce the overall volatility through time. The portfolios that have done the best over the longer term are those that tend to be the most geographically diversified.

Referring to the 10-year after-fee return of 8.8% reported on page 3 of the Hancock slides, MR. RICHARDS commented that if returns can vary by 10% from year to year then obviously there were years where the return was less than 8.8%. He asked if that would be due to market fluctuations, and how much disease or forest fires come into play.

MR. WASHBURN explained that returns were below average in 2000, 2001 and 2002, probably less than 5%, and those three years dragged down the 10-year return number. There has since been a rebound, and returns are at what he would characterize as more normal levels. The decline in 2000-2002 was owed to weak timber markets, which dragged down timberland values. He also clarified that the variation statement that he made earlier was not the standard deviation of returns, it was the actual range of performance. The spread between the lowest performing portfolio and the highest performing portfolio was only about 5%, if the analysis was confined to the diversified core portfolios, which is the bulk of what Hancock manages.

MR. CAYEN stated that there are three risks in the timber asset class. Timber price is 80-90% of the risk, not knowing what prices will be three, five or ten years down the road. The second risk is volume risk - disease, fire, changes in the law about what they can harvest. That risk is very low. The risk of fire is less than one-half of one percent. Part of the reason is that the portfolio is diversified, but even within a property it can be hundreds of miles from one end to the other. The last risk is asset value or liquidity risk - can you sell the properties for the price on the books. That was a bigger risk ten or fifteen years ago when there was not as much transaction activity to support the values. A lot of the overall risk can be mitigated through the regional diversification, and Hancock spends a lot of time on the hold/sell/buy analysis.

CHAIR SCHUBERT thanked the gentlemen from Hancock for their presentation.

9(b). Timber Investment Resources LLC

MARK SEAMAN, President and Chief Investment Officer, and TOM JOHNSON, Client Services Director, appeared before the ARM Board to present their firm's timberland management product for consideration. *[A copy of their slide presentation is on file at the ARMB office.]*

MR. SEAMAN said he was in this business since 1977 and started Timber Investment Resources (TIR) in 2003. The privately owned firm currently manages just over $500 million in timberland assets, and the directors have over 20 years of experience each. TIR is horizontally integrated, meaning all the acquisition, management and disposition decisions, and support comes from inside the firm — foresters on the ground, forest economists, biometricians conducting forest science in-house and harvest scheduling, etc., and real estate professionals to actively manage the land. TIR has an intensive screening process in reviewing properties and historically has only acquired about 10-11% of the opportunities they look at.

MR. JOHNSON reviewed the management team at TIR before describing the investment strategy. Their goal is to put together a portfolio of middle-market properties to capture inefficiencies in both timber and land that offer long-term potential for timber growth and asset management. Properties will be located in the Southeast, Eastern U.S., and Pacific Northwest.

MR. SEAMAN stated that over the last 16 months TIR has put to work about $200 million for a separate account investor, within the middle-market transaction arena. TIR looked at close to 60 opportunities before selecting six suitable transactions for the $200 million portfolio.

MR. JOHNSON, with comments from MR. SEAMAN, went into detail about the six elements of TIR's investment strategy:

- An analysis of all the investable regions globally. Opportunity is not limited to just the United States. They have a viewpoint based on their analysis that is driven by economic research in-house. They look at how developed the markets in the different regions are and how cost competitive the markets are, because the commodity (wood) can be sold globally. They look at mill capacity to see if is stable or growing. They look at availability of timberland for purchase because some areas may be attractive but the marketplace is very thin — that means limited opportunities and escalating prices. Lastly, they look at the legal and regulatory environment in those regions. TIR likes the Southeast, Northeast, and Pacific Northwest, based on the criteria they use and based on the determination of their economic research.
- They focus on the middle market within these regions, which are transactions in the $10-$125 million range. The average cost of transactions is lower in this range, and the prices vary a lot more than they do within the bigger property range. That means the potential for mispricing that TIR can capture. Also, many competitors are not focused in the middle market, so TIR can exploit overlooked opportunities. In the 1970s and 1980s, it was large transactions that brought a premium. The forest product companies, the paper companies and saw mills were putting together large timberland bases. Since they had a mill in a particular place, they wanted to acquire timberland within 100 miles of that mill. That flip-flopped going into the 1990s, when timberland investment management organizations (TIMOs)

began to start up. Small amounts of capital came into the market, and smaller transactions actually were more sought after in the market. Into the 2000s, things have flip-flopped again to large transactions being desirable for the bulk of investors. This is because the forest products industry is getting out of the land business so they are offering large transactions. And there is a lot of capital chasing those transactions. While that has been going on, TIR has been playing under that "radar," in the middle market transaction level, where they have had tremendous success for their investors.

- Targeting markets with strong potential, both from a timber as well as land perspective. TIR's in-house economic research finds out where the mills are located, what the long-term supply and demand characteristics indicate, and where TIR should be positioned. Timber is very heavy and can only be hauled about 100 miles economically. So mills compete against each other within a 100-mile range, and that constitutes a timber market setting the prices for that market that is relatively independent of a market 200 miles away. So even within the South, there are over 20 timber markets. Timber land has two characteristics: it is the engine that allows the trees to grow, and it can be used potentially for other things. As population density of an area increases, the land is less likely to be used to grow timber. Mills can be located in areas drawing timber from land that is in the path of progress or where the demographics change the value of the land. The population of the U.S. is growing, and the demand for housing will increase over time. And that will continue to drive demographic change.
- Looking for timber that has high productivity. The growth difference between plantation and natural stands of timber can be significant. Management increases biological growth in some cases as much as 50%. TIR looks for properties where they can influence the management to drive that biological growth. While their focus is on softwood plantations, where they can make the most impact, they will also incorporate some hardwood holdings to add product diversity and reduce portfolio risk. Returns for softwood saw timber and hardwood saw timber are not highly correlated.
- Investment gains through intensive timber management. Research has shown a difference of 500 basis points in return a year between planted stands allowed to grow on their own and stands that have been managed intensively. A typical 500-acre property that TIR would buy may have 20-30 different stands on it. TIR manages each of those stands on an individual basis, no matter what the size of the stand. They know that if they can maximize the return on each stand, they can maximize the return for the portfolio. The challenge to do that is coming up with the optimal management prescription for each stand. TIR will typically run growth and yield models over 300 times to figure out which is the best one for each stand.
- Integrating the land management program with TIR's internal real estate and higher and better use expertise, in order to understand the land's value and maximize those values.

MR. JOHNSON next presented the three primary stages to build, develop, and ultimately liquidate a portfolio. To acquire assets, TIR looks to forest product companies, private landowners (a major holder of commercial timberland), and third parties who may be aware of individuals or organizations that are in the market to sell timberland. TIR leverages its management team's contacts developed over the past 20 or more years. TIR's management team has a history of honesty and

integrity in dealing: when they go to contract with a seller, they deliver.

MR. SEAMAN stated that when TIR does a deal with a private landowner, it is almost always a private transaction rather than an auction or a bid. They have found that when they pursue a deal, they get better terms. TIR has a lot of contacts with private landowners and their agents. They believe this had led to a lot of their success in placing money in the middle market arena over the last couple of years.

In closing, MR. JOHNSON drew attention to the TIR performance to date (slide 23).

MR. O'LEARY commented that sometimes return numbers look too good to be true, that TIR had its best year when it first started up. He asked what happened there, and what TIR considered a sustainable return objective.

MR. SEAMAN explained that TIR bought all the deals with the goal of getting low teen performance, but they did better than that. He attributed that to TIR's approach to management in that they are very aggressive in looking at every part of a property — land, timber, location — and having their own people on the ground and in the marketplace daily so they see opportunities as they come up. The third contributor to performance has been a very good land market, and they have capitalized on that. He guessed that half the reported return is coming from the land and the other half from the timber side.

MR. JOHNSON stated that underwriting at 9% to 11% nominal return, net of fees and expenses, is what they feel comfortable with. He added that if they were to continue with returns in the 20%-plus range that would be terrific, but that is not what they are anticipating. The land markets are outside TIR's control, but they have been strong in Georgia, Tennessee, Texas, Virginia and South Carolina - many of the markets in which TIR currently owns property.

MR. TRIVETTE asked for the percentage of return that is based upon the sale of timber versus the sale of the land. MR. SEAMAN replied that historically about 60% of the return comes from the timber side, which includes the growth and management of the timber. The effect of timber pricing adds another 10-15% of the return attribution. TIR looks for an additional 10-15% to come from the performance of the underlying land. Any residual comes from miscellaneous income, such as hunting leases. MR. JOHNSON stressed that some of the recent year returns have been impacted by favorable land markets and other factors that he does not believe are necessarily sustainable.

MR. TRIVETTE inquired if the ARMB would be buying specific pieces of property in different locations, and who would decide that. MR. SEAMAN stated that TIR wants to construct a portfolio of non-contiguous properties across the country. The focus will be in the Eastern U.S. because they believe those markets have the strongest potential now, but as properties comes up as potential acquisition candidates, TIR screens those down to a smaller list, which he envisioned TIR would share with the ARMB staff. TIR wants the staff to understand how the portfolio is constructed, understand the valuations associated with the individual properties, and how each acquisition will

contribute to the overall building of a diversified portfolio. The diversification will be by location, by timber product, and by age and species of trees.

MR. BADER clarified that staff intended for the timber manager to have full discretion with the portfolio. Similar to several of the ARMB's private investments, staff will receive information about the manager's intent and might from time to time question what the manager is doing.

MR. O'LEARY commented that there are advantages to being a small company, but there are also disadvantages. TIR is a new company with a total of 15 employees. He asked about the sustainability of the entity should something happen to one of the management team.

MR. SEAMAN explained that when building the company he chose to be top heavy with experienced people from the beginning. The risk is that there is a lot of cost in doing that, but he can delegate and trust these people with major decision-making, as part of the investment committee. That was the only way to build sustainability, as well as bring in the skills and experience to create the investment performance that TIR is after. As an example, when he travels, there are people who step in and continue the decision-making on a day-to-day basis.

CHAIR SCHUBERT called a scheduled break from 3:23 to 3:46 p.m.

9(c). Board Discussion and Approval

MR. BADER drew attention to data showing that over the history of the timberland asset class the NCREIF Timber Index return has had one down year since 1987. He said it is time for the pension fund to get a little bit more defensive in its asset classes by taking on this sort of asset class that is likely to be an anchor to windward in the markets going forward. Even if the public markets are not unfavorable to the pension fund in the future, the history of timberland returns is very strong.

MR. BADER said the two managers that staff brought to the Board represent differences that are complementary, in terms of the needs of the ARM Board. Timber Investment Resources is an aggressive, young firm that staff expects will do very well. Hancock Timber Resource Group is the biggest manager in the industry. Both firms have better than NCREIF Index returns, although the TIR record is short. But the quality of the people at TIR and their experience indicates that they have a good probability of continuing the success that they have already started.

MR. BADER said staff was recommending that the Board allocate $100 million each to Hancock and TIR for the timberland asset class. If the Board needs to begin liquidating these investments in the future, there is a market for these properties, although it is not possible to get out the next day. He related that Dr. Mitchell told him that Massachusetts PRIM recently got out of the timberland asset class when they had the opportunity to make a lot of money by selling the whole portfolio.

MR. RICHARDS asked if staff had any concerns that a $100 million investment with TIR would represent one-fifth of their total assets under management. MR. BADER said that he was not

concerned because the TIR people are very seasoned investment managers. He also thought that one of TIR's largest investors is another public pension fund that probably represents the bulk of their assets under management. TIR has demonstrated the ability to invest $500 million very successfully. He said that staff also believes that if something were to go awry at TIR's top layers of management, the ARMB would also have Hancock, the biggest manager in the industry, and they could take over a separate account almost instantly.

MR. O'LEARY reported that the size and stability of TIR was one of the points that the Callan internal search committee considered. The committee counted heavily the prior experience of TIR's management at Wachovia, because Wachovia was highly regarded as a timber manager, and they had success managing well over a billion dollars. It is not as if this is TIR's first time through the process. He said Callan also understood that several other accounts may end up making allocations to TIR. So the percentage that the ARMB's $100 million allocation would represent as a proportion of TIR's future asset base would still be substantial but a lot less than now. Callan believes that TIR has the infrastructure to support the investment of the portfolio.

MR. PIHL remarked that most of his career was spent on forest production and harvest, and timber grows, which is a big factor in the real estate part of it.

MR. PIHL moved that the Alaska Retirement Management Board hire Hancock Timber Resource Group and Timber Investment Resources each for $100 million separate account timberland mandates, subject to successful fee negotiation, policy and procedure development, and contractual legal review. MR. SEMMENS seconded.

When prompted by the Chair for any IAC comments, DR. MITCHELL stated that he was enthusiastically in favor of the motion. He said timber is a useful part of a well-diversified portfolio, and Hancock and TIR are capable. He confirmed that the Massachusetts pension fund, which began its timber investments in 2001 and got up to $1.6 billion, was virtually out of the asset class now because the fund got a great bid. He guessed that eventually Mass PRIM would get back in.

DR. JENNINGS said he, too, supported the proposed Board action. His concerns about TIR related to the firm's size, but he thought their market positioning in the middle market is useful for the ARMB going forward. The two managers complement each other nicely, so the combined package is a good proposal.

Roll call vote
Ayes: Harbo, Kreitzer, Pihl, Richards, Williams, Semmens, Trivette, Schubert
Nays: None

The motion passed unanimously, 8-0.

10. Investment Actions

10(a). Equity Guideline Revision - Resolution 2007-30

MR. BADER reported that the Board last approved updates to the Investment Guidelines for Domestic and International Equities in February 2006. He said staff is recommending two changes to the guidelines:

- Amend the rating restriction for convertible securities. Since convertible securities are essentially buying a right to convert them to common stock, the credit rating is less important than it would be for an investment grade bond portfolio.
- Clarify the proxy voting and notification, which has been a bit confusing to the investment managers. Language that required managers to notify the ARMB prior to voting any security if ownership is at least 3% of the portfolio has been removed because it is difficult to provide prior notification. If the Board should want to take a position on a proxy vote for a large company, it could communicate that to staff, and staff could notify the manager of its intent to take over the proxy voting, at least temporarily. The Board's will could be accomplished in that fashion, rather than the reporting process in place now.

MR. TRIVETTE moved that the Alaska Retirement Management Board adopt Resolution 2007-30 approving the revised Investment Guidelines for Domestic and International Equities.
MS. HARBO seconded.

MR. WILLIAMS commented that proxies are just as valuable an asset as the underlying security, and it is the ARMB's opportunity as shareholders to have some say in the direction of the company. He asked for Mr. Bader's opinion about ceding authority over to the portfolio managers to vote the proxies rather than having a policy statement from the Board about how proxies should be voted.

MR. BADER stated that the ARMB invests in Russell 1000 Index funds, so it is possible of having as many as 1,000 securities in that index that issue proxies. The Treasury Division would have to take on staff to do that task. He said the ARMB could leave that authority with the index manager, but he did not disagree with Mr. Williams that proxies are a valuable asset and need to be protected and not treated casually. The current policies require investment managers to have a voting policy in place and to vote those proxies in the best interest of the Alaska pension fund. The amended policy is telling the investment manager to go ahead and vote a proxy even if it is 3% of the portfolio; the reporting is almost after the fact anyway in most instances. That is why staff is suggesting saving everybody a lot of time by doing away with the requirement to report it to the ARMB first.

On a roll call vote, the motion passed 8-0. [Commissioner Galvin was absent.]

10(b). Explore Mezzanine Debt & Emerging Market Debt Managers

MR. BADER requested authority for staff to engage Callan Associates to conduct a due diligence review of fund managers for mezzanine debt and emerging market debt that could be good fits for the ARMB. He explained that currently if a fund comes to staff, and staff does due diligence on it, but the fund is going to close shortly, staff has to wait until the next board meeting to get authority to

have Callan do the research. Then it would be the following meeting before the Board could take action on that fund. The point of the request is to make sure the funds that look the most attractive are available to the ARMB in a timely fashion.

MR. WILLIAMS moved that the Alaska Retirement Management Board authorize staff to engage Callan Associates to review managers with mezzanine debt and emerging market debt mandates following a staff review and recommendation. MR. TRIVETTE seconded.

