State of Alaska
ALASKA RETIREMENT MANAGEMENT BOARD
MEETING

Location of Meeting
Anchorage Marriott Hotel
820 West 7th Avenue
Anchorage, Alaska

MINUTES OF
April 24-24, 2008

Thursday, April 24, 2008

CALL TO ORDER

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

ROLL CALL

Six ARMB trustees were present at roll call on April 24 to form a quorum.

ARMB Board Members Present
Sam Trivette, *Vice Chair*
Gayle Harbo, *Secretary*
Commissioner Annette Kreitzer
Martin Pihl
Tom Richards
Larry Semmens

Gail Schubert, *Chair* (arrived at 2:50 p.m.)
Commissioner Patrick Galvin (present on April 25)

ARMB Board Members Absent
Commissioner Patrick Galvin (April 24)
Mike Williams

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

Consultants Present
Robert Johnson, outside legal counsel
Mike Barnhill, AK Department of Law legal counsel (by teleconference)
Michael O'Leary, Callan Associates, Inc.

Department of Revenue Staff Present
Brian Andrews, Deputy Commissioner
Gary M. Bader, Chief Investment Officer
Pamela Green, State Comptroller
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 & Benefits
Jim Puckett, Deputy Director, Division of Retirement & Benefits
Kevin Worley, Chief Finance Officer

Invited Participants and Others Present
David Slishinsky, Buck Consultants, Inc.
Christopher Hulla, Buck Consultants, Inc.
Michelle DeLange, Buck Consultants, Inc.
Leslie Thompson, Gabriel Roeder Smith & Company
Lee Wanie, Barclays Global Investors
Marco Merz, Barclays Global Investors
Fred McIntosh, Tishman Speyer Properties
Julie Lurie, Tishman Speyer Properties
David Weiner, Sentinel Realty Advisors Corporation
David Stenger, Sentinel Realty Advisors Corporation
Thad Gray, Abbott Capital Management
Tim Maloney, Abbott Capital Management
Al Clerc, Pathway Capital Management
James Chambliss, Pathway Capital Management
Jason Jenkins, Pathway Capital Management
Melody McDonald, RCM Asset Management
Peter Goetz, RCM Asset Management

PUBLIC MEETING NOTICE

Judy Hall confirmed that proper public notice of this meeting had been made.

APPROVAL OF AGENDA

VICE CHAIR TRIVETTE indicated the addition of "Farmland - Action Item" following #9 of Reports.

MR. SEMMENS moved to approve the agenda with the addition indicated. MS. HARBO seconded.

With no objection, the agenda was approved as amended.

COMMUNICATIONS, PUBLIC/MEMBER PARTICIPATION, AND APPEARANCES

There was no one present at the meeting location in Anchorage or on line who wished to speak to the Board.

APPROVAL OF MINUTES

February 14-15, 2008
MS. HARBO moved to approve the minutes of the February 14-15, 2008 meeting as written. MR. SEMMENS seconded.

There being no objection, the motion passed unanimously.

March 17, 2008
MS. HARBO moved to approve the minutes of the March 17, 2008 meeting as written. MR. SEMMENS seconded.

There being no objection, the motion passed unanimously.

REPORTS

1. Chair Report

CHAIR GAIL SCHUBERT was not present at this point in the meeting.

2. Retirement & Benefits Division Report

2(a). Legislative Update - SB 125
COMMISSIONER KREITZER reported that the Governor signed SB 125, and the

Public Employees' Retirement System (PERS) will now be a cost share system like the Teachers' Retirement System (TRS) is. She also reviewed the operating budget, which is HB 310. There is $206.3 million deposited for TRS and $241.6 million deposited for PERS. The Legislature also decided to appropriate funds to zero out the unfunded liability for the Judicial Retirement System (JRS) and for the National Guard and Naval Militia Retirement System (NGNMRS). She read into the record a portion of a communication between Legislative Finance and Department of Administration staff: The Department of Military and Veterans Affairs (DMVA) will pay the normal cost of $750,800 in its operating budget plus $10 million in a separate direct appropriation to retirement. The past service payment of $1.7 million was taken out of the DMVA operating budget and it appears the intent is to fund any past service costs out of the direct appropriation to retirement. So the $10 million would be paying for the unfunded liability. The Court System is paying the FY09 employer contribution rate of 57.7% plus $49 million in a separate direct appropriation to retirement. It appears the FY10 employer rate will decrease, and there should be an additional request to pay the unfunded liability with direct appropriations to retirement if there is any past service cost in the next valuation report scheduled for June 30, 2008.

MS. HARBO requested a copy of the information that the Commissioner just presented.

COMMISSIONER KREITZER stated that the ARM Board had passed a resolution in support of an additional contribution to TRS of $450 million, and the Legislature chose not to do that but to put more into savings accounts.

2(b). Retirement & Benefits Office Update

Director PAT SHIER introduced Jim Puckett, the new Deputy Director of the Division of Retirement and Benefits (DR&B). He reported that the Juneau office is in the middle of some minor administrative changes. The space is just about thoroughly locked down and secure, an initiative started shortly after he came on board to make sure that the members' information is secure. A final step is to build a hallway that secures the health administration section. Finally, there is a request for proposal (RFP) on the street for the political subdivision plans: he asked Mr. Semmens to provide the details.

MR. SEMMENS stated that the proposal evaluation team will meet within the next ten days, and the effective date is July 1.

MR. SHIER reported that the RFP for the major health carrier should be released this fall. The reconstituted benefit plan booklets for the active employee plans should be out in July. Mr. Puckett has been instrumental in helping move some of the Department's initiatives forward. Once the active employee plan booklets are done, rewriting the retiree plan booklets will be next.

2(c). Membership Statistics (including SSgA Participant Claims)

KEVIN WORLEY, Chief Finance Officer in DR&B, reviewed the quarterly and cumulative information report that was revamped per a request at the last meeting to separate those members who have terminated from those who retired. He said of interest was that 820 members opted out of managed accounts in the PERS defined contribution plan and TRS defined contribution plan in the quarter ended March 31, 2008, bringing the cumulative total to 1,036. There is no information as to why members opted out.

2(d). KPMG

MR. WORLEY stated that he spoke with Kathy Porterfield of KPMG yesterday regarding the *Financial Week* article in the meeting packet, and Ms. Porterfield said she had no information to provide that was not already contained in news reports.

2(e). Buck Consulting Invoices

Copies of invoices for actuarial valuation and consulting services for the month of February were included in the meeting packet.