MR. RICHARDS inquired if this would be an ongoing review of this type of debt fund. MR. BADER replied that the request was for two funds that are coming up. He left it up to the Board to indicate whether the authority to engage Callan would continue beyond Callan researching those two funds. He added that the continuing authority would be a valuable tool for staff, and staff would report to the Board when they used that authority.

MR. O'LEARY explained that these situations are typically closed-end funds that may be put together to respond to unusual market circumstances. At the moment, there are a host of funds being assembled to try to take advantage of some of the problems that occurred in the debt markets in July and August. These funds are literally being assembled in a three-month period, from start to finish, which is the time period that investors have to evaluate the potential investment. Normally, a manager search process takes a couple of months before staff reaches the point of making a recommendation to the Board. In this situation, staff is looking at funds that may be investing in some illiquid instruments, almost as part of the private equity type of component of the portfolio. If a fund appears interesting, staff might want to take it to the next stage, which is what they are requesting authority to do.

MR. SEMMENS asked if there was a dollar amount attached to Callan's fund review. MR. BADER stated that the Board's contract with Callan sets the search fee. MR. O'LEARY added that a full manager search fee is $25,000, but it would be less than that if Callan is just looking at an individual one-off investment.

MR. SEMMENS stated that he had no problem with this particular request, but he also had no objection if Mr. Bader were to propose that he be given continuing authority to do searches of this type, if there were a certain dollar amount or other sort of reasonable limit attached.

MR. BADER indicated that he could bring a detailed proposal for ongoing authority to the Board at its next meeting.

The motion carried unanimously, 8-0.

10(c). Fund Changes - T. Rowe Price

MR. BADER stated that this action item came to the Board with a recommendation from the Defined Contribution Plan Committee after they heard a presentation by T. Rowe Price. Staff has

been discussing these changes for a long time, and Ms. Hall researched glide paths of leading target date funds and presented the information to the Committee.

T. Rowe Price also proposed changes to improve sector allocations in the building block portfolios. The changes more closely reflect the market cap profile of the total U.S. equity market, as well as reflect a more global economy. T. Rowe Price recommended: (1) replacing current large cap and small cap building block portfolios; (2) changing the allocation to non-U.S. stocks; (3) increasing flexibility to invest in emerging markets; (4) expanding the fixed income investment opportunity set to include all sectors that are part of the Lehman Brothers U.S. Aggregate Bond Index and replacing the current Govt/Corp and GNMA building block portfolios; (5) changing the investment asset allocation glide paths of the Alaska Target Funds offered in SBS; and (6) offering the Alaska Target Funds to SBS, Deferred Compensation Plan, and Defined Contribution Retirement Plan members.

MR. TRIVETTE moved that the Alaska Retirement Management Board approve the recommendation of the Defined Contribution Plan Committee changing the building block funds and target fund glide paths, and offering the Alaska Target Funds to SBS, Deferred Compensation, and Defined Contribution Retirement Plan members.
MR. RICHARDS seconded.

MR. SEMMENS asked if the changes needed to be communicated to the existing Alaska Target Fund participants. MR. BADER said yes, that this would have to be coordinated with the Division of Retirement and Benefits. There should be ample notice to existing participants so they can adjust their portfolios if they see fit.

MR. TRIVETTE recalled that Dr. Jennings had provided his comments to the Defined Contribution Plan Committee to the effect that it was time for the Alaska Target Fund glide paths to move into the 21st century. DR. JENNINGS said that the presentations at both the Committee and Board level support that the proposed changes are pulling best practices into those funds.

The roll was called, and the motion passed unanimously, 8-0.

10(d). Audit Actuary RFP

MR. BADER reported that the statute created by SB 141 requires the Board to contract for an independent audit of the state's actuary not less than once every four years. The Legislature wanted to be as certain as they could be that the information coming from actuaries was correct. The actuary firm in place, Buck Consultants, was contracted in October 2005. He said staff was recommending that the independent audit be done during fiscal year 2009. This item was part of the ARMB budget that the Budget Committee approved.

MR. SEMMENS moved that the Alaska Retirement Management Board direct staff to prepare a Request For Proposal (RFP) for an independent audit of the state's actuary to be conducted during FY09, and that funding for such audit be included in the FY09 ARMB budget. MR. TRIVETTE

seconded.

MR. PIHL said he thought the Legislature was going to hire its own actuary. COMMISSIONER KREITZER said he was probably recalling a discussion in which she reported that the Legislature had access to Buck Consultants during consideration of SB 123 and SB 125. Her concern was that in the future the Legislature is going to have to hire a separate actuary if legislators want to run scenarios with regard to legislation. The Department of Administration was caught between a rock and a hard place toward the end of the session, and she felt that if the department did not cooperate that the whole PERS and TRS fix was going to fall apart.

The motion carried without objection, 8-0.

11(a). Defined Benefit Plan Retiree Healthcare Trust Agreement
- Resolution 2007-31
Defined Contribution Plan Retiree Healthcare Trust Agreement - Resolution 2007-32

MIKE BARNHILL reported that the two resolutions are designed to comply with Internal Revenue Service (IRS) requirements that healthcare monies in a pension system be kept separate from pension monies. At the June meeting, the Board approved creation of a retiree healthcare trust agreement with the Department of Administration for the new defined benefit healthcare trust account. Since then, the Treasury Division has identified an accounting need to establish separate PERS, TRS and Judicial Retirement System subaccounts in the new health trust account. Outside tax counsel, Ice Miller LLP, has advised that the healthcare trust agreement that the Board adopted in June be revised to explicitly provide authority to establish those subaccounts. Further, Ice Miller has prepared a similar agreement for the new defined contribution plan healthcare trust account to accommodate the different accounting needs within that trust.

MR. TRIVETTE asked if the Board approves the healthcare trust agreements that permit creation of subaccounts, and later it is found that one subaccount needs more of the money than another subaccount, if the money would be transferable. MR. BARNHILL said he understood that, until passage of SB 125 which would transforms the PERS system to a cost-share system, each employer will have two contribution rates - one rate for pension and one rate for health. All the monies that the PERS employer contributes for health will go into the healthcare trust account, and all the monies that the PERS employer contributes for pension will go into the pension account. So there needs to be a subaccount in the healthcare trust for the PERS monies and a subaccount in the TRS healthcare trust for TRS monies. He did not see any way of transferring money between the TRS, PERS and JRS subaccounts. If there needs to be more money in those subaccounts, then the employer contribution rates need to be adjusted.

MR. BADER stated there are attorneys, accountants, and investment officers involved in accounts, funds and trusts. He anticipated that although called subaccounts, they would be as independent as if they were called different funds or even different trusts. Assets of PERS, TRS and JRS would not be mixed, or if they were, they would be unitized in a way allowed for by statute.

MR. SEMMENS said he has been concerned about these allocations. There is a history involving the retiree reserve account that shows that sometimes things can go amok. His only concern at this point is that any allocations be carefully done and documented, whether they be investment earnings or costs. He said that, unless he misunderstood how it would all be done, the ARMB does not escape certain allocation processes that could be eliminated if there were separate trusts so there would be no question about the costs that are associated with the PERS trust and the TRS trust. When the monies are put together and invested as one, there will be certain allocations that have to be made. That is not necessarily bad, but that was what led to the problem with the retiree reserve account. He asked Mr. Barnhill to draw a circle chart to illustrate how the irrevocable trusts relate to each other.

MR. BARNHILL stated that in the PERS defined benefit plan there are two trusts - the pension trust and now the new health trust. Each PERS employer will have two rates under SB 123 - the pension contribution rate and the health contribution rate. For example, all the monies the City of Kenai contributes as part of its employer contribution will be segregated into pension and health. Those monies will go into the respective trust accounts. Under SB 123, one health trust account was established for PERS, TRS and JRS. There probably should have been three separate health trust accounts established in statute. Ice Miller has suggested doing it by virtue of agreement that there will be three subaccounts in the overall umbrella health trust account - the PERS subaccount, the TRS subaccount, and the JRS subaccount.

MR. WILLIAMS commented that, from an accounting viewpoint, the same issues of allocation exist whether there are three separate trusts or three subaccounts in one trust. There is no need to create three separate trusts if everyone recognizes the three subaccounts within the healthcare trust, and there is accurate accounting of the monies going into each of the subaccounts.

MR. SEMMENS said that, regarding the agent multiple employer PERS plan that exists now, he understood that any monies that are going in there on Kenai's behalf are going to be tracked all the way through until such time that SB 125 or its equivalent is passed that changes it all to a cost-share plan.

COMMISSIONER KREITZER stated that she understood that the Division of Retirement and Benefits would have to keep separate books all along. MR. SHIER added that until SB 125 becomes law, the Division is continuing the process of separate accounting. Using the valuation that Buck Consultants brought to the table last year, the Division is segregating pension and healthcare for the purposes of accumulating enough cash to make sure that there is money to pay healthcare costs going forward.

MR. ANDREWS said that there is a real need for separate accounting on this in case there is authorization to issue bonds next year to pay for the unfunded liability. Separate accounting is also necessary in case there might be a cash input to TRS and not to PERS.

MR. PIHL asked about the effective date of the retiree healthcare trust agreements. MR.

BARNHILL said it was July 1, 2007.

MR. BARNHILL explained that this is all part of an effort to come into compliance with the Internal Revenue Code. Once all the agreements are adopted, Ice Miller is planning an approach to the IRS this fall to seek IRS approval for the segregation of the healthcare and pension trusts.

MR. WILLIAMS moved that the Alaska Retirement Management Board adopt Resolution 2007-31, establishing the Alaska Defined Benefit Plan Retiree Health Care Trust Agreement and amendments thereto.
MS. HARBO seconded.

MR. TRIVETTE asked if the definition of "medical benefit" on page 2 was broad enough to cover everything that needs to be covered. MR. BARNHILL said it was absolutely broad enough.

The motion passed unanimously, 8-0.

MR. RICHARDS moved that the Alaska Retirement Management Board adopt Resolution 2007-32, adopting the Alaska Defined Contribution Plan Retiree Health Care Trust Agreement.
MS. HARBO seconded.

Referring to page 2 of the resolution (definitions), MS. HARBO noted that major medical was not mentioned. She asked if there was a separate major medical account established for each person, because major medical is based on individual salary.

MR. BARNHILL stated that Section 2.01 on page 3 lays out what monies get deposited into the defined contribution plan trust fund, including contributions made under AS 39.35.750(b), which is the major medical.

MR. SEMMENS asked for clarification about whether there is one healthcare plan or more than one. MR. BARNHILL replied that under the defined contribution plan there are multiple healthcare plans. He said he understood there is a health reimbursement arrangement, and then there is the contribution for major medical — and there could be more.

On an outcry vote, the motion passed unanimously, 8-0.

11(b). Asset Allocation - Health Trust Fund - Resolution 2007-33

MR. BADER briefly reviewed the history of the ARMB adopting an asset allocation of 100% cash for the retirement health trust at the June meeting. Now that there is more information about the trust, including that there is $300 million-plus already deposited in the account, staff believes it is important to have an asset allocation that is not just cash. Staff worked with Callan Associates to come up with an asset allocation that is very similar, in terms of its return and risk characteristics, to that of the PERS and TRS funds. The investments for the retirement health trust will be in highly

liquid securities to facilitate the accounting and the marking to market of fund values. Staff is not suggesting that in the long run it is not preferable to have real estate and other less liquid asset classes. However, until there is feedback from the IRS and so on, staff believes this is the appropriate asset allocation because it is all liquid.

MS. HARBO moved that the Alaska Retirement Management Board adopt Resolution 2007-33 approving the revised Retirement Health Trust Fund asset allocation. MR. PIHL seconded.

MR. O'LEARY explained that, in preparing this asset allocation, staff and Callan reviewed the memorandum provided to Mr. Shier by Buck Consultants regarding the expected cash flows into and from the retirement health trust. That figured importantly in assessing the potential aggressiveness of the asset allocation policy. The key feature is that there is a net inflow anticipated for many years, and then the outflow is comparatively minor relative to the size of the fund. In addition, staff and Callan recognize that there may be substantial changes, and the flexibility that Mr. Bader noted in dealing with the liquid markets is important. One of the key assumptions that Buck outlined in their memo was an expected return of 8.25%, which is the same as that for all the other actuarially determined retirement programs. Just as with all the other asset allocation policies, the expected rate of the return based on Callan's capital market assumptions is slightly below that. The difference (between Buck and Callan) may be attributable to differences in expected future inflation rates.

MR. RICHARDS said Mr. O'Leary may have answered his concern about the zero allocation to cash, given that the retirement health trust pays the medical bills. MR. O'LEARY said that there is more money coming into the trust in the early years. MR. RICHARDS commented that the problem that resulted in SB 141 was really about rising healthcare costs and a loss to the retirement funds. He asked if Mr. O'Leary saw a turnaround in that healthcare cost trend that would make the asset allocation okay.

MR. O'LEARY replied that the question was appropriate for the actuary, because the actuary is charged with projecting the future liabilities. Callan is saying that to earn 8.25% the asset allocation policy has to be pretty aggressive, but he felt uncomfortable having more than 70% of the portfolio invested in publicly traded equities. The policy's 7.99% expected return is very similar to the expected return of the Judicial System, the health care reimbursement arrangement, and the death and disability component, so there is plenty of precedent for it.

MR. BADER reminded the Board that there is another retiree health account at the Department of Revenue that is a hold-over from when premiums were sent to that account. Draw-downs are about $25 million a month on a $200 million balance, so there is about eight months from the beginning of the program until the retirement health trust will be needed to make medical payments. The account at Revenue is invested all in cash, so there is even more of a cushion than the cash flows that Mr. O'Leary described in terms of protecting the fund.

On a roll call vote, the motion passed unanimously, 8-0.

RECESS

CHAIR SCHUBERT recessed the meeting for the day at 4:45 p.m.

Thursday, September 27, 2007

CALL BACK TO ORDER

CHAIR SCHUBERT called the meeting back to order at 9:00 a.m. All nine trustees were present.

REPORTS (Continued)

12. FY09 Budget Review / Fund Financials

Deputy Commissioner BRIAN ANDREWS introduced Scott Jones, the Assistant State Comptroller, who joined the Treasury Division in the spring.

MR. ANDREWS mentioned that the Sharpe ratio numbers of the ARMB portfolio are all positive, meaning that the added value was through good investment results and not a lot of risk taking. He said that at the end of FY07 the state's pension plans totaled about $16 billion. Actual expenditures for FY07 were $33.2 million. That means it cost the ARMB 21 basis points to manage every $1,000 of pension assets, which is a good comparative rate. Stripping out the investment management and custodial costs leaves 3 basis points of operational cost to run the assets.

MR. ANDREWS stated that $10.8 million from the FY07 budget authorization was lapsed, and while that was the cushion for investment management fees and custodial fees, it was a lot of money to lapse. The FY08 authorized budget totals $49.8 million, an increase of $1.5 million over the FY07 actual expenditures. He stated that there is enough money for the personal services cost increase in the FY08 authorized budget. ARMB personnel expenses are shared with the general fund component of the Treasury Division budget, and typically that is a 65% ARMB/35% general fund split.

MR. ANDREWS said that the FY09 proposed budget is held constant to the FY08 authorized, with two exceptions — personal services, and a $300,000 request for the required audit of the actuary. Treasury is requesting two additional positions, an equity investment officer and another fixed income investment officer. As the ARMB does more and more private equity and alternative investments, it is important to bring on an equity investment officer to continue the high level of due diligence that is needed in those asset classes. There are also plans to bring more management in-house, which would save outside manager fees. The ARMB's fixed income investments are

managed in-house, and the investments are still in traditional bonds. The trend is toward more derivatives, and it is important to bring in someone with expertise in the derivatives market. In a meeting with the Office of Management and Budget, the Governor's Office recognized the personnel problems within state government, and they are working to resolve them.

MR. ANDREWS gave a brief update on the cost allocation program review. He also indicated that he wished to give a deputy commissioner's report at each board meeting, including a budget variance update.

CHAIR SCHUBERT stated that the Budget Committee met and made a recommendation to the full Board to adopt the FY09 budget.

MS. HARBO moved that the Alaska Retirement Management Board adopt the fiscal year 2009 proposed budget as provided. MR. TRIVETTE seconded.

COMMISSIONER KREITZER inquired if there was an offset in the budget for projected investment manager fee savings by bringing some asset management in-house. MR. ANDREWS replied that he wanted to get the new equity investment officer position established before taking any more asset management in-house, but the savings could be as much as 10 basis points.

MR. TRIVETTE recalled that the Treasury investment group took over more fixed income management when the Board terminated BlackRock.

MR. BADER said that action brought over one billion dollars in-house, and he thought there was an offset in last year's budget. He added that the potential for more in-house investment is not so much bringing things that are done outside now internally, but investments that staff plans to do in the future. Enhanced cash, for example, and the TIPS component that was added this year without any offset in the budget. The portfolio is growing and there are more contributions, so the in-house management does not necessarily offset investment management fees, because the new plans are invested in TIPS and things of that nature. Staff is bringing activities in-house almost every month in the sense that the assets under management are growing, and he feels that the investment section needs more support.

COMMISSIONER KREITZER stated that she was going to vote no on the FY09 budget so the administration can deal with personal services holistically.

Roll call vote
Ayes: Trivette, Williams, Pihl, Harbo, Richards, Semmens, Schubert
Nays: Kreitzer
Abstain: Galvin

The motion passed 7-1, with one abstention.

MR. ANDREWS next briefly reviewed the July 31, 2007 financial reports that were included in the meeting packet.

MR. PIHL noted that the net contributions and withdrawals number was positive by $125 million in July, and he wondered if that was because of the state's contribution to the pension systems.

MR. ANDREWS said he would get the answer to that question.

13. Performance Measurement as of June 30, 2007

MICHAEL O'LEARY of Callan Associates, Inc. presented the performance of the ARMB's asset classes and various managers for the quarter and fiscal year ended June 30, 2007. Important highlights of his report are as follows:

- The Treasury yield curve was inverted in the June quarter, in that the short end of the curve was higher than the intermediate and long end of the curve. Rates had declined across the curve from June 2006. The June 2007 quarter was not a good quarter for bonds because interest rates rose substantially during the quarter.
- There was a striking difference in performance during the year between stocks and bonds. Domestic equities were up over 20% and bonds made 6.1%. However, it was not a bad year for bonds relative to the prior recent years.
- International stocks continued to outperform U.S. stocks for the fiscal year, in part attributable to currency (the decline of the dollar). Over ten years, the returns for domestic and international stocks are essentially the same.
- For the fiscal year, large capitalization stocks, as measured by the S&P 500 Index, have outperformed small cap stocks, as measured by the Russell 2000 Index. But over the longer periods, small cap stocks still have a return edge.
- Using the Russell style indices to measure, value style stocks have outperformed growth stocks by a lot for a protracted period. If the Board were looking at the same graph in 1999, it would be 180 degrees different.
- Real estate returns in recent years have been extraordinary. A bigger portion of the return has come from appreciation, and the yield component has declined, both in a relative sense and an absolute sense.
- The only significant variance between the actual asset allocation of the portfolio and the target at June 30 was international equity being overweighted. In part, this is attributable to market action. Bonds went down and stocks were up strongly in the June quarter, and international stocks have been very strong. The only asset class that is significantly underweighted is domestic fixed income. Real estate is overallocated, mostly attributable to its strong performance.
- The median domestic equity exposure in Callan's public fund database was just under 43%, while the ARMB's target is 36% and the actual allocation at June 30 was 36.12%. The ARMB also clearly has lower fixed income exposure than the median fund. That means in a quarter where the bond market does well and the stock market tanks the ARMB portfolio's

relative performance compared to others in the universe will appear poor - and the converse, which fortunately has been the case. About half the public funds in the database have a dedicated allocation to real estate, but some funds group real estate with other asset categories. The ARMB actual international equity allocation at June 30 was right at the median. Only 44% of the public funds in the database had a distinct alternative investments category, and the ARMB allocation of 10.54% is comparatively high. The ARMB alternative category includes private equity, absolute return, and other.

- The total fund returned 4.54% for the June quarter, which was great performance and better than the target return of 4.11%.
- PERS earned 18.87% for one year, and TRS returned 18.92%, versus the target index of 16.99% (these numbers do not reflect the final real estate numbers). Callan will provide final numbers, as well as an after-fee performance report, prior to the next meeting. Some asset classes did better than others, but across all the asset categories the performance was consistently better than target. There were no conspicuous challenging areas, and that is unusual.
- The private equity return of 28.74% for the year reflects the values as captured by the custodian bank, State Street. The great return is showing the benefit of having meaningful private market exposure. Annually, Callan does a separate review of private equity performance, which is a far superior view in terms of looking at the internal rates of return by manager and by vintage year, etc.
- The total domestic fixed income portfolio return of 6.19% was better than the custom benchmark return of 6.12%.
- International equity carried the day at 30.20% for the fiscal year. Compared to other public funds, that is right at the top of the heap. Many other public funds do not have as great a commitment to emerging markets as the ARMB. That clearly has been a very positive factor. Also, the active equity managers have done better than their benchmarks, and that has added a lot of return.
- The large cap domestic equity pool at 20.88% for the fiscal year outperformed the S&P 500 return of 20.59%. This is an area that had been lagging, but it is now a tad better than the index return. The new value managers were added during the last quarter, so there is not a full quarter's results. Looking behind the numbers, Callan believes the flexibility that the Board gave to staff to use stylized index funds as rebalancing tools has been an important contributing factor to the improved large cap performance.
- The small cap domestic equity pool managed to outperform the small cap index for the fiscal year, 16.86% versus 16.43%.
- The internally managed fixed income portfolio returned 6.24% for the year against the Lehman Aggregate Index return of 6.12%. The in-house portfolio also outperformed for the June quarter, down 47 basis points as opposed to the index's decline of 52 basis points. The return has been superior to the index for all the cumulative periods up to ten years.
- The internally managed REIT portfolio was down in the last quarter because the REIT sector has been very weak, but the portfolio did not go down as much as the index. A large part of that outperformance is attributable to the value tilt embedded in a significant portion of the portfolio.

- SBS and Deferred Compensation portfolios - 10 out of the 14 investment options met or exceeded their targets for the trailing 12 months. Those that lagged were primarily the silo options. The most notable laggards were Citizens Core Growth Fund and T. Rowe Price Small Cap. Fortunately, both of them seem to be showing signs of improvement. The State Street Government Credit Bond Fund underperformed for the June quarter and for the fiscal year. The significant underperformance occurred subsequent to June 30, which prompted the Board to terminate the fund in August. It was replaced with an index fund. The State Street S&P 500 Index Fund is right on target. The T. Rowe Price Stable Value Fund is also doing well. The Brandes International Fund (mutual fund) has not done as well as the Brandes portfolio for the retirement systems. Part of that is because of fees, because retail mutual fund fees are higher. But there are also other differences, although that is not inconsistent with how Brandes runs their shop — all portfolios are not clones of one another. But it is something that Callan will be watching.
- Regarding SBS asset allocation, the Alaska Balanced Fund and the Long Term Balanced Fund are the biggest pieces, but the Alaska Target Funds are collectively moving up in size. The S&P 500 Index Fund is also a very large piece.
- The BGI Tactical Asset Fund is going out of the SBS, but it was there for the full quarter, and Callan included it in the reporting.
- The component or building block funds that T. Rowe Price assembles to create the Balanced Funds and the Alaska Target Funds were generally positive for the June quarter, with the exception of the small cap fund.

MR. PIHL inquired why so much of new SBS contributions would be going into the T. Rowe Price Stable Value Fund. MR. O'LEARY said that was participant direction. A lot of people will go into stable value because they don't want to risk losing money. In some cases, it may be shifting balances because they are getting ready to retire. The T. Rowe Price Stable Value Fund returned 4.77% for the fiscal year, compared to the 3-month Treasury Bill at 5.21% and the GIC Master 3-Year Index at 4.18%. Replacing the money market option with a stable value fund was a good decision. It was implemented exceedingly well in stages, at a time when short-term interest rates were a lot lower than they are today. The objective of the stable value fund is to produce a return that is greater than the money market fund and to produce it on a more consistent basis.

COMMISSIONER GALVIN reported that some of the feedback that the Department of Revenue got as a result of the SSgA Govt/Corp Fund issue was an interest in a money market option. He asked Mr. O'Leary if having both a stable value and a money market option creates the opportunity for arbitrage type behavior.

MR. O'LEARY replied that the possibility has to be administered around. In the plans that have both there is a requirement for what is commonly called an equity wash, that a person cannot transfer from a money market fund into the stable value fund without going through some risk-oriented vehicle.

MR. BADER stated that staff has discussed with T. Rowe Price the possibility of adding a cash fund

or money market fund. It is T. Rowe Price's belief that a plan is better off with just a stable value fund, but they can accommodate the money market account with an equity wash account. They are sending staff correspondence to describe how the process would take place. He understood that a participant would have to be in an equity wash account for at least 30 days to avoid the arbitrage game that is played. Also, the institutions that provide the guarantees for a stable value product that allow book value accounting will require it or they won't wrap the account. He said he would make a presentation to the Board for discussion and analysis as soon as he has complete information.

Further responding to COMMISSIONER GALVIN, MR. O'LEARY said he would check further to see if new assets going into the T. Rowe Price Stable Value Fund in the SBS are interpreted as contributions to a vehicle, which would be the sum of deposits plus transfers.

COMMISSIONER GALVIN asked if there was any analysis done on the actuarial aspects of the participants, because there are a disproportionate number of people in SBS who are at or in retirement. He wondered if a "bubble" of people's assets was moving into a different place.

COMMISSIONER KREITZER said she had not asked the actuary that question directly, and she would be interested to know if there has been other analysis.

MR. O'LEARY stated that as part of the review of investment options for SBS, Deferred Compensation, and the new defined contribution plans, a lot of data has been assembled about the demographics of the participants. The ARMB Defined Contribution Plan Committee received some of that data. Greater use of the target maturity funds is the behavior desired.

DR. JENNINGS mentioned that there is some academic research that participants are a bit smarter than sometimes given credit for. The large use of money market and stable value accounts may be a concern to management, but when seen as part of a participant's overall portfolio and not just what is in a plan, the participant is being smart in determining that perhaps the stable value option is better than the bond option that they might have through their regular brokerage account. People may like the stable value fund because of the insurance wrap and the book value accounting. So an SBS participant might have all their money in the stable value fund, but their overall portfolio reflects a better mix.

MR. O'LEARY next commented on the financial markets subsequent to June 30. Since the August special board meeting, the big change was the Fed dropping the Fed funds target rate by 50 basis points and also lowering the discount rate. The extreme concern about the financial viability of banks and brokers has not gone away, but it certainly has diminished. The earnings reports of four major brokerage firms helped people breathe easier. There has been widespread concern with regard to the commercial paper market, which is just one way of talking about the flight to quality and the fear dominating how people are thinking about things. There is less commercial paper being issued than maturing, but the rate of decline has diminished. Importantly, some of the financing that was embedded in the announced mergers and acquisitions has begun to occur. This is a source of loss to the banking industry and the investment banks. While not out of the woods yet, things are

progressing through clearing up that problem.

MR. O'LEARY reviewed a graph of the sharp drop in the 1-month Treasury yield, showing the massive flight to quality underway in August. Since then, 3-month Treasury yields are up to about 3.70%. LIBOR (London Interbank Offered Rate) went up a little bit more, then came down, but it is still over 5%. Normally, LIBOR is always a little bit above short-term Treasury Bills, but there is still an extraordinarily wide spread. That is a fear-based spread. A real important factor to LIBOR is that it is the base around which a lot of deals are made.

MR. O'LEARY mentioned that the presentation booklet contained a page of performance data for each manager for the trustees to review on their own.

DR. MITCHELL congratulated the Board, the staff and Mr. O'Leary on a very fine year's performance. He credited it to some of the changes that have been made over the past few years, particularly on asset allocation, where more money has gone into international and into real assets and the private side. As an example of a real outlier, he said the Yale University Endowment had a 28% return for the year ended June 30, and their asset allocation is 25% equities (over 50% of that is in international), 23% hedge funds, 16% private equity, 28% real assets, and 8% bonds and other. He said he was not suggesting that the ARMB go there, but when the trustees see that its asset allocation is a bit of an outlier compared with other public funds, there are still further outliers.

CHAIR SCHUBERT asked Mr. O'Leary if there were any managers that the Board ought to look at cutting loose at this point.

MR. O'LEARY said no. The manager he is watching the closest is Turner in the small cap equity area, and it has been a more recent development. Turner's performance had started out very strong for the ARMB, but they were up only 10.5% for the year. He said he would have highlighted this, but in the June quarter they did better. There was one investment person change at Turner, and now the firm is going public with part of its ownership. That may be good for the non-founding employees. McKinley Capital has been doing a terrific job on the international equity side, and no major issues on the domestic equity side, but they are a manager that has some pretty volatile performance. He did not see a problem there. Capital Guardian was among several managers that the Board removed from the watch list that had been a source of concern. And they came off for the right reason — their performances improved. RCM is a core large cap growth manager that was in the 39th percentile relative to large cap growth managers for the year. Over 12 years, RCM is top quartile compared to other growth managers and better than the S&P 500 Index. RCM's five-year number is the only one that is below median.

MR. SEMMENS commented that if RCM is not meeting their benchmark at least over seven years and everywhere forward it said to him that large cap managers cannot beat the index, given RCM's position at or above the median large cap growth manager. MR. O'LEARY pointed out that the measure is against the S&P 500, a broad market index. RCM is a growth manager so Callan also looks at performance relative to the Russell 1000 Growth Index.

MR. SEMMENS asked that Callan put the style index on the performance chart next time. He added that he likes RCM's process, and when they make a presentation he feels that they are doing the right things. But when he looks at the performance charts he does not have in mind what he should be measuring them against.

In closing, MR. O'LEARY congratulated the Board on a great year and said they created the environment to let staff do it.

CHAIR SCHUBERT called a scheduled break from 10:28 to 10:45 a.m. Commissioner Galvin was absent after the break.

14. Farmland Investment Program Review

MR. BADER stated that farmland is in the pension fund portfolio because it is an asset class that is not highly correlated with stocks and bonds. The NCREIF Farmland Index has not had a losing year since 1992, and the lowest return in that period was 2.0% in 2001. The portfolio has target weights of 90% to row crops and 10% to permanent crops. The goal is to get a consistent 5% real return from the farmland portfolio over time. That is what the pension fund's actuarial assumption is based on. The asset class is not in the portfolio to shoot the lights out but to provide a consistent return. The ARMB does not operate the farmland but earns income from lease payments by farmers.

MR. SIKES gave an overview of the farmland investment program. *[A copy of the slides that contains details of the presentation are on file at the ARMB office.]* The ARMB has two farmland advisors, Hancock Agricultural Investment Group and UBS AgriVest, that each received a $100 million allocation initially. UBS AgriVest's allocation was subsequently increased to $125 million in response to a large opportunity that they were looking at but they wound up not making that investment.

MR. SIKES described the rationale for farmland investment: attractive total returns with high cash distributions; low volatility; portfolio diversification; and a positive correlation to inflation. He explained that the actual NCREIF Farmland Index has a much heavier weight to permanent cropland, so that index was reweighted to create a custom NCREIF Farmland Index for the ARMB portfolio that reflects the 90% row crop/10% permanent crop target weights.

MR. SIKES reviewed the farmland portfolio as of June 30, 2007:
- Net asset value - $115 million (0.7% of ARMB assets)
- Total allocation to two advisors - $225 million
- Remaining allocation - $119.4 million
- Number of properties - 27
- Total acres - 57,096 in 10 states
- Row crops 92%, Permanent crops 8%
- FY07 total return net of fees - 12.3%

- FY07 real return net of inflation - 9.61% (achieved 5% real return objective)
- Since inception total return net of fees - 9.16%
- Since inception real return net of inflation - 5.77% (achieved 5% net real return objective)

MR. O'LEARY stated that there has been some movement to remove legal restrictions against large institutional investments in farmland in the states that have restrictions. He asked if that would be a good move, and if the emphasis on corn to produce ethanol would have a significant effect on the ARMB's current holdings.