3. Treasury Division Report

Deputy Commissioner BRIAN ANDREWS gave a budget update, noting that actual and projected budgetary costs for FY08 will be in line. All components are under budget at this point except for travel. He reported that the Legislature approved the budget for FY09 and accepted the request for two additional investment officer positions, one designated for fixed income and the other oriented toward equities. A remodeling effort is underway in Treasury to accommodate these two new staff. He informed the Board that the morale in the Treasury Division is very high, and the Division is fully staffed except for one position.

MR. ANDREWS stated that on April 24 another cash exchange with State Street Global Advisors (SSgA) took place, and that receivable is now down to $1.73 million. He projected that the entire amount will be received by June 30. Fewer than 80 people have yet to make a claim for payback. Alaska is the only public or private party that has settled with SSgA at this point, which he attributed to the long relationship that Alaska has with SSgA and Mike Barnhill's ability to negotiate the settlement.

MR. ANDREWS reported that pension obligation bond (POB) legislation passed unanimously in the Legislature but has not been prepared for the Governor's signature yet. The legislation was modified in Senate Finance to take out the Alaska Municipal Bond Bank and the State Bond Committee as issuing entities of this, and kept in the Pension Obligation Bond Corporation and the Alaska Housing Finance Corporation. Commissioners Kreitzer, Galvin and Notti comprise the Board of the Pension Obligation Bond Corporation.

In anticipation of the Governor signing the legislation, requests for proposal have been issued for bond counsel, financial advisors, and investment bankers that would be interested in putting a selling group together.

MR. ANDREWS said the State of Connecticut last week did a $2 billion POB transaction. He thought it was not priced as well as it should have been because of poor marketing of the bonds. Despite that, 60% of the bonds were sold to European cover banks. He related that European banks reportedly are interested in when Alaska will be coming to market because of its resources and petro-dollars.

MR. ANDREWS stated that the State of Alaska received a credit rating upgrade from S&P to AA+. Fitch will review the State next month.

POBs will be on the June meeting agenda. MR. ANDREWS mentioned that there are matrices of cash injections and employer contribution rate savings based on a percentage of pay calculation methodology, as opposed to a level dollar methodology that was used last spring. The State worked with the actuary for a number of weeks to put together this information because of the complex mathematics in the calculations. Of interest is that once the POB transaction is done and the proceeds are sent to the ARMB, the actuary has 30 days to produce a new contribution rate. The legislation authorizes issuing up to $5 billion in POBs, but the size will be based on the market.

MR. SEMMENS said he has favored using pension obligation bonds since day one as a tool to address the unfunded liability. He asked who repays the debt. MR. ANDREWS replied that it is an appropriation debt rather than a general obligation debt, so each year the Legislature has to appropriate a debt service payment. It actually becomes an obligation of the State to make that appropriation. From the ARMB's point of view, the payment will reduce the amount of contribution that the employer makes to the retirement fund.

MR. SEMMENS recalled that HB 13 originally contemplated individual employers being able to issue debt, but that provision was removed. He asked if individual employers are still liable for part of the pension obligation or if the State General Fund was going to cover that appropriation. MR. ANDREWS replied that SB 125 limited the municipalities to a contribution rate of 22%; the State has absorbed any unfunded liability cost above that 22%. At this point, municipalities are not obligated in any way for POBs.

MR. PIHL asked if the State, having fixed the rates at 22% and 12.56%, is assuming the obligation for the unfunded liability. The State will be able to reduce its cost over time by issuing the POBs. MR. ANDREWS agreed with that summary. MR. PIHL asked Mr. Andrews to walk through an example of the employer contribution savings in the matrix, and MR. ANDREWS obliged, using the Public Employees' Retirement System as the example.

Regarding the SSgA settlement, MR. SHIER noted that there was a spreadsheet in the DR&B material listing the percentages of people who have made claims. He said the Division intends to make one more contact with individuals who have not claimed the settlement money.

4. Chief Investment Officer Report

Chief Investment Officer GARY BADER reported on the following items:

- Stable Value and Interest Income Funds are perhaps the most popular investment option for new money in the defined contribution plans. They are a good option for participants who want high stability in their portfolio. Staff is reviewing all the defined contribution plan options in terms of the information that is provided to the participant, staff's ability to monitor the investment, and how to simplify it so that people can understand it - in particular the descriptions for Stable Value and Interest Income. The meeting packet contained a communication from T. Rowe Price related to Mr. Bader's request to improve transparency, reduce active management to a more index-like management, and to simplify the structure for better understanding and communications. In some of the literature provided to participants, the Stable Value Fund is shown as two underlying funds and in another instance as three funds. T. Rowe Price's strategy has a reserve fund, which is basically cash to provide the liquidity and take care of inflows and outflows into the fund, and two other funds that are invested in by T. Rowe Price. They engage what they call a insurance wrapper that guarantees book value performance of those underlying securities. The Board has agreed in the past that there should be one underlying set of investments, and T. Rowe Price considers these two accounts in terms of trying to create an intermediate Lehman index-like return out of the fund. Staff has suggested that T. Rowe Price simply go to the Lehman Intermediate Aggregate Index so that staff would be able to better monitor the fund and have greater comfort that this fund is not subject to the vagaries of active management and some play that is not understood. This item does not require any Board action, since ARMB already has a contract in place with T. Rowe Price where they talk about this alternative.

MS. HARBO asked if the fees using the Lehman Index would be less for the Stable Value Fund participants. MR. BADER replied that they have not discussed the fee side of it yet because staff is also asking for more accountability in terms of what T. Rowe Price is reporting. He said he intended to visit T. Rowe Price and eventually have that discussion about fees. The average fee for all the accounts with T. Rowe Price is 13 basis points, which is extraordinarily low.

VICE CHAIR TRIVETTE said he assumed that participants in the Stable Value Fund would be advised of any modifications. MR. BADER stated that staff would make suggestions to the Division of Retirement and Benefits, in conjunction with T. Rowe Price and Great-West. He said this is a very complicated investment for people to understand, and all parties would be working together in this regard.

- Notification that staff transferred $30 million out of fixed income into the Russell 1000 Growth Fund.
- Notification that staff transferred $30 million from Mondrian International Fixed Income into the Russell 200 Index, to increase the large cap. Also, Mondrian has had a great run and was getting close to the upper allocation band.
- Notification of increasing the commitment to Hancock Agricultural Investment Group from $125 million to $156 million. The asset allocation to farmland investments calls for much higher than that.
- Information from McKinley Capital Management advising that they created a research analyst function with three new staff members in New York to assist the portfolio management team. McKinley is a highly quantitative-driven investment manager: one of the components of their investment style is to try to identify the best research analyst on Wall Street and place a higher emphasis upon the best analyst than they do on aggregated street data.
- Request to place Capital Guardian's large cap equity mandate on the Watch List for underperformance. The Board has a policy of putting managers on the Watch List if there is a significant change in the management structure of the firm or the investment team, or for quantitative reasons such as underperformance of the index by more than one percent or being in the lower 65% of the peer universe.