MR. SIKES said that corn crops have benefited from the ethanol craze, and even soybeans are in demand. The implications ripple through the other sectors because farmers, drawn by the increased prices, decide to plant more corn or soybeans. That means less supply of the other crops they had been planting, so most row crops are at extremely high prices. For example, wheat is at an all-time high. It is hard to say what the impact of corn prices will have on the ARMB portfolio. Regarding legal restrictions, Nebraska opened up recently. Neither of the ARMB farmland advisors has made any investments in Nebraska yet but are exploring that opportunity. The money allocated to farmland has not been fully invested yet because the two advisors have been very patient in wanting to get the best properties at the best prices.

The Board next heard presentations from its two farmland investment advisors.

14(a). UBS AgriVest LLC

The CEO, BRIAN WEBB, and JAMES McCANDLESS, President and Portfolio Manager on the ARMB account, appeared before the Board to talk about the farmland portfolio that they manage for Alaska's pension fund. *[A copy of the UBS AgriVest slide presentation is on file at the ARMB office.]*

MR. McCANDLESS briefly covered some general information about the UBS AgriVest organization and the U.S. farmland investment universe. He said that the ARMB portfolio is held by an entity called Midnight Sun, Inc. As of June 30, 2007, the portfolio holds 19 farms covering 32,222 acres in eight states. The cost of those properties was $57.9 million and the market value is $62.7 million. This portfolio is in the process of being built and is not fully invested yet, so the diversification reflects what UBS AgriVest has been able to buy so far. The highest concentration (46%) is in the mountain states - Colorado and Idaho, 25% in the southern plains (Texas principally), about 16% in the Delta states - Louisiana, Arkansas, Mississippi, about 6% in the Pacific Northwest, and roughly 6% in California. Right now, properties that produce corn make up about 32% of the portfolio, and vegetables account for over 17%. Permanent crops represent 5.46% of the portfolio.

MR. O'LEARY asked about potential liability when the Midnight Sun holding company holds assets. MR. McCANDLESS confirmed that all 19 properties are held in one entity, so if there is a potential liability on one property the plaintiff could seek relief from other properties. MR. BADER stated that he and Mr. Sikes have talked about creating other holding companies to disperse the

liability, particularly if the ARMB portfolio winds up holding properties in Nebraska, which recently opened up to institutional investors through a Supreme Court ruling.

MR. McCANDLESS reviewed the portfolio constraints per the ARMB Policies and Procedures investment guidelines. He explained the registration system set up with ARMB investment staff to register potential acquisitions at the time that UBS AgriVest identifies them for further investigation. Since inception, UBS AgriVest has registered 122 properties, and since the beginning of the year they have registered 42 properties. They have to look at a lot of properties in order to find one they believe fits the ARMB standards.

MR. BADER stated that a very important component of the registration process is to make sure that the Board's two farmland advisors do not wind up bidding against each other for the same property.

MR. McCANDLESS reviewed the Midnight Sun returns: 10.93% annualized since inception in April 2005, versus the customized index return of 18.68%. It has been the appreciation component that has lagged the benchmark, primarily in the area of permanent crops where appreciation has soared. This portfolio has roughly 5% in permanent crops while the custom index has 10%. Also, row crop properties in the index are located in areas of significant urban pressure, which is increasing their value, and the ARMB properties are not in those areas.

MR. WEBB said that there is a global race between demand and supply of the commodities that farmland is able to produce. For the last few years, increasing global demand is far outpacing the ability of the globe to increase the supply of farmland commodities. AgriVest does not see any real change in that in the coming years. The sources of the increased demand are twofold: (1) improving economies in developing countries mean improved diets; and (2) alternative fuels. That has translated into improving commodity prices, which flows through to improving income to the farm operators, which allows the owners to push rents. That also supports the appreciation returns.

Regarding the benchmark index returns, MR. WEBB said that while it has been largely driven by permanent crops, the state of Florida has a major influence on returns in the last couple years. Basically the whole state seems to have moved in the direction of residential development, and that really pushed prices across the board to the very high appreciation returns in the index. That has run its course at this point, although it may come back in the future. AgriVest is very confident about the ARMB portfolio absolute returns, and they think the benchmark returns will come back more to a normal level that a core diversified exposure to farmland probably should deliver.

MR. WEBB stated that as commodity prices rise and farm income improves it takes a while to push rents. Rents typically lag where land values go. That is the conundrum now that land values have been pushing for the last few years, and rents are gradually moving up to levels that are consistent with the land values.

Addressing farm sector economy, MR. WEBB said it is not being driven by debt: it is all equity that is flowing in. Farm income has kept pace with the land appreciation, therefore, the farm debt/equity

and price/earnings ratio has remained consistent with long-term averages. So AgriVest is comfortable that land values are sustainable, given the amount of earnings that the land is currently able to support. He said it really is a global market for farm commodities, but the U.S. is uniquely positioned to take advantage of that, particularly in the short run. The U.S. has the geography, the infrastructure, the technology and well-capitalized farmers, and the country is viewed as the most dependable exporter of farm commodities in the globe. Other countries are trying to make some inroads: Brazil is the poster child of this, but they don't have the infrastructure in place (and that is very costly), and they don't have the well-capitalized farmer and the technology. Brazil's lack of low-cost capital prohibits their ability to make great inroads in the global markets.

MR. O'LEARY noted that AgriVest's $341 million of pension assets under management is comparatively small, which begs the question of whether the larger organization of UBS might close the farmland shop someday. He asked for comment. MR. WEBB responded that UBS is a very large global financial services organization. The AgriVest part sits within the UBS Realty Division, where it is not quite as insignificant as it is on the broader UBS platform. To address that, AgriVest is exploring investing in other countries, because the ability to invest in the U.S. is constrained. Ownership of farmland is very segmented in the U.S., so there aren't opportunities to buy really large pieces. For example, the average size of investments in the NCREIF Index is about $2.5 million, and that is roughly consistent with the AgriVest aggregate portfolio as well. There are other countries were they would not be as constrained.

MR. TRIVETTE inquired about the timeline for getting fully invested. MR. McCANDLESS said that is a function of the pricing in the markets, but he expected in maybe 18 months.

MR. SEMMENS noted that there was no mention of how UBS AgriVest manages the leases to protect long-term use of the land. MR. McCANDLESS stated that the leases for row crop properties are negotiated every year or every two years. The permanent crop property leases are longer term. The UBS AgriVest people visit the properties periodically and meet the tenants. The leases require that the tenants care for the property in a husband-like manner. If AgriVest observes that that is not happening, then they could immediately terminate the lease. They have not had to do that because in the farming community there is a tremendous amount of pride in doing well for their landowners. These tenants lease from other landowners as well and want to maintain a good reputation. Also, when AgriVest buys a property there is usually a line at the door of qualified operators who want to rent it. So if someone does not do well, they know there are others waiting to take their place. It is a strong motivator for them to do well.

CHAIR SCHUBERT thanked the gentlemen from UBS AgriVest for their presentation.

14(b). Hancock Agricultural Investment Group

JEFFREY CONRAD, President of Hancock Agricultural Investment Group, OLIVER WILLIAMS, Director of Asset Management, and JOSEPH SILVERIA, President of Farmland Management Services (Hancock's property management firm in the U.S.), made a presentation about the farmland

portfolio they manage for the ARMB. *[A copy of Hancock's slides are on file at the ARMB office.]*

MR. CONRAD informed the Board that Northern Agriculture LLC is the vehicle that Hancock is buying properties for the ARMB's account in. He provided background on how farmland fits into a portfolio, remarking that farmland is comparable to real estate as far as return potential but slightly more volatile. Farmland compares very favorably to the S&P 500, international stocks and small cap equities, but at a much lower risk level. Historically, farmland has a negative to neutral correlation with stocks and bonds, a slightly positive correlation with commercial real state, and has been a good inflation hedge. Farmland values have historically appreciated and that continues to take place. Net farm income has trended up over time and is a major driver of land value increases. Other factors are alternative uses of land - taking land out of production for housing development, for example, and recreational use.

MR. CONRAD stated that forecasts from the U.S. Department of Agriculture (USDA) indicate that the farm sector asset values will continue to grow faster than debt levels. The farm sector is in a good position that if there is an income shock there is not a lot of leverage being applied, and it should be able to withstand any adversity. The USDA also forecasts continuing global demand for U.S. agricultural products.

MR. CONRAD spoke briefly about the Hancock Agricultural Investment Group, which has about $850 million in farm real estate and commitments managed for ten institutions.

MR. SILVERIA spent a few minutes discussing Farmland Management Services, the property management firm in the U.S. that sources and screen acquisitions, manages dispositions, and provides expert operational management for Hancock Agricultural Investment Group (HAIG).

OLIVER WILLIAMS gave an overview of Northern Agriculture LLC, the holding entity for the ARMB's farmland account. Alaska originally allocated $100 million in August 2004. As of September 1, 2007, the properties owned or under contract totaled $70.7 million, and they are currently evaluating about $50 million in other transactions to build out the remainder of the portfolio. He briefly reviewed the ARMB's investment policy and guidelines for farmland investments before covering the portfolio's diversification by region and by farmland crop type. The largest geographic exposures are in the Southern Plains and the Delta states. The largest crop type exposures are corn, cotton and soybeans.

MR. CONRAD talked about the NCREIF Farmland Index and the customized NCREIF benchmark used for Northern Agriculture, the ARMB's portfolio.

MR. O'LEARY asked how many contributors there were to the NCREIF Farmland Index. MR. CONRAD said there are four, and HAIG comprises about 25% of the index. This has been a tax-exempt index, and HAIG manages for some taxables that are in the process of being added to the index. At that time HAIG will be approximately 35-40% of the index.

MR. CONRAD reviewed the portfolio performance as of June 30, 2007. He noted that they have lagged the appreciation component of the index because the portfolio is new and some of the properties have not been reappraised. Also, the southeast region experienced a 41% return for the year, which is a region not represented in the Northern Agriculture portfolio. The portfolio's income return has been slightly above the index.

MR. PIHL indicated he would like to see some longer term returns on row crops versus permanent crops to see if the ARMB's 90%/10% split is working for the pension fund or against it. MR. CONRAD said he could definitely do that. He added that permanent crop returns tend to more volatile, and it all depends on what the client's investment objectives are.

MR. O'LEARY asked if the holding entity, Northern Agriculture, was the limit of liability or if there were some entities that are held by the holding entity. MR. CONRAD replied that right now that is the one entity that they have, but they are in the process of setting up another one to allow HAIG to go into the state of Nebraska. The new entity will not come off of Northern Agriculture but will come directly off the plan.

MR. O'LEARY inquired if, in Mr.Conrad's experience at Hancock, there have been any environmental claims that have had financial consequences for other investors. MR. CONRAD stated that part of their standard due diligence is to do an environmental audit on a property. They typical get, especially with the irrigated properties, housekeeping issues where there might be stained soil, and they will spread it throughout so the density isn't so strong at one particular spot. Early in his career in the 1980s in the foreclosure crisis there could be some problems, but there was never a huge problem. Problems are usually tens of thousands (of dollars).

MR. O'LEARY sought comment on how HAIG satisfies itself that there is adequate water rights to support farming. MR. CONRAD stated that soil and water are two critical factors. MR. SILVERIA added that in the Midwest a lot of it is dry land, and they know the areas where rainfall is good. When water is coming out of wells or they are taking surface water from districts, depending on the crop type that they are going to lease, they know what is normally consumed, the water rights that go with the land, and the history of that delivery to make sure they can cover the water needs at the peak time of the crop season.

CHAIR SCHUBERT thanked the Hancock people for their presentation.

LUNCH BREAK

The Chair recessed the meeting for lunch at 11:58 a.m. When she called the meeting back to order at 1:15 p.m., eight trustees were present. Commissioner Galvin rejoined the meeting at 1:59 p.m., during the Lazard presentation.

REPORTS (Continued)

15. Colony Capital LLC

MR. BADER introduced KEVIN TRAENKLE and ALEXANDRA HILL of Colony Capital. He said staff selected the firm, under the authority the Board granted to the chief investment officer to make certain real estate manager selections with the concurrence of the ARMB real estate consultant. He reported that he and Steve Sikes traveled to New York and met with the team from Colony. They had read a lot about the firm before meeting them and were very impressed. Staff asked real estate consultant Townsend to do due diligence on Colony Capital, and Mr. Sikes also did a lot of research. Mr. Bader informed the Board of Colony's selection to manage $68 million in Colony Investors VIII, with the potential to increase the investment by 10% if they have a call, bringing it to the Board's limit of $75 million.

[Colony Capital provided a paper copy of their slide presentation, which is on file at the ARMB office.]

MR. TRAENKLE reviewed why real estate is a necessary asset class for a portfolio: current cash flow, diversification, a hedge against inflation, and managers can directly add value to assets. He explained that real estate has been getting more expensive in terms of the yield that it has been providing, especially in the U.S. That is one of the reasons that Colony has not been investing in traditional real estate for the past five years in the U.S. Colony has been focusing a lot of its attention in Europe and Asia.

MR. TRAENKLE gave an overview of Colony Capital, which has been in business for 17 years and has 200 people in 14 offices in 10 countries. They have an opportunistic product, which the ARMB is invested in, that goes after 20-25% returns all over the world in many different asset classes. They have a value-added product line that is U.S. only and is an income-producing vehicle. That is the more traditional real estate investment type that most people are used to. Lastly, they have a real estate hedge fund. Colony has invested in assets valued at about $32 billion around the globe over the past 17 years. The opportunistic platform has generated close to 24% annualized returns over that time, and returns over the last ten years have been even higher since they rolled out the international platform. Colony likes international for a lot of reasons, one of which is supply and demand of investable capital: there is a lot less competition internationally. They also see much healthier growth opportunities in some of the markets around the world than seen in the U.S. Colony hires local teams in each of their offices because they believe that real estate is a locals game. They have found that hiring the best real estate and financial professionals to build a local team has contributed a lot to their deal sourcing capabilities. They are seeing off-market transactions, where they can generate the higher rates of return.

MR. TRAENKLE stated that Colony has been consistent in its returns since inception. He said they are trying to generate north of two times equity multiples - for every dollar invested they deliver at least twice that in profits back to the investor, and they try to also generate north of 20% IRRs (internal rates of return).

MR. TRAENKLE talked about where Colony has invested its capital over the years. They created a

new category "Pan-Global" about a year ago because a lot of transactions today are with large multi-national companies that are not necessarily in one specific geographic region. For example, Carrefour is the second largest retailer in the world behind Wal-Mart, and Colony is the largest shareholder in this company. It had a significant real estate holding that Colony believed the public markets were not valuing appropriately. It was not necessarily a Western European deal because Carrefour had assets in Asia, in India, and in South America. It really was a pan-global real estate opportunity. Colony will be participating in more and more pan-global opportunities, and it is difficult for other real estate managers that only have infrastructure in one region of the world to participate in those types of transactions. When Colony sees a company that has significant real estate holdings in all the three major markets where Colony is present — Asia Pacific, Western Europe, and North America — it is another competitive advantage to have on-the-ground bodies that can underwrite the real estate in these locations. Asia Pacific has been a very big active market for Colony over the last ten years. Given what is going on in the debt markets since the summer, they believe there might be a lot more opportunities back in North America again.

MR. TRAENKLE stated that Colony invests in real estate-dependent operating companies. That is hotel companies that own a lot of their real estate assets, restaurant chains, casino companies that are embarking on huge development campaigns — any operating company that real estate is fundamental to its business. A lot of times they find that having real estate on the balance sheet of a public company is not very conducive to good earnings and returns because it is appreciation, amortization, and the lumpiness of real estate in terms of capital expenditures for those assets. Colony looks worldwide for those operating companies where real estate is a part of it but should not be on the balance sheet, and they monitize that real estate value.

MR. TRAENKLE said that Colony has been very good at distressed investing, and it is actually how they got into business in the early 1990s. Over the last five years there has not been much distress around the world, although that is all changing today, and they are seeing a lot more distressed real estate and distressed debt opportunities. Colony's third focus is direct real estate assets. As an example, Colony is the largest developer of office space in Paris today. Colony VIII has an investment in a 2.2 million square foot entertainment-themed retail mall in the Meadowlands next to Giant Stadium in New Jersey.