MS. HARBO moved that the Alaska Retirement Management Board place Capital Guardian large cap equity on the Watch List (for underperformance). MR. RICHARDS seconded.

By roll call vote, the motion passed unanimously, 6-0.

- Request to place the internally managed real estate investment trust (REIT) portfolio on the Watch List because it meets Watch List criteria. MR. BADER said he views this slightly different than if the ARMB had an external manager for the portfolio because the internal investments allow staff to rebalance the real estate portfolio with greater ease. So while the investment performance has been correctly measured by the accepted standards, the initial investment in this fund was $100,100,000, and nearly $50 million has been draw out and placed in other asset classes since then. The portfolio value is $82 million now. So staff sold assets when the portfolio made a lot of money and got out, and the portfolio has been smaller during the period of lower returns. Relative to the fixed income returns over the period that the internal REIT portfolio has existed, staff can demonstrate that creation of the portfolio has been a good decision. Staff intends to make a recommendation on the REIT portfolio at the June meeting.

MS. HARBO moved that the Alaska Retirement Management Board place the internal REIT portfolio on the Watch List (for underperformance). MR. RICHARDS seconded.

MR. SEMMENS asked specifically why this product meets the criteria for the Watch List. MR. BADER explained it was the return of 5.93% for the last three years versus the index return of 8.49%, as well as the portfolio being in the lower percentile versus other managers.

The roll was called, and the motion carried unanimously, 6-0.

- Request to put the Brandes International Equity commingled fund in the defined contribution plan on the Watch List. Brandes is one of the most popular investment managers that the State has, and they are one of the most outstanding investment managers in the defined benefit plans. That has not been the case in their mutual fund, which is available to the defined contribution plans. The mutual fund has underperformed and failed to meet the standards.

MS. HARBO moved that the Alaska Retirement Management Board place the Brandes International Equity commingled fund on the Watch List (for underperformance). MR. SEMMENS seconded.

COMMISSIONER KREITZER said she found it helpful to hear the actual return and the expected performance, and inquired what those numbers were for Brandes. MR. O'LEARY reported that Brandes's return in 2007 was 8.5%, and the relevant index was 11.17%; for three years the commingled fund returned 14.85% versus the index's 16.83%. He said the three years is the most critical period result to look at.

The motion passed unanimously, on a 6-0 roll call vote.

- The Board held a special meeting on March 17 on securities lending and directed staff to suspend that program and proceed in a responsible manner to call in all outstanding securities on loan that the ARMB had control of. Staff approached State Street, the custodian bank, and advised them to call back all the securities, which totaled over $2 billion. State Street did not make as rapid progress as was hoped, and there is currently $150,000 of assets still outstanding. These are in some foreign securities, as well as Delta Airlines and Northwest Airlines bonds. There is collateral of 102% of the estimated value of those securities still in place, so there is no impairment. There are also some securities on loan through the commingled funds in which the ARMB invests. Many of them happen to be through SSgA, where the ARMB picked the option of going into a securities lending account for those assets. Staff advised SSgA that the ARMB wanted to be in the non-securities lending account, and Mr. Tremblay of SSgA has indicated that that has all been accomplished. There are a number of investments where ARMB has no say in whether or not assets are loaned out: the Brandes mutual fund would be a good example, where they have SEC authority to lend out up to 30% of their portfolio. Brandes has probably about 10% on loan. So plan participants have some exposure in securities lending.

- A teleconference meeting of the Defined Contribution Plan Committee is scheduled for May 7, 2008. The agenda will cover the status of the defined contribution plans and some recommended changes to the plans.
- Request to put Mariner, an absolute return manager, on the Watch List. Mariner's benchmark is to get T-bill plus 5% rate of return; the benchmark return at the end of December was 9.3%, and Mariner's return was calculated at 6.09%. They are in the 83rd percentile of their peer group.

MS. HARBO moved that the Alaska Retirement Management Board place Mariner on the Watch List (for underperformance). MR. SEMMENS seconded.

The roll was called, and the motion carried unanimously, 6-0.

- Request to place ING Ghent on the Watch List for qualitative reasons. Rogge Global Partners, a $37 billion international fixed income management firm, will purchase ING Ghent, a high yield manager, in a friendly transaction. Treasury staff does not believe this indicates any problems, but it is the Board's practice to place a manager on the Watch List when there is a change in management.

MR. O'LEARY added that the acquisition was announced last week. The whole unit at ING that has been managing the high yield bond product is based in New York and will stay there. Rogge has offices in Connecticut and London. He said he has tried to understand what would drive the people at the high yield unit within ING to look for a new parent. ING has a number of fixed income operations that can develop and offer a range of products. The ING Ghent people were in the silo of high yield, but there are things closely related to high yield where they might not have been able to expand. From their perspective, being part of a larger fixed income shop that has a global focus but does not really have products on the fringe of what ING Ghent does would provide them with greater growth opportunity. He said he was happy this was a friendly acquisition but agreed ING should be placed on the Watch List because of the magnitude of the change.

MS. HARBO moved that the Alaska Retirement Management Board place ING Ghent on the Watch List (because of management change). MR. SEMMENS seconded.

The motion passed unanimously, on a 6-0 roll call vote.

- Information that Chair Gail Schubert has appointed Sam Trivette, Gayle Harbo, and

Tom Richards to an evaluation committee to evaluate the submissions of firms that applied to do the actuarial review of the State's actuary.

- The date and location for the education conference has been changed to September 15-16, 2008 in Seattle. The September 8-9 dates in New York City did not work out for logistical and cost reasons. Ms. Hall will proceed with new arrangements for the conference, unless Board members object.

5. Fund Financial Report

State Comptroller PAM GREEN reported that during the period that Juneau is operating on diesel generated power, the Treasury Division has a contingency arrangement with the Alaska Permanent Fund Corporation (APFC) to be operational using APFC's generator within an hour or two of electrical brown-outs or power outages. The APFC is located in a separate building in Juneau.

MS. GREEN reviewed the financial report for the eight months ending February 29, 2008 included in the meeting packet:

- The invested assets for all the retirement funds totaled $18.6 billion, roughly the same as at July 1, 2007, the beginning of the fiscal year.
- The assets for the Public Employees' Retirement System (PERS) have decreased roughly 2.5% since 7/1/07, due primarily to net investment losses and withdrawals within the defined benefit plan.
- The Teachers Retirement System (TRS) has lost slightly more than 2.5% since the beginning of the fiscal year, again due to investment losses and net withdrawals in the defined benefit plan.
- The assets of the Judicial Retirement System have declined about 4.5%, having experienced a net withdrawal for the last eight months.
- The Military Retirement Plan had net contributions, and the ending invested assets are up about 3.2%.
- The Supplemental Benefit Annuity Plan assets decreased roughly 3.5% because of both investment losses and net withdrawals in the plan.
- The Deferred Compensation Plan also had a loss of 6.4% from the beginning of the fiscal year.
- The Defined Contribution Retirement Retiree Medical Plan had significant net contributions.
- The Defined Contribution Retirement Health Reimbursement Arrangement Plan had significant net contributions.
- The Defined Contribution Retirement Health Trust Plans have also been growing.

MS. GREEN stated that the March 2008 financial statements are already on the web site. The "Schedule of Investment Income and Changes in Invested Assets by Fund" has been reformatted so the Retiree Medical Plan, the Health Reimbursement Arrangement Plan, and the Health Trust Plans are allocated to their perspective plans.

MS. HARBO noted that for 2006-2007 the employer contribution rate to the major medical plan was 1.75%, and for this year it is 0.99%. KEVIN WORLEY, CFO, Division of Retirement and Benefits, indicated he would have to check the rates and get back to her.

MS. GREEN briefly reviewed the February monthly activity for the various plans. She also presented graphs for the PERS, TRS, Judicial and Military plans showing total invested assets, investment income, and actual asset allocation versus the target.

Beginning with the defined benefit plans as a group, MS. GREEN reported on income by investment type and by investment manager. Total investment income was a loss of $3.1 million for February, or roughly a 1% loss. A new emerging markets income fund managed by Lazard will be added to the March report. She indicated she had reviewed the income by investment type and by investment manager for the defined contribution plans at the last meeting, and would simply take any questions on that section at this meeting rather than go through the details.

MR. WORLEY spent a few minutes explaining a handout where the net contributions and withdrawals column for the defined benefit plans was split into two columns to show inflows and outflows separately, as the Board had requested.

Referring to the financial report for SBS, MS. HARBO made note of the substantial investment loss to members in February.

MR. PIHL and MR. WORLEY had a brief exchange about how the State "employer relief" appropriation in July 2007 was split between the PERS and TRS pension funds and the Alaska Retiree Health Care Trust.

6. Actuarial Valuation Review - 2007

6(a). Certification of Draft FY07 Actuarial Valuation

[A copy of the GRS actuarial review was included in the meeting packet and is kept on file at the ARMB offices.]

LESLIE THOMPSON, Senior Consultant with Gabriel Roeder Smith & Company (GRS), presented a report on her actuarial review of the June 30, 2007 actuarial valuations for PERS and TRS. She started by saying she has been a consulting actuary for 30 years and has been doing audits for a long time, and this was a very favorable audit. Over the last five to ten years she has observed that actuarial firms have become more reluctant to submit peer true test life data, but Buck Consultants was exemplary in submitting very detailed data to GRS. She personally reviewed the test lives, and GRS was able to go into great detail with the audit. Any comments in the GRS report are de minimus in nature and have a negligible impact on the valuation results. Her suggestion was for the actuary to review the comments and make changes where applicable and reasonable next year, and inform GRS so they could make a note in the file. Also of note was that Buck was able to obtain and use even more data than they had in the past on the retiree medical side, and that enhanced the credibility of the valuation for retiree medical. GRS considered that an extremely favorable result, too.

MS. THOMPSON referred to page 22 of the GRS report, which contained the comments she mentioned earlier. She recommended discussion on these and resolution prior to the next valuation. She reiterated that many, if not all, are completely de minimus. She also reviewed page 23: the results of the limited scope valuation for PERS, listing the benefits, Buck's results, GRS's results from their calculation, and the percent difference. The point of the audit is to make sure the present value benefits match, and in each case the difference was extremely small. She next reviewed the results for TRS, which were very favorable but not as close as PERS, but that may have been due to how the sick leave was treated in the valuation. This is something the report recommended looking at.

MS. THOMPSON stated that no actuary can perfectly program every single benefit, so there are estimation techniques. She said what Buck is doing is reasonable and conservative, but there may be an opportunity to make it more in line with actual practice.

MS. THOMPSON noted that the Alaska retirement systems are about to go through a full scope audit, and the GRS report comments could be a guide for the full replication auditing actuaries to use.

Responding to MS. HARBO, MS. THOMPSON said that GRS actually audited more test lives but only included a couple of exhibits in the report as illustrations. They select a span of benefits (a new hire, an older hire, someone close to retirement, etc.), in order to capture all the different features of the benefits program.

Noting that both actuary firms use data from Division of Retirement and Benefits, MR. BADER asked if GRS does any auditing of the incoming data before it is used. MS. THOMPSON replied that GRS did that last year but not this year, and they found the data to be very reasonable. She added that the standard is to do a reconciliation matrix that monitors where people were at the beginning of the year, what they did during the year, and where they ended up at year end. That can be a very critical component in making sure people are not lost or that unaccounted for people do not show up. If that can be done year by year, it will further ensure the credibility of the valuation.

VICE CHAIR TRIVETTE called a scheduled break from 10:30 a.m. to 10:45 a.m.

6(b). FY07 Draft Actuarial Valuation Report - PERS and TRS

DAVID SLISHINSKY, MICHELLE DeLANGE and CHRISTOPHER HULLA of Buck Consultants made an actuarial presentation to the Board on the four traditional defined benefit pension plans:

Public Employees' Retirement System (PERS)
Teachers' Retirement System (TRS)
Judicial Retirement System (JRS)
National Guard and Naval Militia Retirement System (NGNMRS)

[A copy of Buck's slides used for this presentation are on file at the ARMB offices.]

In addition to the traditional defined benefit plans, a defined contribution plan was added for new hires in PERS and TRS after July 1, 2006. Buck's valuation only covers benefits for the members who were hired prior to July 1, 2006. A postemployment health care plan covers all members in the defined benefit and defined contribution plans. The actuarial valuations are done annually as of June 30, so this report is for data collected as of June 30, 2007. The results for JRS and NGNMRS are roll-forward valuations, using the liabilities from the previous year (assuming there are no demographic gains or losses) and the actual assets at the valuation date to determine the unfunded liabilities. The ARM Board has responsibility for PERS, TRS and NGNMRS. The Commissioner of Administration is responsible for JRS.

MR. SLISHINSKY began by providing a short refresher on the actuarial valuation process.

MR. SEMMENS asked if Buck verifies the integrity of the data that they get from Division of Retirement and Benefits (DR&B). MR. SLISHINSKY replied that Buck performed a reconciliation of the June 30, 2007 data against last year's data, so they track what happens to everybody from one year to the next. Buck also screens the information for reliability, for example, checking that everyone has a date of birth and date of hire, and that the information is reasonable. Buck will ask questions about the data from DR&B, and if the information is not available, they will make some assumptions about the data to make sure that it is reasonable before it is put into the computer program to calculate the value of the benefits.