MR. TRAENKLE next described some of the investments that Colony VIII has made to date.

MR. TRIVETTE inquired about the basis for Colony's slide indicating that the growth prospects look good for the real estate asset class. MR. TRAENKLE replied that there are a lot of opinions out in the market, but the slide information came from Green Street Advisors, whose projections historically have proven to be good. Everyone is pretty bullish in terms of the projections of the underlying fundamentals, the cash flow from the properties. Some of the underlying assumptions that go into the projections are that the economy is doing well, unemployment rates are in the 5% range, and income is doing just fine.

CHAIR SCHUBERT thanked the people from Colony for their presentation.

16. Emerging Markets Manager Selection

MR. BADER stated that at its April meeting the ARM Board terminated JP Morgan as an emerging markets equity manager because of underperformance. JP Morgan was notified of the ARMB's intent to terminate them, but, in order to keep exposure to the asset class, staff has not directed them to sell the assets and return the money to the retirement fund yet. The Board at the April meeting also authorized staff to engage Callan Associates to conduct a manager search to replace JP Morgan. Callan completed the initial search and submitted 13 candidates for further review. Mr. Bader and staff members Zach Hanna and Ryan Bigelow analyzed the list of managers and selected two that they believed stood out above the rest. Those two managers were selected to make presentations to the Board today: Lazard Asset Management and Eaton Vance Management. While staff typically brings three candidates to the Board, they felt that the cut was easy to make at this level.

MR. O'LEARY told the Board that emerging markets equity managers are very analogous to small capitalization equity managers in that they tend to be capacity constrained. He said that Callan always starts with the broadest universe possible in a manager search, including managers who are closed, asking them if conditions have changed that they could take on additional capital. Unfortunately, the interest in emerging markets has been strong enough that most of the premier firms that Callan otherwise would have included in the manager search were unable to participate. Capital Guardian is managing an emerging markets portfolio for the ARMB, and Callan and the board's investment staff wanted to find organizations that had a different investment approach that would serve as good complements. Those were the two limiting factors on the universe of emerging markets candidates. Callan believes they came up with a large group of good candidates, and they are very comfortable with staff's recommendation to proceed with just interviewing two managers. Callan feels that either one or both of them would be fine additions and complements to Capital Guardian.

MR. TRIVETTE inquired about the proposed dollar allocation to a new emerging markets manager or managers. MR. BADER said $200 million. He said JP Morgan is currently managing about $150 million, but $200 million would be within the asset allocation bands the Board has set.

CHAIR SCHUBERT stated that each firm would have 30 minutes to make a presentation, including time for questions, and, to be fair, she would be sticking to that time allotment.

16(a). Lazard Asset Management

TONY DOTE, Director, and JAMES DONALD, Managing Director and Senior Portfolio Manager of the emerging markets section, presented Lazard Asset Management's emerging markets equity product to the Board. *[A copy of Lazard's presentation material is on file at the ARMB office.]*

MR. DOTE stated that Lazard has about $12 billion under management in emerging markets equity. They closed to new business at the end of the second quarter and are only honoring those

commitments for clients or prospects that were in the pipeline. They expect to close the product totally within the next couple of months.

MR. DOTE said there are four things that differentiate Lazard as an emerging markets manager:

- Bottom-up approach with 70-90 emerging market names in the portfolio that are the best ideas.
- Three emerging market teams of about 15 investment professionals at Lazard (equity, closed-end funds, and debt). Teams meets monthly to provide unbiased input that helps with portfolio construction and better decision-making.
- Proprietary database screening. Accounting validation is an important step, as is portfolio construction, which incorporates corporate governance types of issues and some of the macro issues.
- Proactive client servicing.

MR. DONALD explained that there are six members of the emerging markets equity team, three of whom are portfolio managers. All three have to reach a consensus in order to make any decision in the portfolio. If they cannot reach consensus, he, as team leader, will make the ultimate decision. The emerging markets equity team works closely with four other teams at Lazard. Besides the closed-end funds and emerging markets debt teams that Mr. Dote mentioned, there is the risk management and quantitative analysis team and the global research platform. The closed-end funds and emerging markets debt team are much more macro economically and politically focused than the equity team, and they give very important inputs that the equity team takes down to a company level in the last part of the selection process.

MR. DONALD said that Lazard's global research is organized by industry, not by geography. They believe the type of business is more important than the location. There is an analytical relationship between the emerging markets equity team and the major global research platform teams. The more that companies tend to be affected by globalization, or the more a company is in a global industry, the more likely it is that the global research platform will take the lead with that analysis. So a company in Brazil involved in manufacturing commuter aircraft has competitors that are entirely in developed markets. It makes no sense for a member of the emerging markets equity team to re-learn that whole industry when Lazard's head of industrials knows it very well. The emerging markets equity team travels between eight and twelve weeks a year across all the emerging market areas, and they travel up to three weeks a year with members of the global research platform.

MR. DOTE reviewed Lazard's investment philosophy, stressing that the parameters of the financial characteristics for any emerging market company are the same as for the global equity product they manage for the retirement fund. They look for high return on equity. They are trying to buy a dollar bill's worth of value at some discounted price. The pricing mechanism is price-to-cashflow or price-to-book. MR. DOTE stated that Lazard participates in rising markets or speculatively led markets, so the last 18 months is a perfect example of that kind of market, where they have been basically in line with the market indices. But they do better than the averages in down and flat markets. The emerging markets product is a stock-driven approach, which gives the ARMB participation in

emerging markets at lower levels of risk and protection during the down markets.

MR. DONALD described the investment process. They begin with an analytical framework, which is database screening. The basic idea behind this is reversion to the mean. They take the whole universe of MSCI Emerging Markets companies and cut it off at $300 million of market capitalization. Then the quantitative team back tests every industry across that universe for predictability of future outperformance. What falls out from this first step are stocks that are inexpensively valued in comparison to their history. Lazard then looks at the most compelling opportunities from this and puts them through an accounting validation step, which is the most labor intensive step. They look at all the financial statements and the footnotes: industry by industry they will restate reported data for comparability purposes and to see if the accounts are relatively liberal or conservative against their peers. If accounting is very byzantine and very difficult to understand, and Lazard cannot get reasonable responses from company management, they will remove the company entirely from their analysis at this stage. At the end of accounting validation, they have historical data arranged by industry, which they believe is more comparable and realistic than the companies' reported data.

MR. DONALD said that Lazard takes the most interestingly valued companies into fundamental analysis, where they analyze the competitive advantage, a company's position in the industry, and the experience of management. They forecast a one-, two-, and three-year revenue, margin, and, most importantly, return on equity statistics. Return on equity is Lazard's best indicator of profitability. Essentially their process is looking for a trade-off between valuation and profitability. The return on equity forecast will determine Lazard's initial price targets, which are after fundamental analysis. If they have typically at least 30% upside, they will then put the stock into the final part of the process, which is portfolio construction. At this stage they weight four distinct risks: 20% macro economics, 20% politics, 20% portfolio risk, and 40% corporate governance (the largest manageable risk in emerging markets). Stocks receive scores of between zero and 10 for all four of these risks. A score of 10 means no significant risk and no discount. A score of zero would reflect maximum risk and a full discount of this weight.

MR. DONALD said an example of macro economic risk is if the local currency debt team, which is looking at 54 markets around the emerging market world, believes that there is an inflationary risk in a certain market, the emerging markets equity team will look at which companies might be affected by that and then examine whether that is going to improve or worsen a company's profitability going forward. They will implement risk scores based upon that type of effect. Higher inflation can help some companies and can certainly hurt others. The two other emerging markets investment teams at Lazard provide added information on political risk. Three years ago they held both Yukos Oil Company and Lukoil in the portfolios, both in the same country (Russia) and in the same industry. Clearly, when the chairman of Yukos was arrested and then the CEO, Lazard's political risk scores fell dramatically, until it ultimately fed through to the final price target and they sold it at a profit. Portfolio risk looks at the addition of a stock to the portfolio: will it enhance liquidity, both quantitatively and qualitatively? Corporate governance risk is divided into two segments; 50% is past experience, looking at abuses, disclosures and communications, and the other 50% is looking at

future factors, but particularly the alignment of interests between management and minority shareholders.

MR. DONALD explained that once the risk discounts are implemented they get final price targets for one, two and three years forward. Lazard typically would put a stock in the portfolio if the up sides to those final price targets are attractive relative to the existing portfolio's up sides, and the size of the position would be dependent upon those up sides and liquidity.

MR. DONALD said the portfolio today has about 80 stocks. The benchmark sensitivity is moderate. Lazard's goal is not to replicate the benchmark but to make money for clients over the long term. The typical portfolio has low price-to-earnings and price-to-cash flow ratios, high and stable returns on equity, strong free cash flow, and relatively high dividend yields. Over the last three years, tracking error has been about 5%. Turnover in the last three years has been about 50%, and since inception about 35%. The weighted average market capitalization is about $20 billion.

In reviewing the current portfolio, MR. DONALD stated that they find a lot of value today in Brazil, India, Indonesia, South Korea, Egypt, South Africa, and Turkey, and relatively little value in Chile, China, Malaysia, Poland, and Russia. He went on to explain that parameters by sector and by country are other elements of risk control that they do annually. The parameters start at zero, and they are never forced to invest in a given sector or a given country if they believe there is no value there.

MR. DOTE briefly covered Lazard's emerging markets equity performance. He said one of their objectives is to outperform the benchmark over a full market cycle, and they have outperformed by about 4% over the last five years. Their desired pattern of results is to defend in down markets, do well in flat markets, and participate in rising markets. Lazard is in the top quartile when compared against their competitors in the Callan universe over three and five years and inception-to-date. Their key objective is to generate consistent results, given that there is a lot of volatility in the emerging markets. Over the last ten years that Lazard has been managing money in this discipline, they have outperformed the benchmark in eight of those years, which is a very consistent track record. He pointed out that in 2006, when the market was more speculatively driven, led by China and Russia, Lazard pretty well matched the index. Through June 2007, they are lagging the index — 27.5% versus 31% — because of the underweighting in China and Russia.

DR. JENNINGS asked how the Lazard emerging markets equity product compared to the emerging markets sleeve of Lazard's global equity product. MR. DOTE replied that it is the exact same product. The only difference is that Lazard provides the ARMB with exposure to emerging markets through an allocation in the institutional mutual fund, and they can adjust that exposure from 10% to zero of the total global portfolio. Today, the ARMB's emerging markets allocation at Lazard is about 3.5% to this same product. DR. JENNINGS commented that 3.5% represented roughly $35 million.

MR. DOTE said that Mr. Bader had asked him to mention Lazard's other emerging markets investment vehicles *[see Lazard's handout chart, on file at ARMB office]*. For a sizeable separate

allocation, a mutual fund would not be an advantage to the ARMB because Lazard cannot discount the fees on a mutual fund. In addition to offering a separate account, Lazard has two emerging markets trusts: a group trust that provides monthly valuations, and a collective trust that provides daily valuations. So investors can get the same underlying portfolio, whether it is a separate account, the group trust or the collective trust. Regarding fees, MR. DOTE said that if the allocation was $125 million or more, Lazard would discount the standard management fee of 100 basis points to 65 basis points. That 65 basis points would hold true if the ARMB decided to go into the group trust or the collective trust. He also pointed out that "other estimated expenses" for the trusts are 20 basis points for assets between $25 million and $75 million. But as assets grow in each of the trusts, that fee goes down, and today the fee is 15 basis points in each. So if the Board decided to invest via one of the trusts, the total fees would be 80 basis points (65 + 15). For a separate account, the management fees would be 65 basis points. Custodial fees could be in addition to that.

MR. O'LEARY pointed out that several members of the Board are unfamiliar with the administrative challenges of investing in emerging markets. He asked Lazard to opine on the advantages and disadvantages of a collective investment vehicle versus a separate account.

MR. DOTE said the first is registering, but the ARMB already invests in emerging markets and is probably registered in those markets. MR. O'LEARY clarified that the retirement fund is investing in emerging markets primarily through collective vehicles. MR. DOTE said that a separate account where the ARMB would own the individual securities requires a registration process, which can take a few weeks to a few months, maybe longer. There are registration fees that vary from market to market, as well as taxes. So there are costs and huge amounts of bureaucracy, and the biggest problem is India, which usually requires hiring a lawyer to do the enormous amounts of paperwork. MR. DONALD said he brought this to the attention of the finance minister of India last March. MR. DOTE explained that investing through one of the trusts is quick and simple, and the ARMB can have either daily or monthly pricing. The group trust has about $800 million of assets in it. The collective trust has about $350 million in it.

MR. O'LEARY stated that a concern when anybody invests in a collective vehicle is whether they could be adversely affected by the action of other investors in that same investment vehicle. He asked, when dealing with a high transaction cost area such as emerging markets, if people coming into a trust bear the transaction costs that are associated with their entry into the trust, or if the costs are spread among all the participants. Further, if there were a run for the door, would those investors who stay absorb some of the costs of those that are leaving, or would those that are leaving bear the costs.

Regarding the first question, MR. DOTE said the costs are amortized over all the participants, so there is no weighted cost, per se. In terms of being impacted by the actions of others, because there is 401(k) money in the collective trust, it is subject to individual decision-making. So it is possible there could be a stampede in either direction, but Lazard has not seen that. Lastly, if there were a lot of withdrawals, the remaining shareholders would bear a higher percentage of the costs — because the administrative fee is based on assets under management, so as assets increase the fee goes down,

and as assets fall the fee goes up.

MR. O'LEARY stated that if $200 million were to come into an $800 million trust, and the transactions occurred within the fund, then the $800 million that is already there is picking up part of the brokerage costs associated with that $200 million inflow. And the converse of that would be true.

Regarding transparency, MR. BADER inquired about what ability the ARMB investment staff would have to see what was in the trust and to monitor it. MR. DOTE said a monthly report would list all the holdings — market value, cost, number of shares, positions, and net asset value (NAV) as of the end of the month. Beyond that, if staff wanted more frequent information or more analysis done on the portfolio, the portfolios are on Lazard's internal system and they can provide that to staff. Some clients want to see risk statistics on an ad hoc basis, and Lazard can provide that. The process is that the trust would report to the ARMB's custodian — number of shares owned, NAV, market value, and cost. That would basically become a line item in the total plan. Then staff would receive details for the entire portfolio. He reminded everyone that regardless of the investment vehicle, the underlying positions are very similar.

Regarding registering in emerging markets, MR. BADER said that interestingly enough he had advised the Board today of the need to have a tax filing agent in Taiwan. He asked if that is typically provided by the investment manager, the custodian, or the plan sponsor. MR. DONALD said that in this situation it would be the custodian.

MR. DOTE stated that the beauty of the trust structure is that it keeps the ARMB away from all the administrative requirements. The negative is being with other shareholders, and their behavior may or may not influence the ARMB investment. But Lazard tries to prevent that as much as possible.

MR. ANDREWS asked how much of the performance numbers that Lazard reported was the currency effect, with the U.S. dollar declining. MR. DONALD said very little over the last four years, because there have actually been periods when the U.S. dollar has done reasonably well. In relation to the returns, the effect is no more than 200-300 basis points a year. Two years ago there was a negative effect from currency. MR. DOTE added that Lazard would be happy to provide that attribution, but most of the performance has come from stock selection, very little from country, and a modest amount from sector.

CHAIR SCHUBERT thanked the Lazard representatives for their presentation, and they were excused. There was a brief at ease from 2:20 to 2:25 p.m., before the next presentation.

16(b). Eaton Vance Management

BRIAN LANGSTRAAT, Chief Executive Officer of Parametric Portfolio Advisors, and WILLIAM IRVINE, Institutional Business Development Officer, appeared before the Board to talk about the structured emerging markets equity product. *[A copy of their presentation booklet is on file at the ARMB office.]* MR. IRVINE explained that in 2001 Eaton Vance purchased 80% of Parametric

Portfolio Advisors, and the current ownership is 82%. Eaton Vance is a publicly traded company on the New York Stock Exchange, but all the voting stock is controlled by a 16-member executive board. The organization remains fiercely independent, and they have done one thing only for over eight decades, which is manage people's assets. He mentioned that Eaton Vance has 911 employees, and they honor them each year in the annual report by listing their names in the order of their tenure with the firm. He said it demonstrates the culture at Eaton Vance, and they believe that culture is a competitive advantage.