MR. RICHARDS inquired if Buck's asset valuation method looked at Alaska's PERS and TRS return on investments or if they used nationwide results. MR. SLISHINSKY explained that most systems use a method that smoothes gains and losses. Buck uses a five-year period of smoothing for Alaska's plans. It reduces, but does not eliminate, the amount of volatility in the return on the actuarial value from one year to the next. However, a long period of gains or losses can produce volatility in the actuarial value.

MR. PIHL asked if Buck confirms the data with employers. MR. SLISHINSKY said that Buck does not; Buck collects information from DR&B and matches it to prior data. If there are any questions with the data, Buck works with DR&B.

MR. SLISHINSKY reviewed the demographic, economic, and health care actuarial assumptions used to quantify the amount and value of future benefit payments. Actuarial assumptions should be a realistic "best guess" based on past history, future expectations, and a long time horizon of 40-plus years.

MR. O'LEARY stated that there is a discussion each year about the differences in assumptions from the investment side and the actuarial side, which basically has to do with a difference in time horizon. Callan Associates uses a 2.75% projected inflation rate for investments, and Buck's long-run inflation assumption is 3.5%. He asked Buck if the discount rate used by others has shifted much in the last year. MR. SLISHINSKY said not in the last year, but there has been a minor shift downward in long-term assumptions in the past three years.

MR. O'LEARY asked if an 8% return is still the norm, with most outliers tending to be below rather than above that. MR. SLISHINSKY replied that 8% still remains the most common return assumption in the surveys he has seen. He added that it is a function of asset allocation, and most systems are at 65% equity or equity-like investments and 35% in fixed income. The Alaska systems have more equity investments, so there is a greater long-term expected return, which is why Buck sets that assumption slightly higher than the average assumption used by other systems.

Continuing with his description of actuarial assumptions, MR. SLISHINSKY said the inflation assumption is consistently applied to salary increases, cost-of-living adjustments (COLAs), investment return, and health care trend. Buck presents and recommends the assumptions to the ARMB, and the Board discusses them and is responsible for approving them. Buck makes sure that each assumption is individually reasonable and appropriate. Actuarial mathematics is a science, but the application in the real world is an art. So the setting of assumptions is a blend of art and science.

MR. SLISHINSKY reviewed a summary of current economic assumptions (slide 7), including an investment return of 8.25% for PERS, TRS and JRS and a lower 7.25% investment return for NGNMRS because of its more conservative investment policy. The underlying inflation rate being used is 3.5%.

MR. SEMMENS mentioned that the Anchorage School District negotiated a contract where the average salary increase was 28% over four years. He asked about the impact on Buck's actuarial valuation if other unions achieve similar salary increases.

MR. SLISHINSKY responded that when a group of the plan membership is getting pay increases that exceed the assumption number, it will result in an actuarial loss and increase the unfunded liability. If future increases are likely to be less because of a larger increase now, then those increases will tend to even out over time, and there may not be actuarial losses going forward. Buck has seen legislation in some states to significantly increase salaries for certain employee groups, and there has not been a corresponding fiscal impact note attached to the bills. Buck has had to tell those state boards that the legislation created an actuarial loss.

MS. HARBO commented that she was not familiar with the details behind the four-year 28% salary increase for Anchorage teachers. She recalled hearing at a forum in Fairbanks during discussion of SB 141 that new employees in a defined contribution plan would not be getting the benefits of the defined benefit system and would need bigger salary increases in order to save more money and provide themselves with health care in retirement.

MR. SEMMENS said his question was not specific to the Anchorage School District but to ask that if actual pay increases exceed the actuary's 4% average salary increase assumption over time if there was some other assumption that would impact that. MR. SLISHINSKY stated that the 4% payroll growth assumption over time is based on a 3.5% underlying inflation assumption. If there is a low inflationary period, then Buck would expect salary increases to be less than they are assuming. Those gains have a tendency to counteract investment losses also, when they occur during a low inflationary period.

COMMISSIONER KREITZER stated that the Board could take a closer look at the payroll increase assumption if it did not consider that 4% was the appropriate number, but she agreed with the actuary that it will be smoothed over time. She added that she negotiates eleven contracts for the State of Alaska, and not one party at the table has indicated they needed higher salaries because of the defined contribution plan. From the State's perspective, there have been 1% and 2% contracts in the past, and now the State is trying to catch up on salaries. The issue may come up, because the AFL-CIO and some legislators have given her notice that next year there will be a more intensive discussion about the defined contribution plan.

VICE CHAIR TRIVETTE commented that the salary increase assumption was the one he spent the most time thinking about, in light of what actually happened over time. He said there will be anomalies, and the Board has to make sure that Buck is aware of those anomalies.

MR. PIHL stated that Mr. Semmens identified something that the Board has to watch, which is the impact on the cost-sharing system of an employer giving a 7% annual salary increase. The other thing on his mind is the salary increases if the State proceeds with a gas pipeline.

MR. BADER asked the actuary what two assumptions the Board makes have the greatest consequences. MR. SLISHINSKY said number one is the investment return assumption and the second is mortality.

MR. SLISHINSKY stated that there are about six cost methods that are approved by the Governmental Accounting Standards Board (GASB). Each of the methods arrives at full funding of retirement pension at assumed retirement age; it is just that the paths to that full funding are different. The entry age actuarial cost method is used for Alaska pension benefits. This method has a calculation of normal cost for pension purposes that is a level percentage of pay. In theory, for anybody who is hired, there is a particular cost rate as a percentage of pay that if paid from entry age to retirement age and set aside in the pension fund and earning 8.25% investment return every year, then enough money will be accumulated in the pension fund at retirement to pay that retirement benefit. The level dollar amount basis is used to calculate the normal cost for NGNMRS and medical benefits.

Returning to the economic assumptions page, COMMISSIONER KREITZER asked for discussion on how Buck developed the health care trend number: medical trend starts at 8.5% and grades to 5% over seven years; and prescription drug trend starts at 12% and grades to 5% over seven years.