MR. LANGSTRAAT stated that theirs is a very different investment approach in its structure and its results. In 1994 they created a structured, rules-based dynamic investment process that captures the return of a very dynamic asset class, while mitigating the risk factors, the cost factors, and the hurdles and obstacles facing investors. He referred to a five-year risk-return chart that showed Eaton Vance significantly to the left of the market line in terms of risk. That is by design. When their structure was put in place in the early 1990s, risk was as much of a concern as return in investing in the emerging markets, and that stays true today.

MR. LANGSTRAAT said that in 1994 he was on a team that was asked the research question that they answered with the emerging markets equity product. The question was how to build the best long-term strategic portfolio in the emerging markets — not a tactical portfolio, not a portfolio that looks to exploit a near-term mispricing or near-term information advantage, but something that can be invested in long term to capture the dynamism in these markets but mitigate the risk and the costs. At Eaton Vance they are very sensitive and skeptical about stepping away from the capitalization-weighted benchmarks. They have a lot of respect for the consensus that is in cap-weighted indexing.

MR. LANGSTRAAT stated that as they started evaluating the emerging markets opportunity set as represented by the cap-weighted benchmarks, they started to notice things that were true in 1994 and are true now in 2007. The foremost was that the cap-weighted markets were dominated by two to five countries. The second thing they noticed is that information they get from developing markets is not great. The third is that there is enormous volatility in these markets. So as they looked at opportunity on the left hand and the obstacles on the right hand, Parametric created an investment structure that has the duel objective of capturing the dynamic returns that are systemically available in developing markets but mitigates the risk and, by its design, mitigates some of the costs.

Describing the investment process, MR. LANGSTRAAT said the structure has three components: country structure, country rebalancing, and sector and stock selection. Using pie charts, he showed how they have created a more diversified country weighting scheme than the S&P/IFCI Index (Intl. Financial Corp. Investable Index). Parametric's structure has a much more diversified country weighting scheme that has tiers. Tier 1 is the largest, most liquid countries, currently targeted at about 6% weight. Tier 2 countries have a 3% weight. Tier 3 is almost a 2% weight. Tier 4 is countries they target at just under one percent in investments. The structure includes frontier countries, those that are not quite into the emerging markets indices but that have the requisite investor protections, liquidity, and subcustodian involvement to make these countries a prudent place to be a long-term investor. They tend to emphasize the smaller countries over the large

countries, they tend to be much more diversified than the index, and they have a substantial long-term maintained investment in the developing of what are called frontier markets. These have all been key components in driving the performance of Parametric's strategy.

MR. LANGSTRAAT pointed out a series of statistical charts in the booklet that explain why they believe the small country exposure long term and the rebalancing effect are so powerful.

MR. LANGSTRAAT stated that within each of those country weights they have a challenge to rebalance. Eaton Vance has a very disciplined rebalancing strategy that whenever a country exceeds its target by 50% they will bring it back to its target weight. For example, if Brazil at 6% target reaches 9% of the portfolio, the position is trimmed back down to 6% and the proceeds reinvested among the other countries that are underweight. The reason this is so powerful is that one of the things they found in emerging markets was a very unique combination of extremely high individual country volatility and very low cross correlations. When these two things are in a portfolio, rebalancing has a first order effect of reducing the risk in the portfolio but also has a rebalancing alpha effect. He said he would not get into it today, but he could show mathematically how rebalancing a portfolio with high volatility and low correlation experience drives return. Eaton Vance believes that about half to 40% of their excess return over the benchmark is the result of this rebalancing effect. It is not a tactical one. It does not require Eaton Vance to say now is this country's time to peak or that country's time to fall. But systematically, rules-based, quarter after quarter, year after year, by rebalancing across these disparate, highly volatile assets, they produce a higher growth rate and a higher return stream than the buy-and-hold benchmark.

MR. LANGSTRAAT reviewed the third component of their investment process — structured sector allocation and structured stock selection — using Brazil as a hypothetical example. They have individual target weights in each of five major sectors in every country: (1) basic industry, resources and materials; (2) consumer; (3) finance; (4) industrial; and (5) utility, telecom and transportation. They then build the portfolio stock by stock in each sector, in each country. At a stock level, they are primarily cap-weighted passive stock selection. So selecting securities to get exposure to a sector, which gives them exposure to that country in the weights and rebalancing scheme that is set up at the top level of the structure. They are careful to screen for liquidity to make sure they have opportunity to trade in securities, and at times they will eliminate names that are in the index.

MR. LANGSTRAAT said the Eaton Vance investment approach is different from others in that it does not emphasize the BRIC countries (Brazil, Russia, India and China) but emphasizes a very broad basket of economic development around the globe. It maintains significant exposure to frontier markets, and emphasizes significant exposure to the smaller second tier countries. They love the valuations there as a long-term investor. They love the economic growth and development that occurs over long cycles in these countries. It has also been an enormous win for Eaton Vance in determining adding additional countries that have unique volatility and correlation streams. So when Eaton Vance is added to a very large and complex portfolio like the Alaska Retirement Fund, compared to a traditional money manager who does fundamental research and focuses on the BRICs and who may produce its alpha from the application of fundamental insights and research, Eaton

Vance's rebalancing alpha diversified approach offers diversification within the emerging markets asset class.

MR. LANGSTRAAT reviewed the sell discipline. The partial sales in a country occur when the weight exceeds the upper target on the rebalancing scheme. So that means they are selling into Saudi Arabia when oil prices are peaking, and Saudi Arabia in the last couple of years has reached its upper bounds. That means Eaton Vance is buying into Malaysia and into Russia during periods in the last decade when there are market weaknesses. This discipline across 41 countries has over time proven to be a very good approach. There will be winners in losers in the Eaton Vance emerging markets country line-up. That is why they expose the portfolio across 41 countries, to capture the systematic return they believe is available for long-term investors in the asset class. There will continue to be periods of sharp volatility in the emerging markets, some of it regionally based, lots of it country based, and some of it holistically based. But Eaton Vance's structure, underpinned by a broad level of diversification, and then imposing on it very disciplined and systematic rebalancing, has a wonderful chance to turn to their advantage some of those things that are obstacles for many investors.

MR. LANGSTRAAT said they do remove countries from their model from time to time. Eventually, some of the countries will grow out of the emerging markets indices and definitions, examples being Greece and Portugal. There are also countries that for whatever reason chose to go in what appears to be the wrong direction, in terms of investor protection and pro-capitalist policies. Eaton Vance recently removed Venezuela. They are no longer able to make investments long term in Zimbabwe. But these countries are 80 basis points to 160 basis points of the target. Eaton Vance will add new countries over the next couple of years, as markets and economies grow around the world. When they started in 1994 they had 19 countries in two tiers. Now they have 41 countries in four tiers. That is a testament to the dynamism of the process, it is evolution, but more dramatically it is a testament to the dynamism of the developing market equity situations and the economic activity that has existed in the last 13 or 14 years.

MR. BADER asked on what basis Eaton Vance decided that a 50% increase over the target weight was the time to rebalance back to the target weight.

MR. LANGSTRAAT said a lot of simulations and back-testing, comparing the cost of transactions versus the benefit that they pick up from a risk and return standpoint. The volatilities in the emerging markets are at about 35% per annum individual country volatility and a correlation of about 0.2 across each other. Those tend to be the parameters that they have fairly statically over the time they have been investing. They want to rebalance between four and six times a year, given the transactions costs and what the rebalancing premium could pick up (reference page 22 of the presentation booklet). They look for about 3% to 3.5% just coming from the rebalancing premium. By using Monte Carlo simulations and live experience, they discovered that about 50% of target — so when a 3% country gets to 4.5%, or when a 6% country gets to 9% — was really a very solid way of achieving this premium. MR. LANGSTRAAT said Eaton Vance is doing some research to maybe adjust that rebalancing trigger by volatility and correlations statistics as they vary within the

emerging markets. Their ability to get information has improved over the last 14 years, and it may result in some slight modifications over time they rebalance more volatile countries with a higher trigger and less volatile countries with a slightly lower trigger. It won't be a material change, but it is in an area where the markets may provide them with more information.

Referring to a condition Eaton Vance mentioned for removing a country from the portfolio, MR. RICHARDS asked how many times a major constituent became nationalized over the last 14 years. MR. LANGSTRAAT clarified that it is not a major constituent of the Parametric portfolio that becomes nationalized, because they own over 1,000 securities in the portfolio, and none of them are ever more than 1% of the portfolio. What they are concerned with is looking at a country's attitude toward portfolio capital from foreigners. If a country nationalizes a major constituent of their local index, that is a signal to Eaton Vance that the country is anti-foreign capital, and they want to be real careful about adding additional money and may potentially remove it from the model. The talk has been very pointed in Venezuela in the most recent period. And it happens from time to time in countries where the politics pushes them in a different direction. But they have never had a major constituent of the portfolio nationalized or taken any type of a markdown as a result of that.

Referring to page 34, MR. O'LEARY asked about the investment vehicles available. MR. LANGSTRAAT said the structured emerging markets equity private fund is a mutual fund with daily valuation and daily liquidity. He verified that the 125 basis points of fees was the total expense ratio, and that there are roughly 1,235 stocks in that mutual fund. MR. O'LEARY inquired how many stocks would be in a separate account. MR. LANGSTRAAT explained that in addition to the two mutual funds that Eaton Vance manages, they have four institutional separate accounts totaling about $2 billion in assets. In those separate accounts they own 800 to 900 names across the 41 countries.

MR. O'LEARY commented that the essence of the Eaton Vance process is the high transaction activity as they constantly rebalance. MR. LANGSTRAAT stated that their average annual turnover rate is between 20% and 25%. Those are usually spread across a variety of names and are relatively small transactions. But relative to the universe of emerging markets managers, their turnover rate is actually very low, but the number of transaction tickets can be very high. MR. O'LEARY said that in a separate account that is frequently a driver of the administrative costs. He went on to ask with respect to the mutual fund if there was a redemption fee, and when large accounts are added or depart from the fund if the costs were borne pro rata by all the shareholders. MR. LANGSTRAAT said that in the structured emerging markets equity private fund there are no transactions charges, so they are, in a sense, socialized across all investors.

MR. O'LEARY asked what protection the continuing investors in the mutual fund have that they are not abused by people coming and going. MR. LANGSTRAAT stated that there are no explicit protections related to transaction charges. He added that there is a second mutual fund which has those transaction charges. The investor protections are twofold. One, Eaton Vance tends to position the emerging markets portfolio and strategy with long-term strategic investors. The structured emerging markets equity private fund has about $300 million of assets, so an investment by the

ARMB would be a sizeable piece of that. The second protection is that any time they have an opportunity to deliver securities outside of the fund, they do so. MR. O'LEARY interpreted that as meaning that the fund as an entity will let an investor take their $200 million and run, but the mutual fund would give the investor a pro rata slice of the 1,200 securities in a subaccount, sell those, and the investor would bear the risk and the transaction costs and get the net proceeds. He asked if that power was available at Eaton Vance's discretion. MR. LANGSTRAAT said that was correct.

MR. ANDREWS asked if Parametric ever uses country ETFs (exchange traded funds) or closed-end funds. MR. LANGSTRAAT said they have used ETFs, closed-end funds, some swaps, and some depository receipts - both traded in London and in New York. They will use those primarily as an initial exposure vehicle into a new country. They have used them extensively in India, and some of the Eastern European countries when they built their exposure there. It is their preference over time to own the local securities individually. After having two, three, four years of exposure to a country, and those things become available to them, they will sell the exposure vehicles like the funds and create the exposure in individual stock names.

Noting that Eaton Vance is a quantitatively oriented manager, MR. O'LEARY asked how they did in August. MR. LANGSTRAAT said their performance was within 20 basis points of the index in August. He added that they have always been a quantitatively oriented firm, and at times it is better or worse to be painted with that brush. He said they have nothing in common, by strategy and approach, with the quantitative strategies that were hammered due to their approaches in August. Their quantitative structure is very strategic, and the strategy has a considerable amount of inertia in it, in capturing what they think are long-term structural aspects of the emerging markets. There is very little tactical in it.

MR. BADER inquired what access the ARMB staff would have to information regarding the holdings of the structured emerging markets equity private fund, if the Board approved an investment. MR. LANGSTRAAT said the best access they can provide, subject to the SEC requirements, which he believed was generally to look into the holdings on a 45-day lag. So as soon as they are able to publish those holdings, they would provide them to anyone. He noted that a separate account has the advantage of real time access to the holdings and the exposure to the currencies. MR. O'LEARY stated that Eaton Vance could provide sector and top-holding names on a much more timely basis. MR. LANGSTRAAT agreed. He stressed that that was a decision driven completely by the attorneys at Eaton Vance. They would provide whatever they could, subject to the attorneys' approval.

MR. BADER asked if Eaton Vance ever engages in leverage. MR. LANGSTRAAT replied no, nor do they use any type of a leveraging derivative.

CHAIR SCHUBERT observed that the firm has about $1.4 billion under management in emerging markets equities. She also recalled a comment that an ARMB investment would be a significant investment at Eaton Vance. She asked if it would be problematic if the ARMB were to decide at some point to pull its funds out. MR. LANGSTRAAT explained that as a company Eaton Vance

manages $27 billion across a variety of strategies. They would be thrilled to have the ARMB as a client, but it would not represent an undue influence on their business on the way in or on the way out. They currently manage $2 billion in client assets in emerging markets equities. The liquidity in the fund is very good, and they can redeem large chunks of the fund, in response to statutory requirements. Should the Board choose to go the separate account route, the ARMB would control the liquidity. Their strategy is very much like an index fund, with some succinct risk and return advantages. And like an index fund, they are spreading the investment widely and broadly, with the largest countries representing the largest investment. They have nearly as much liquidity as the ETF, EEM, or a broad-based commingled index fund. They have been managing money in this strategy since 1994. The composite return presented on an institutional basis starts in 1998.

CHAIR SCHUBERT thanked the gentlemen from Eaton Vance for their presentation, and they were excused so the Board, staff and advisors could discuss the candidates.

16(c). Board Discussion and Action

CHAIR SCHUBERT asked for Dr. Mitchell's comments before he had to leave for the airport.

DR. MITCHELL said his conclusion was that the ARM Board should do this, that he was in favor of emerging markets as an asset class, and he was glad the Board was going to stay in it. He encouraged the Board to add to the asset class when it is appropriate. He said that when he first saw the two firms scheduled to make presentations to the Board his first thought was that these were not the usual candidates in the emerging markets area. But Mr. O'Leary shared with him some of the Callan material that the usual products are closed and not available for investment. So, given the universe that Callan and staff chose from, Lazard and Eaton Vance are excellent choices. The firms are as complementary as any two managers could be, one being research oriented, bottom-up, concentrated relatively speaking, and the other is top-down, smaller countries, more passive, very diversified. That is a terrific balance, and he urged a yes vote on both candidates. He said he definitely thought that Lazard and Eaton Vance should be taken as a pair.

At the Chair's prompting, MR. BADER said staff's recommendation was that both managers be represented in the portfolio. He explained that a $100 million allocation to each manager, for a total of $200 million, would put the overall portfolio slightly above its target for emerging markets equity. To be right at the target would be a $75 million allocation to each manager.

COMMISSIONER GALVIN asked Mr. Bader why staff was recommending going above the target asset allocation for emerging markets equity. MR. BADER said it was more of a visceral recommendation than one that he could substantiate quantitatively. There are certain asset classes that the ARMB cannot participate in because of liquidity and that the portfolio is not at its targets in. So the portfolio has to be overweight in some asset class(es), and the overweight caused by a $200 million allocation to emerging markets equity is 0.25%. That is a reasonable overweight, given the volatility of the asset class.

MR. RICHARDS said he understood that products close because they do not have the resources to manage any more money, but he had it in the back of his head that performance often takes a dip when certain products have too many assets under management. He had a concern that Lazard would take the ARMB money and close the fund, so he wondered if Mr. O'Leary had any insight into what to expect.

MR. O'LEARY stated that there is some evidence that newer managers with small asset bases may achieve some premium return. Why that exists and in what asset categories it exists are other questions. He said he wanted the Board to be clear about what Lazard is doing. Lazard said they wanted to maintain their flexibility to continue to have concentrated portfolios, and the only way they could do that is to stop taking new business — at least for a time until the markets grow further, or they are comfortable that they can take additional assets. He said he would be very concerned if Lazard had not done that. In markets such as emerging markets and small cap equity, it is easy for a manager to continue to take money, and then over time the performance seems to deteriorate. It is very good for the existing investors if the manager has identified a level to stop gathering assets. So it was a positive development with respect to Lazard. When Callan started the manager search Lazard has said they were closed, but it was only because of the existing relationship with the ARMB that they were open in this mandate. Neither Lazard nor Eaton Vance are a new manager, but there is a big distinction in average company size between the two. Eaton Vance's weighted median market capitalization is in the $5 billion range, and Lazard is in the $20 billion range. That is part of what creates the complement between the two firms. The combination of the two firms then combined with the Board's existing emerging markets manager, Capital Guardian, is a neat structure.

MR. TRIVETTE asked for and received clarification from Mr. Bader that the asset allocation to emerging markets has bands of plus or minus 3% around the target.

MR. SEMMENS requested clarification about how much Lazard is already managing in emerging markets as part of their global mandate for the ARMB. MR. O'LEARY stated that Mr. Dote of Lazard had said that within the global equity portfolio they have the authority to invest up to 10% in emerging markets. They are currently invested around 3.5%, or about $35 million.

MR. BADER pointed out that Brandes and McKinley Capital also have a bit of emerging markets in their portfolios. MR. O'LEARY said Brandes was currently about 10%.

MR. SEMMENS asked if all that was figured into the target. MR. O'LEARY replied that the emerging markets target is a distinct target allocation, and the reason for the limitation on the international or global portfolios is so that it does not get excessive. That is discretionary authority given to the managers, but they are measured against the developed markets only. So they only invest in emerging markets when they think it will really add to returns.

MR. O'LEARY told the Board that if they should decide to proceed with hiring two emerging markets managers he strongly advised using a commingled investment vehicle and not a separate account. If the Board hired one manager, then they might want to have a separate account,

depending on which firm, although he really did not like separate accounts in emerging markets.

When MR. TRIVETTE solicited his input, DR. JENNINGS stated that the two products were complementary. Eaton Vance complements the existing manager, Capital Guardian, perhaps more than Lazard does. He would be comfortable with the Board hiring both. He said he sensed a bit of hesitation about going above the target asset allocation for emerging markets. There are a lot of compelling reasons to be excited about emerging markets. According to published reports, Yale's endowment fund has half of their international allocation invested in emerging markets because they see a tremendous opportunity. So he would not be uncomfortable with a slight overallocation.

CHAIR SCHUBERT stated that she would not be comfortable giving the whole allocation to Eaton Vance. They have somewhat more attractive returns than Lazard, but she was a bit concerned about Eaton Vance's size in emerging markets. Lazard has $14 billion in emerging markets, while Eaton Vance has $2 billion. She said she liked the difference in the two products and would prefer to split the $200 million into two awards.

MR. TRIVETTE moved that the Alaska Retirement Management Board select Lazard Asset Management and Eaton Vance Management to manage emerging markets equity portfolios in commingled funds, and approve funding each firm $100 million, subject to staff's successful contract negotiations. MS. HARBO seconded.

Roll call vote
Ayes: Harbo, Kreitzer, Pihl, Richards, Williams, Semmens, Galvin, Trivette, Schubert
Nays: None

The motion passed unanimously on a 9-0 vote.

CHAIR SCHUBERT called a scheduled break from 3:13 p.m. until 3:30 p.m.

17(a). Judicial Retirement System FY06 Actuarial Valuation Report

DAVID SLISHINSKY and MICHELLE DELANGE of Buck Consultants attended the meeting to present the actuarial results of the Judicial Retirement System, as well as some additional information on the PERS and TRS, including an estimate of FY10 contribution rates. *[A copy of the Buck Consultants slide presentation and the JRS Valuation Report was included in the packet and is on file at the ARMB office.]*

MR. SLISHINSKY stated that the Judicial Retirement System (JRS) actuarial valuation is performed every other year. The last valuation was done by Mercer as of June 30, 2004. When Buck was hired in late 2005 they did a replication of that 2004 valuation. The new valuation is as of June 30, 2006.

MR. SLISHINSKY listed changes that occurred since the last valuation in 2004:

- Legislation substantially increased judges' salaries and had a significant impact on the valuation of the liabilities and the projection of the benefits.
- The cost method was changed to the entry age method to make it consistent with the other retirement systems.
- Buck is in the process of making a change in the asset valuation method. As of 2006, the assets are still valued at market value. From that point in time Buck will grade into a five-year smoothing approach, the same approach used for the other systems.
- Buck made some changes in the actuarial assumptions but did not perform a full scope experience analysis on the JRS due to its small sample size.
- There were changes in mortality, payroll growth, percent married assumption, and healthcare costs and trends that make the system consistent with the other retirement plans.

MR. SLISHINSKY noted that Buck did not present the JRS valuation results to the Board in June. There was some confusion over the authority to set the contribution rates for the Judicial Retirement System. In one section of the statute that covers the JRS it gives the Commissioner of Administration authority to set the contribution rates. Buck Consultants has been told that the Commissioner sets this rate and that they did not have to worry about presenting the actuarial results to the ARM Board. But there is another section of the statute that came out of SB 141 that gives the authority to the ARMB. So there appears to be some conflict within statute as to who actually has the authority. Buck intends to present the JRS valuation results to the Board and let others decide who can set the contribution rates.

MR. SLISHINSKY stated that there are 66 judges currently participating in JRS as of the June 30, 2006 valuation compared to 62 two years prior. There are now 86 retirees and beneficiaries versus 75 two years ago. The total number of participants is now 159 versus 148 in 2004. Compensation is up significantly because of the salary increase enacted by legislation. The total annual compensation is a bit less than $10 million for the active group. Two years ago, payroll was $6.5 million. The average annual compensation is up from roughly $105,000 in 2004 to $146,000 in 2006. Plan assets rose from $70.4 million in 2004 to almost $80 million. The annual benefit payments are now close $5.3 million, up from $4.4 million two years ago, representing roughly 7% of total assets.

MR. SEMMENS asked if was true that the benefit of retired members is directly tied to the active members' salaries. MR. SLISHINSKY said that the retirees get a benefit that adjusts with changes in the salaries. As a result of the salary increases, there was a significant change in the liabilities, not just for actives, but also for retirees.

MR. SLISHINSKY briefly reviewed the two-year reconciliation of the system assets. He then presented the results of the June 30, 2006 valuation compared to 2004, noting the growth in the accrued liability over the two-year period because of all the changes that happened. The accrued liability has grown to $127.7 million. Subtracting out the actuarial value of assets at almost $80 million leaves an unfunded liability of $48 million. It was slightly less than $10 million just two years ago. Because of this significant change, the funded ratio has dropped from 88% down to 62.4%.

MR. SLISHINSKY ran through the calculation of the annual actuarial contribution to come up with $6 million, or 62.6% of pay. Subtracting out member contributions of about 4.9% of pay leaves an employer contribution rate of 57.7%, or $5.57 million total.

Looking at the breakdown between pension and healthcare, MR. SLISHINSKY pointed out that the majority of this benefit liability is due to the pension benefit, which is tied to salaries. He said the split on the actuarial value of assets is based upon a split of the market value that Buck received from the Retirement and Benefits Division. It shows that the unfunded liability for the pension side is about $35 million, and for healthcare the unfunded liability is roughly $13.5 million. Of the 57.7% employer required contribution rate, almost 45% is for pension and almost 13% is for healthcare.

MR. SLISHINSKY reviewed the calculation of the unfunded liability to show how it changed over the two-year period since 2004 to reach $48 million by June 30, 2006. He explained that Buck did a re-evaluation of the valuation that Mercer had performed, and there was a change in the way the benefit was valued. Mercer was applying the amount of the claims to a family unit, and Buck applied it to the individual unit. As a result, that increased the liabilities on the healthcare benefits by about $13 million. The change in salaries increased the accrued liabilities by about $27 million.

MR. SLISHINSKY presented the details of the change in the employer contribution rate, broken down by pension and healthcare. He also showed a graph of the JRS funded ratio history, which is currently down to 62.4%.

MR. SEMMENS asked if 57.7% was the employer contribution rate that Buck expected would have to be paid over the next 25 years, or if something else could happen. MR. SLISHINSKY confirmed that it was for 25 years. He said the amortization of the unfunded liability is being calculated on a level percentage of pay basis. The Judicial Retirement System is an open plan, so it is ongoing, and Buck expects salaries to increase from time to time. As salaries increase, that contribution as a percentage of pay should remain level, and should pay off the unfunded liability in 25 years. Once it is all paid off, then the contribution rate reverts to the normal cost rate, which is 30.9% of pay. There is experience from year to year, primarily with regards to investments and asset returns that are going to impact that rate. But if Buck's assumptions are correct long term, then the 57.7% rate can be expected for 25 years until the unfunded liability is paid off.

MR. O'LEARY commented that the unusual feature of the JRS is that the people who are already retired have their benefit enhanced if the actives receive a pay increase. He asked if Buck in doing its actuarial valuation was taking into account the increase in benefits to retirees attributable to the pay increases that Buck anticipates for the actives.

MS. DELANGE said they were, that Buck has an assumed salary scale for the actives. So when they see the active salaries go up 4% they assume that the retiree benefits go up 4%. Buck is assuming that salary increases happen annually, although they understand there is not a set increase every year and that salaries could bump up every two to four years.

MR. O'LEARY stated that if the actual experience were similar to what has happened more recently, there would be a significant increase in the unfunded liability attributable to the retirees. MS. DELANGE said yes.

ROB JOHNSON explained that the salary for judges went up significantly recently because they had not received a salary bump for five to seven years. It is fairly rare that judge salaries get bumped up, however, the number of judges occasionally increases. That probably has an effect as well.

COMMISSIONER KREITZER cautioned against confusing payroll growth with salary increases. There were six new judges added statewide.

17(b). Review of 2006 Actuarial Results for PERS, TRS and NGNMRS

MR. SLISHINSKY stated that these actuarial valuation results in 2006 are used to set contribution rates for fiscal year 2009.

For PERS, the contribution rate as a level percentage of pay for the valuation June 30, 2006 was 35.22% of pay. That compares to the previous year's valuation of 32.51% of pay. The level percentage of pay method was used for amortizing the unfunded liability over a 25-year period. In comparison, the level dollar pay method results in a contribution rate of 43.04% of pay.

For TRS, the contribution rate as a level percentage of pay for the valuation June 30, 2006 was 44.17% of pay. That compared to the prior year at 42.26% of pay. Comparing on a level dollar basis, the contribution would be 56.67% of pay.

For the National Guard and Naval Militia Retirement System (NGNMRS), the benefits are not tied to salary at all; therefore, the amortization of the unfunded liability is based upon the level dollar approach. The total contribution for the June 30, 2006 valuation is $2,473,000.

Responding to MR. ANDREWS, MR. SLISHINSKY said he could not extrapolate the growth in the unfunded liability for these systems because of all the changes that were made — particularly with setting the rates at a more reasonable level, the fact that the 5% cap no longer exists, and that there are some deferred investment gains going to be realized over the next few years.

MR. ANDREWS asked where the unfunded liability is for FY08. MR. SLISHINSKY said Buck had some projections in their reports that he would share with Mr. Andrews after the meeting.

MR. SLISHINSKY said that at the June meeting Mr. Semmens had asked what the employer contribution rates would be if the assets and amortization period were "fresh started" to market value and 25 years, respectively, and it was a level percentage payment. He explained how Buck did the calculations and said on PERS a fresh start contribution rate would be 32.26% of pay, or almost 3% less than the current contribution rate of 35.22%. For TRS, it is 39.52%, about a 4.5% decrease from

the current contribution rate. Both were calculated on a level percentage of pay basis.

MR. SEMMENS asked how many dollars the 3% decrease in the contribution rate represented. MS. DELANGE stated that it was $51 million on PERS and $18 million on TRS.

MR. SLISHINSKY stated that with the ARMB's 18.9% rate of investment return for the year ended June 30, 2007, Buck input that into their projection system to come up with some estimated FY10 employer contribution rates. It takes the FY06 valuation results and rolls them forward to FY07, then takes into consideration that the actual return on the pension fund was 18.9% - so there are gains and the projection system recognizes 20% of those gains and does a recalculation of the contribution rates. On PERS, in a roll forward, Buck would expect the employer contribution rate to be 34.26% of pay for FY10, but with 20% of last year's investment return taken into account, the contribution rate would be 33.54%. On TRS, the calculated expected contribution rate is 45.13%, and with last fiscal year's investment return taken into account, the contribution rate goes to 44.22%. The investment return gains would also be recognized for the next four years, so there would be the same kind of reduction in contribution rates over the next four years.

MR. O'LEARY commented that that assumed investment earnings of 8.25% in each of the next four years.

MR. SLISHINSKY added that Buck's projections do not take into consideration any of the other deferred gains on investment return that would also be realized in future years.

MR. SEMMENS congratulated Buck as the first actuary that has ever delivered good news to this Board. He said he hoped that these projected reductions in employer contribution rates going forward materialize. The work that staff and the ARMB Board do on investments makes a difference.

MR. SLISHINSKY said that Buck cannot take credit for the investment results, and investments are a big driver.

MR. TRIVETTE commented that the projected contribution rate reductions are not huge but they are significant.

MR. PIHL cautioned that there could be negative investment results in future years, and it seems that people are always looking for reasons to reduce the contribution rates.

MR. BADER requested that the agenda be re-ordered to take up the GRS Certification before hearing Mr. Shier's report.

18. FY06 Actuarial Valuation Reports

18(a). Board Acceptance of GRS Certification

MR. BADER stated that statute 39.10.220(a)(9) prescribes that a second actuary conduct a review of actuarial valuation reports prior to the ARMB review. He asked that the Board accept the review done by Gabriel Roeder Smith & Company, per staff's written recommendation in the meeting packet.

COMMISSIONER KREITZER moved that the Alaska Retirement Management Board formally accept the review and certification of actuarial reports by Gabriel Roeder Smith & Company, and that staff coordinate with the Division of Retirement and Benefits and Buck Consultants for discussion and implementation of the reviewing actuary's suggestions and recommendations where considered appropriate. MR. RICHARDS seconded.

The motion carried unanimously, 9-0.

18(b). Board Acceptance of Buck Consultants Report

Retirement and Benefits Division Director PAT SHIER stated that before the Board can set the employer contribution rates it should accept the actuarial valuation reports presented by Buck Consultants, as follows:

- Public Employees' Retirement System as of June 30, 2006;
- A supplemental report to the Public Employees' Retirement System as of June 30, 2006;
- Teachers' Retirement System as of June 30, 2006;
- Judicial Retirement System as of June 30, 2006; and
- Alaska National Guard and Naval Militia Retirement System as of June 30, 2006.

COMMISSIONER KREITZER moved that the Alaska Retirement Management Board accept the actuarial reports prepared by Buck Consultants for the retirement systems in order to set retirement system employer rates. MR. WILLIAMS seconded.

The motion passed unanimously, 9-0.

19. FY09 Employer Contribution Rates

19(a) Resolution 2007-34 PERS

A revised resolution was distributed to the trustees prior to the start of today's session.

COMMISSIONER KREITZER moved that the Alaska Retirement Management Board set fiscal year 2009 Public Employees' Retirement System employer contribution rates consistent with its fiduciary duty, as set out in Resolution 2007-34 (Revision #1 handed out).
MR. SEMMENS seconded.