MR. HULLA stated that the health care cost trend rate assumptions are built by looking at past experience specific to the Alaska retiree (and active plans, in some cases), and also national and Alaska regional trends. It is not a rigorous formula for how much weight to give each of those factors. Buck looks at individual claims statistics and tries to smooth out volatility and focus on what to expect over 30 years. That basically gets to a reasonable starting point. Then another set of analyses is the health care cost trend rate for going forward. The current plan, with its relatively low out-of-pocket deductible, higher regional costs in Alaska, etc., means the base cost is higher. When the base cost is higher, a lower trend is expected. (The national trends may be 15% or more for medical, but the national statistics reflect lower bases.) The medical trend grades down to 5%, reverting back more towards the fundamental economic model, which is the proposition that health care costs cannot continue to inflate forever at the rates of the last several years. If it did, health care would consume "too much" as a percentage of the gross domestic product. Right now, it is almost 17%. The industry standard and the economists' approach is to assume that at least over time the underlying health care cost inflations will come back more in line with underlying CPI and return on assets, etc. In Alaska's case, it boils down to a 5% long-term trend rate.

COMMISSIONER KREITZER indicated she understood the response and wished to speak with Buck more about it at some point.

MR. BADER said he recalled this same "health care costs cannot continue to inflate forever" discussion when he was director of DR&B years ago. The trouble in the early 2000s was that the medical trend assumption was grading down but health care costs escalated. The State woke up one day and found itself deeply in the hole. He asked when Buck would sound the alert that the downward trend assumption in health care rates was not happening.

MR. HULLA replied that Buck's analysis takes into account what Alaska's trend rates have been, and these have been coming down. If Buck saw at least two years, and preferably three years, where health care costs were consistently exceeding their assumptions, they would consider whether to increase the starting point of people on medical and change the glide path. Another input to the model that Buck monitors is industry standards. The Society of Actuaries just completed a major long-term health care trend study and reaffirmed the model of pegging a percentage of GDP that is spent on national health care and calling that a limiting point. The Society's modification to the model is to increase the limiting point, perhaps to 25% of GDP spent on national health expenditures, and to stretch out the point at which that is attained to 15 or so years from now. It will not be surprising if, over the next several years, these standard models still reflect plan-specific near-term trends, but instead of grading to 5% over seven years they might grade to 5% over 15 years.

MS. HARBO said she thought the Alaska medical trend had gone down over the last four or five years because the actuary was getting better data from the health care providers. She added her agreement with Commissioner Kreitzer that she did not see health care costs going down nationwide. Nursing home costs in Alaska are about three times as high as the rest of the U.S. She suggested looking at the data every six months.

Continuing with his explanation of the actuarial cost method, MR. SLISHINSKY stated that the actuarial contribution rate is the sum of the normal cost payment (the cost of the benefits accruing during the year for active members) and an amortization payment to pay off the unfunded liability. For PERS, TRS and JRS, the amortization period is 25 years for all new amortizations that are measured as of the valuation date, and all prior bases are being amortized over their remaining periods. Buck is using an increasing payroll assumption of 4% to amortize that unfunded liability, so payments will increase over time. Buck is expecting the unfunded liability to rise as well, until such time as salaries increase enough so that the amortization payment begins paying off more and more of the unfunded liability principal. The amortization period is seven years for NGNMRS.

MR. SLISHINSKY reviewed a graphic representation of the funding process and then spent a few minutes describing the asset valuation method that uses a five-year smoothing of market value. He noted that this is the first valuation where the entire five-year period has been phased in: all the investment losses prior to 2003 have been fully recognized, and healthy gains are being deferred in the asset valuation method currently.

MR. SLISHINSKY next presented the 2007 actuarial valuation results. He noted that any changes since last year were minor. SB 125 passed in 2008 that changed PERS to a cost-sharing system with State assistance. He said they would be presenting the valuation results on the systems in total at this meeting, and at the June meeting would give a more detailed look at who is expected to pay what going forward.

Starting with the PERS valuation, MR. SLISHINSKY stated that the active membership in the defined benefit plan is down to 31,362. That is because the defined benefit plan was closed to new members effective July 1, 2006, and any new PERS employees become members of the defined contribution plan. He reviewed the other statistics for PERS: annual compensation, market and actuarial values of assets, annual benefit payments, and accumulated member contributions.

When MS. HARBO asked if the annual compensation figure was defined benefit only, MR. SLISHINSKY said yes. He added that when Buck calculates the rates of pay they calculate the normal cost amount and the amortization payment for unfunded liabilities as an amount, then they convert those to a percentage of payroll based upon total payroll that includes defined contribution members. The unfunded liability is being paid over the salary for defined benefit members and defined contribution members. Then the normal cost, or cost of the accruing benefits, is split out differently to the defined benefit members and the defined contribution members. As the normal cost amount starts gradually decreasing for the defined benefit plan because the number of defined benefit members is going down, there will be an increase in the contribution to the DC plan for defined contribution members.

Board attorney ROB JOHNSON noted the employers' contribution being calculated as a base of salary does not mean that it is deducted from an employee's pay.

MR. SLISHINSKY stated that the defined benefit assets had a total market value of $10.9 billion, and the actuarial value after the smoothing was $9.9 billion, leaving a $1.0 billion "cushion" that is held in reserve and not recognized for valuation purposes. If the retirement fund were to fall short of the 8.5% return assumption for the year ending June 30, 2008, there is $1.0 billion set aside in reserve to counteract at least some of those losses. That is why the smoothing method really helps out on the actuarial side.

MR. SLISHINSKY reviewed the calculation of the actuarial value of PERS defined benefit assets. He spent a couple of minutes reviewing with MR. SEMMENS how Buck calculated the five-year smoothing number for assets at June 30, 2007 that included 20% of the considerable investment returns for that fiscal year.

MR. SLISHINSKY explained a graph of the progression of market and actuarial values of assets from 1996 through 2007, noting in particular the impact of the poor markets of 2000-2002.

MR. PIHL said he found this analysis misleading because it seems to indicate that much of the unfunded liability was the result of investment performance, which was not the case. He said the graph should be labeled "asset smoothing against liabilities," because it was the explosion of liabilities that produced the huge change in the unfunded liability, not the investment performance so much.

MR. SLISHINSKY moved on to the detailed results of the actuarial valuation, split between pension and health care (slide 16). The PERS total unfunded liability was $4.67 billion at June 30, 2007, down from $5.35 billion the prior year. The funded ratio for pension is 77.8% and for health care is 53.5%. This is based on an allocation that has been calculated within the Division of Retirement and Benefits for a number of years.

MR. BADER asked if an accumulated gain in investments is attributed to the pension part or the health care part. MR. SLISHINSKY replied that it is split according to the ratios provided by DR&B.

MR. SEMMENS observed that the member contribution of 6.42% was less than 6.75% and less than 7.5% because of the defined contribution members that are now contributing. MR. SLISHINSKY said that was a good point and added that the actual rate is a little over 6.8%, based on defined benefit payroll only. When Buck calculates the member contribution rate based on total payroll, that rate goes down. MR. SEMMENS said the $116 million in member contributions is actually coming from only the defined benefit pots, so he found it interesting that the calculated percentage attributes monies coming from defined contribution when no money is coming from defined contribution members. MR. SLISHINSKY agreed but said that, in effect, the percentage is really irrelevant: what is relevant is the total dollar employer contribution and what that represents as the total payroll.