MR. SEMMENS stated that Resolution 2007-34 sets the employer contribution rate at 35.22%

average. The reason for that is the Board passed Resolution 2007-20 at a prior meeting, which set the level percentage of pay method. The Board also passed Resolution 2007-19 that supported Senate Bill 125, which would set contribution rates at 22% and the State would pick up the difference between 22% and whatever rate the ARMB set. In fiscal year 2007, that difference amounted to $185 million. Senate Bill 125 did not pass, and the Legislature has not set the FY2009 budget yet. So the approach in Resolution 2007-34 is that the Board sets the PERS employer contribution rate at 35.22% average. The Administrator of the system, Commissioner Kreitzer, would notify each employer of their individual normal cost rate and the total rate that is set out in the supplement. The resolution also sets out that the rate is composed of 10.91% for pension and 24.31% for post-employment healthcare costs, as recommended by the Department of Law. The resolution also says that if the State contributes funding that is intended to lower or cap the employer rate, that the rate would be adjusted accordingly. The assumption is that the Board would not have to come back and reset the rate if the State contributes funding on behalf of the employers again - as it had to do last year, that this resolution would be automatic. If that is the case, the Administrator would have to notify employers again of what their adjusted contribution rates would be.

MR. JOHNSON clarified that it would not be the average rate that would be adjusted by reducing or capping the employer contribution rate; it would be the individual employer contribution rate that would be reduced.

MR. SEMMENS agreed, saying that last year the individual employer contribution rates were capped at 22%, with some individual employer variances that were listed.

MR. BARNHILL, prompted by a question from MR. TRIVETTE, said that the Department of Law did not see any problem with that clause in the resolution. But because no one knows what the Legislature is going to do, it would be prudent to revisit Resolution 2007-34 following any legislative action to make sure the resolution does what the Board thought it was going to do.

On a roll call vote, the motion passed unanimously, with all nine trustees present.

19(b) Resolution 2007-35 TRS

A revision to Resolution 2007-35 was distributed to the trustees prior to the start of today's session.

MR. SHIER pointed out the whereas clause that states this is the first year the level percentage of pay method was used to set the TRS contribution rate.

COMMISSIONER KREITZER moved that the Alaska Retirement Management Board set fiscal year 2009 Teachers' Retirement System employer contribution rates consistent with its fiduciary duty, as set out in Resolution 2007-35 (Revision #1 handed out). MS. HARBO seconded.

The roll was called, and the motion carried unanimously, 9-0.

19(c) Resolution 2007-36 NGNMRS

COMMISSIONER KREITZER moved that the Alaska Retirement Management Board adopt Resolution 2007-36, relating to the fiscal year 2009 annual contribution for the National Guard Naval Militia Retirement System. MS. HARBO seconded.

The motion carried unanimously, on a roll call vote, 9-0.

CHAIR SCHUBERT temporarily turned the chair duties over to VICE CHAIR TRIVETTE and left the meeting for about 30 minutes.

19(d) Resolution 2007-37 PERS/TRS Retiree Major Medical Insurance

COMMISSIONER KREITZER moved that the Alaska Retirement Management Board adopt Resolution 2007-37, relating to the employer contribution rate for Public Employees' and Teachers' Defined Contribution Retirement Plans Retiree Major Medical Insurance. MS. HARBO seconded.

The roll was called, and the motion passed unanimously, 8-0.

19(e) Resolution 2007-38 PERS Occupational Death-Disability Benefit

COMMISSIONER KREITZER moved that the Alaska Retirement Management Board adopt Resolution 2007-38, relating to the Public Employees' Defined Contribution Retirement Plan Occupational Death and Disability Benefit rate. MR. RICHARDS seconded.

COMMISSIONER KREITZER said those rates were 1.33% for peace officers and firefighters, and 0.58% for all other PERS employees.

The motion carried unanimously, on a roll call vote, 8-0.

19(f) Resolution 2007-39 TRS Occupational Death-Disability Benefit

COMMISSIONER KREITZER moved that the Alaska Retirement Management Board adopt Resolution 2007-39, relating to the Teachers' Defined Contribution Retirement Plan Occupational Death and Disability Benefit rate. MR. WILLIAMS seconded.

The roll was called, and the motion passed unanimously, 8-0.

20. DR&B Director's Update

20(a). Membership Statistics

MR. SHIER provided membership statistics for fiscal year 2007 that trustees had requested

previously. *[This data was provided in a one-page memorandum in the meeting packet, which is on file at the ARMB office.]* He then answered numerous questions that delved into the details of the statistics.

The director received requests from trustees for the following information:

- If one of the 3,694 new members enrolled in the defined contribution plan Tier IV selected a target fund on their own, would they be counted as one of the 60 members who opted out of managed accounts?
- The number of total returned PERS employees in 2007 that were State of Alaska employees versus other PERS employees.
- A statistics report be included in every board meeting packet.

MR. SHIER related that the Retirement and Benefits Division is now seeing new employees desiring to enroll into the DCR plan their assets from a prior employer's plan. The portability of retirement benefits is a growing concern.

COMMISSIONER KREITZER said that if trustees think of other information they would like to see to let the Division know.

[Commissioner Galvin left the meeting and did not return.]

18(a). Board Acceptance of GRS Certification (revisited)

COMMISSIONER KREITZER requested that Buck Consultants clarify what Gabriel Roeder Smith & Company (GRS) actually certified with regard to retiree medical and death and disability actuarial rates.

MR. SLISHINSKY stated that on the defined contribution plan retiree medical rates and the death and disability rates, Buck Consultants performed a study based on the 2005 data. These members have not materialized yet in the data, therefore, when Buck did their initial study they looked at the data of the most recent tier for PERS and for TRS to come up with what the normal costs rates would be for these benefits. That was the basis for the first study. GRS looked at it and said it was reasonable. Buck was then asked what these rates would be for 2006, and they said there would be no change because there were still no members in the defined contribution plan, which did not begin until July 1, 2006.

20(b). Buck Invoices re: Legislative Session

Per the Board's request at the June meeting, MR. SHIER provided a list of Buck Consultants invoices for PERS and TRS legislation and who ordered the work, for the period July 1, 2006 to June 30, 2007. He noted that the Department of Administration paid one bill for work requested by the Department of Revenue.

MR. SEMMENS asked if retirement system assets were used to pay for all the invoices. COMMISSIONER KREITZER said yes, and that the system assets were used appropriately.

MR. TRIVETTE said that the Board had already looked at all the money expended through April 2007, but he would like to see the invoices for May and June at the next meeting. He thought there were Buck invoices that referred to current employee insurance issues. He said that as a trustee for the retirement systems he wanted to make sure that the retirement funds expended are for retiree issues only and not for active employee issues.

MR. SHIER indicated he could provide the actual invoices from Buck Consultants. He added that Buck Consultants did a significant amount of work for the health plans, and those invoices are segregated according to whether it is a retiree health plan issue or an active employee issue. Tim Adair of the Division of Retirement and Benefits keeps a close eye on that and regularly checks with the managers in charge of the different sections to see whose bill is what so they can be segregated.

MR. TRIVETTE said he was not that concerned about who requested the work from Buck, but it is the Board's obligation to make sure that all the money spent from the trust funds goes for retiree issues and not other things. He recalled that this issue came up a couple of years ago where trust money was spent for other issues, and that money eventually was put back into the retirement system. He said he wanted the record to show that the money spent last fiscal year was all for retiree issues.

20(c). Valuation Report Lag Time

MR. SHIER stated that he had hoped to have an action item ready for the Board in time for this meeting concerning compressing the time frame for determining contribution rates based on annual actuarial valuations from two years to one year. The Board has discussed at previous meeting how to do that. The Division and David Slishinsky of Buck Consultants have identified some concerns to the point where the Division is not ready to put an action item on the table.

MR. SHIER distributed an information memo dated September 27, 2007 that outlined a draft timeline for compressing the lag time between the actuarial valuations and setting the employer contribution rates. He stressed that the timeline was predicated on the idea that SB 125 would pass and therefore render the individual employer supplement unnecessary. He explained how the requirement to have actuarial valuations audited by a second actuary takes time but that it might be possible to use FY08 valuations to set the 2010 contribution rates. However, it would not knock a whole year off the process, as was once thought possible.

MR. SLISHINSKY explained how he had earlier projected what next year's contribution rate might be by rolling forward the calculated accrued liability for the FY06 valuation. He said that if all Buck's assumptions were exactly realized, that would be the accrued liability number for the FY07 valuation. Any difference from the calculated accrued liability based on new data would be attributed to experience that is different than Buck had assumed for the year. So if Buck assumes that

there is going to be no actuarial or demographic gains or losses if their assumptions are exactly met, then they can calculate what the roll-forward number is. What Buck has seen from year to year is that that decrimental gain/loss is usually pretty small and not material. If they can use the roll-forward accrued liabilities, combine that with the actual assets at June 30, and then determine the actuarial value of assets, they could calculate an unfunded liability used for setting the contribution rates. They would assume that the normal cost rate is exactly the same as the percentage of pay. So there is a way of coming up with the fiscal year 2010 contribution rate based on June 30, 2008 assets that is a full 12 months shorter than what they are doing now. There would be a 12-month delay on the asset side and a roll-forward of the liabilities.

MR. O'LEARY asked, if Buck were the certifying actuary, would they be able to certify that as a basis for setting contribution rates. MR. SLISHINSKY said yes, that it is better than what is being used now. The Governmental Accounting Standards Board (GASB) requirements allow going to 24 months out in setting the rates, and the process he just described really shortens that. It comes up with a better rate to apply to FY10.

MR. JOHNSON inquired if the change would create any actuarial challenges for Buck. MR. SLISHINSKY said no.

MR. SHIER reminded everyone that SB 125, which is needed to make this possible, has not passed yet. Also, annual valuations are required by statute. So either the Department of Law would have to say that it was okay to skip a year, or statutory language would have to be changed. He stated that Division staff is committed to following the timeline outlined in the memorandum, and staff is hopeful that SB 125 will take its expected course.

MR. SEMMENS stated that the impact of the proposed timeline on municipalities and teachers' systems, if SB 125 passes, would be minimal because they know that their rates are going to be either 12.56% or 22%. So the compressed timeline really speeds up the process for the State — and hopefully comes up with a lower rate, at least for FY10.

COMMISSIONER KREITZER reported that during discussions of SB 123 and SB 125 there was great frustration over this very issue in the Legislature. So she thought they would be very happy if the proposal to cut the valuation time lag could work.

CHAIR SCHUBERT rejoined the meeting at 5:02 p.m.

MR. SHIER stated that the Division was rewriting the health plan booklets for actives and retirees.

UNFINISHED BUSINESS

1. **Meeting Calendar** - MS. HALL indicated that the meeting schedule was in the packet, and there were no changes.

MR. TRIVETTE commented that Gabriel Roeder Smith & Company was not present to talk about their certification report. He saw that as a problem because actuary reports are difficult reading, and there was no one from GRS present to answer questions. Second, he raised the question of whether five major meetings a year are enough to review everything, in light of the ARMB's workload — the default option probably should be reviewed every couple of years, changing healthcare issues where committee work is brought back to the board, etc. He saw this board as being busier than the Alaska Permanent Fund Board because this board has responsibility for both liabilities and assets.

COMMISSIONER KREITZER suggested that an extra day might occasionally have to be added to a scheduled meeting.

2. **Disclosure Reports** - included in the packet.

3. **Legal Report**

MR. JOHNSON indicated he had nothing to report.

Noting Mr. Johnson's continued presence at ARMB meetings, MR. BARNHILL provided an update on the hiring process for outside legal counsel for the board. He explained that the Department of Law's (DOL) efforts to hire a full-time assistant attorney general to provide legal services to the ARMB and the Treasury Division resulted in an offer that was rejected. Among the reasons given was that the offered salary was too low. He said Mr. Johnson's contract was extended through the end of the year while the DOL proceeds with an RFP process to retain outside legal counsel services for the ARMB and Treasury. He said DOL is pursuing the possibility of allowing the APFC to hire their own dedicated general counsel in-house, which is a rather significant move for the DOL to allow that to happen. DOL cannot do that for the ARMB and the Division of Treasury because only the investment staff are in the exempt service, so Treasury has no additional salary leverage above and beyond what the DOL has.

MR. BARNHILL stated that he would share information about litigation developments if the Board wanted to go into executive session.

MR. TRIVETTE moved that the Alaska Retirement Management Board go into executive session for the purposes of hearing advice and attorney/client privileged information. MR. SEMMENS seconded.

There being no objection, the motion passed, 8-0. [Commissioner Galvin was absent]

The Chair asked staff to remain. The recording devices were turned off, and everyone else left the meeting room. The Board met in executive session starting at 5:11 p.m.

When the Board reconvened in regular session at 5:17 p.m., CHAIR SCHUBERT reported that no

action was taken in executive session.

NEW BUSINESS - None.

OTHER MATTERS TO PROPERLY COME BEFORE THE BOARD

Responsibility for Setting Judicial Retirement System Rate

MR. SEMMENS said Buck Consultants noted in their report that either the Commissioner of Administration or the ARM Board could set the employer contribution rate for the Judicial Retirement System. He said it seemed that the Board does set the rates for the retirement systems, and he wanted a recommendation from the Department of Law or whomever as to who should set that rate and how it should get done.

MR. BARNHILL replied that the Commissioner of Administration has the explicit statutory authority to set the JRS rates. The ARMB also has the explicit authority to set the JRS rates. In the past, the DOL has suggested that the two should do it together. But this year there was not time to do it, so the Commissioner set the rate, and she had the statutory authority to do so.

PUBLIC/MEMBER COMMENTS - None.

INVESTMENT ADVISORY COUNCIL COMMENTS

DR. JENNINGS stated that among not-for-profit investment committees there is a common tendency to say "we all want to be like Yale." Dr. Mitchell had earlier reported that Yale Endowment Fund had a 28% return last year. DR. JENNINGS presented a slide showing the difference between the diversification of the leading edge endowments and their actual returns. He highlighted the 2.6% performance increase if the PERS fund used a Yale-like asset mix with the current managers. The take-away from this exercise is that diversification is good — 2.6% outperformance would be about $400 million, and that is why the IAC beats the drum about further diversification. The other aspect is that, once a fund is in alternative assets, manager selection is extremely powerful (and a big part of Yale's returns).

MR. O'LEARY commented that the degree of leverage that is employed in some of the strategies that not-for-profits invest in is unknown, so two funds can be invested in the same broad category but have a fundamentally different investment. As an illustration, Yale's hedge fund exposure is a much more volatile type of exposure, and the real estate exposure would be much less core-oriented and much more developmental where leverage ratios of 70-80% are not uncommon. It is truly an apple and an orange comparison.

TRUSTEE COMMENTS

MR. SEMMENS stated that the ARMB in its initial report to the Legislature suggested that the State contribute additional monies to pay down the unfunded liabilities. He asked that the Board

encourage the Governor to consider adding significant dollars to the FY09 budget, both to mitigate the impact on employers, and to add material amounts to pay down the unfunded liabilities.

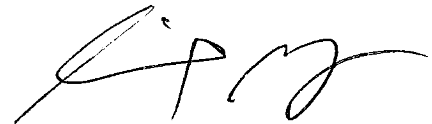
COMMISSIONER KREITZER said the State is right in the middle of the FY09 budget process, so she was not ready to say that she would pursue what she did last year, given expected huge increases in Medicaid and other pressures on the budget. She would know more by the November meeting.

MR. TRIVETTE stated that whenever public information is available on issues the Board discussed in executive session, he would like to get notice of that so he could respond to emails and phone calls from the public.

FUTURE AGENDA ITEMS - None.

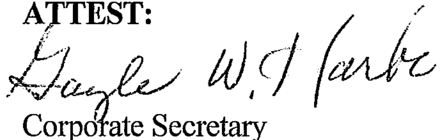
ADJOURNMENT

THERE BEING NO OBJECTION AND NO FURTHER BUSINESS TO COME BEFORE THE BOARD, THE MEETING WAS ADJOURNED AT 5:25 P.M. ON SEPTEMBER 27, 2007, ON A MOTION MADE BY MS. HARBO AND SECONDED BY MR. RICHARDS.



Chair of the Board of Trustees
Alaska Retirement Management Board

ATTEST:



Corporate Secretary

Note: The summary minutes are prepared by an outside contractor who attended and recorded the meeting. For in-depth discussion and more presentation details, please refer to tapes of the meeting and presentation materials on file at the ARMB office.

Confidential Office Services
Karen Pearce Brown
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