MR. SEMMENS asked if the $615 million total contribution assumes that for the next 25 years following June 30, 2007 there will be a $615 million total contribution. MR. SLISHINSKY replied that the contribution is expected to go up for payroll because at least the normal cost and the amortization payment are a level percentage of pay. The normal cost portion is a level percentage of pay for the defined benefit only and is expected to go down as a percentage of pay. The amortization amount would be expected to continue to go up, depending upon what other gains and losses are experienced in the future.

MR. SEMMENS said he was trying to get at the big picture. As a result of SB 125, employers have to contribute 22% of salary, and that salary number has to be estimated by someone. He thought the ARM Board, with the help of the Administration and the actuary, should think about the dollar amount that the State is going to be obligated to pay. This June 30, 2007 valuation will ultimately set the contribution rates for 2010. He wanted to know if the total contribution dollar amount for 2010 would be $615 million or some other calculated number. The ARMB will be making a recommendation to the Legislature that the contribution rate is going to be X (which historically has been whatever number the actuary says it should be), but he wanted to know what dollar amount that would represent. That should be on the record so that if the State makes that dollar amount contribution, net of the expected employer contribution, then everyone can easily agree that the numbers have been met. Dealing with a number would forestall criticism in the future, should the liabilities increase again, for example.

MR. SLISHINSKY noted that he would be reviewing some projections later in the presentation. In those projections Buck applies the salary scales and the payroll growth assumption and assumes a static population that includes both defined benefit and defined contribution members. So that number in total is determined as part of this valuation process. Buck will talk about that in greater detail at the June meeting.

MR. ANDREWS requested that Buck also discuss in June how the State's contribution is allocated out to pension and health care.

Addressing Mr. Semmens' original question, MR. SLISHINSKY referred to page 46 that showed a projected PERS employer contribution of $528 million in 2010.

LUNCH RECESS

VICE CHAIR TRIVETTE recessed the meeting for lunch at 12:01 p.m. and issued a call back to order at 1:20 p.m.

6(b). FY07 Draft Actuarial Valuation Report - PERS and TRS (Continued)
MR. SLISHINSKY reported that the PERS employer rate in total is down to 27.65% from 35.22% last year. He reviewed a series of bar charts showing the PERS historical actuarial accrued liability since 1996, the distribution of the accrued liability between pension and post-employment health care, and the funding ratio history since 1979. He noted that over time a higher percentage of the total accrued liability is attributable to health care. Also of note was that changes to the valuation of the health care liabilities and marking assets to market in 2002 significantly dropped the funding ratio from over 100% down to 75% and lower in following years.

MS. DeLANGE conducted a review of the FY07 actuarial valuation information for the Teachers' Retirement System. The active population of defined benefit members decreased to 9,100, as new hires become members of the new defined contribution plan. She reviewed the other statistics for TRS: annual compensation, market value and actuarial value of assets, annual benefit payments, and accumulated member contributions.

MS. HARBO pointed out that the Newsbreak newsletter reported the total members in the TRS defined benefit plan for FY07 at 9,256, while Buck is reporting 9,107 active members. She questioned that discrepancy. MS. DeLANGE said minor differences could be because some people were not reported as terminated when one count was calculated, and there may have been some data corrections that occurred later.

MS. DeLANGE presented the summary of Buck's calculation to reach the actuarial value for TRS of $4.4 billion. There is a "cushion" of about $470 million between the actuarial value and the market value of system assets because of the five-year smoothing.

MS. DeLANGE reviewed the actuarial calculation for the TRS contribution rate, split between pension and health care (slide 23). The total unfunded liability was $2.8 billion at June 30, 2007, down from more than $3 billion the prior year. The funded ratio for the pension side is 68.3% and for health care is 45.8%. The total employer contribution rate as a percentage of pay is 39.53%.

MS. DeLANGE presented a series of bar charts showing the TRS actuarial accrued liability history since 1996, the accrued liability as a percentage between pension and post-employment health care, and the funding ratio history since 1979. For the last several years the funding ratio has been between 57% and 68%; it is 62% for this year.

MS. DeLANGE next reviewed information for the Judicial Retirement System, noting that valuations are done for JRS and the National Guard System on even-numbered years only. For 2007, Buck used actual assets in the contribution rate calculation and did a roll-forward of liabilities. The number of members stayed at 66 because Buck did not run a valuation or collect the data. She reviewed the other statistics for JRS: annual compensation, market value and actuarial value of assets, and annual benefit payments. This is the first year of using the smoothing method for market value gains for JRS, so the actuarial value is different than the market value. The actual benefit payments were higher than last year because of some COLAs that were given.

MS. DeLANGE explained the development of the actuarial value of assets for JRS at June 30, 2007. Because of the very large asset gain in the fiscal year, 20% of the gain, or $1.5 million, was recognized in the five-year smoothing. There is a deferred gain in the system of $6 million.

MS. DeLANGE reviewed the JRS contribution rate calculation. There is no defined contribution plan for JRS. On a percentage of pay basis, the contribution rate is nearly 64%. Members contribute 4.89%, leaving an employer contribution rate of 58.70% of pay.

MR. SEMMENS recalled that Commissioner Kreitzer had reported that the State operating budget paid off the $49.2 million of unfunded accrued liability in the Judicial System. Deputy Commissioner RACHAEL PETRO stated that the $49 million appropriation has not been processed yet and is not reflected in the actuary's analysis of JRS. She added that the pay-off will take care of any future growth in the unfunded liability. MR. WORLEY added that the legislation takes effect April 13, so the $49 million should hopefully be processed by the end of May.

MR. SEMMENS said an interesting point on JRS is that the normal cost appears to be about 31%, where the normal cost for PERS and TRS is around 12% to 14%.

VICE CHAIR TRIVETTE related that when the Judicial Retirement System was first established there were no employee contributions.

MS. DeLANGE stated that because of the roll-forward this year, the health care gains shown in PERS and TRS are not shown on JRS. The health care gain will appear on the FY08 valuation.

MR. SEMMENS asked if it was possible that JRS could be over 100% funded by the June 2008 valuation. MS. DeLANGE replied that the health care portion of the liability is small, so she was not sure if the payoff of the unfunded contribution would completely cover that. There are also potential asset losses for FY08 and other factors that will play against each other. MR. SLISHINSKY said there is a large gain from investment returns for FY07, so Buck will have to see how it all plays out. By the State paying off the $49 million unfunded liability, and provided that there is no unfunded liability next year, the JRS plan requirement will be to pay the normal cost of about 26% of pay.

MS. DeLANGE next reviewed the National Guard and Naval Militia Retirement System (NGNMRS). Buck used actual assets in the contribution rate calculation and did a roll-forward of liabilities for the 2007 valuation. There was no change in the membership used. Market value of assets increased to $17.6 million, and Buck started the smoothing method for the first time on this plan. The valuation recognizes 20% of the FY07 investment gain, and the remaining $731,000 "cushion" will be deferred. She reviewed development of the actuarial value of assets, noting that NGNMRS uses an expected return of 7.25%, due to a different asset allocation than for the other plans.

MS. DeLANGE presented the development of the actuarial contribution. The unfunded liability for NGNMRS is $9.4 million, and the funded ratio is 64%, which has increased from 61% last year. She noted that the unfunded liability is amortized over seven years, as opposed to the 25 years used for the other plans. This plan's contribution is not based on payroll but uses a flat dollar amount.

VICE CHAIR TRIVETTE asked for a reminder of why the unfunded liability of NGNMRS is amortized over seven years versus 25 years. MR. SLISHINSKY explained that the duration of the benefit payments is different, leading to a shorter period for amortization.

MR. SLISHINSKY briefly summarized highlights of the foregoing presentation, as follows:

- <u>PERS and TRS</u> - asset gains on market value experienced during the year ending June 30, 2007 were significant. Buck independently calculated a rate of return of 18.5% for both PERS and TRS, or 10.25% greater than the assumed rate of return of 8.25%.
- Delayed gains from previous years, along with the investment gain during last year, resulted in an actuarial value return of 11.9% for TRS and 11.6% for PERS - both more than 3.0% over the 8.25% assumed. That 3.0% difference is providing asset gains that are recognized on an actuarial basis to reduce the unfunded liability and also reduce the contribution rates.
- There was a gain on liabilities due to detrimental experience, and additional gains on liabilities for health care claims. The PERS 2007 unfunded liability is $4.67 billion, a decrease of $677 million from 2006. The TRS unfunded liability is $2.765 billion, down from $3.1 billion in 2006. (see slide 37 for calculations)

- JRS - asset gains in FY07. The rate of return was 18.0%, or 9.75% more than the 8.25% assumed. The unfunded liability grew to $49.2 million, primarily due to the contribution shortfall. If the unfunded liability is paid off soon, as reported earlier, then there will be a contribution gain. (see slide 38 for calculation)

- NGNMRS - asset gains in FY07. The rate of return was 13.1%, or 5.85% more than the 7.25% assumed. The unfunded liability was almost $10 million in 2006 and dropped to $9.4 million in 2007. (see slide 38 for calculation)

MR. O'LEARY inquired how others attempt to shorten the contribution rate implementation delay. MR. SLISHINSKY replied that most of the plans he sees have a one-year delay in applying the actuarial rates to their fiscal year. Two years is longer than he generally sees. Other state systems have a contribution rate defined in statutes, and that rate will be set sufficiently high such that the actuarial rate is less than the statutory rate. Systems in that position do not have to change the rate. Other states that have a statutory rate, and an actuarial rate that is higher, are working with their legislators to solve the problem. Another state client has a statutory rate where the statute dictates that if the actuarial rate exceeds the statutory, then the state will make up the difference in the following fiscal year. It is determined as a dollar amount. So how other systems address the issue of contributing the actuarial rate is all over the board.

MR. SLISHINSKY reviewed a summary of the changes in contribution rates for PERS, TRS, NGNMRS, and JRS, as well as higher funded ratios than the prior year (slide 39).

MR. HULLA gave a presentation on the health care side of the actuarial valuations. He said Medicare Part D, the prescription drug benefit, has a beneficial effect on the plan because of the retiree drug subsidy the federal government pays to encourage plans like Alaska's to continue in operation. There are many ways of addressing the fact that Medicare now provides prescription drugs, and the current path of a retiree drug subsidy is likely to be the near-term best solution. Other Medicare financing mechanisms are being analyzed that could further reduce the State's costs in the future, because there are ways to leverage what Medicare pays. Finally, GASB determined that it was not appropriate to reflect prospectively the Part D retiree drug subsidy. As long as the State continues on the retiree drug subsidy path, there will be a slight disconnect between the accounting numbers and the funding numbers because of that "wrinkle" in the accounting standard.

MS. HARBO asked what percentage of the State's prescription drug costs the retiree drug subsidy represents. MR. HULLA said 28% in the allowable range, which is $750. MR. WORLEY indicated he would obtain the particulars of the payments the State has received so far for Ms. Harbo.

MR. SEMMENS asked if the retirement system becoming its own Part D prescription plan would affect the accounting treatment such that it would reduce the unfunded liabilities. MR. HULLA replied that either a wrap-around or a prescription drug plan would close that gap.

MR. O'LEARY said the GASB standard to not recognize the retiree drug subsidy prospectively is an accounting impact only. This means public entities have to show a future liability on the financials that is greater than the actual liability — because they will be reimbursed, in part, by Medicare Part D. MR. SEMMENS thought it would impact the calculated rate to pay back the liability. MR. HULLA said not so long as the current funding philosophy is to project benefits based on the projected net payout.

Continuing with health care related issues that the State and the actuary are working to resolve, MR. HULLA stated that one driver of the retiree medical costs is the retirees who do not qualify for Social Security because they do not have 40 quarters of coverage based on employment. Without Social Security, these retirees do not have Medicare Part A as a free benefit, therefore, Medicare does not pay a share of their hospital bills. That is all built into the claims data that Buck is working with, so those costs are reflected in the valuations. Buck is trying to isolate that cost so they can determine what closed group it applies to, and only apply those higher hospital bills to that closed group. All this analysis will factor into potential ways to address that, one being to have the plan pay the Medicare Part A premium on behalf of those retirees (because, on average, that will be less than the hospital bills).

VICE CHAIR TRIVETTE asked what the average premium for Medicare Part A would be for these retirees. MR. HULLA estimated $800 or $900 a month.

MS. HARBO recalled a State of Alaska study that showed the monthly premium for Medicare Part A at $434 a month. MR. HULLA explained that Medicare Part A starts as soon as a person is 65 years old, and a penalty applies to those who start at a later age. That would still not account for the difference between $434 and $800-$900, so he must have a number wrong somewhere. However, the premium that the Alaska plan may eventually pay on behalf of these retirees will be greater than what other people at age 65 start paying. He noted that some Alaska retirees may be eligible for partial Part A coverage, meaning the State would be able to pay a partial premium on their behalf. What can be an issue is that those retirees may not have any records of how many quarters of Social Security employment they have, and they have no financial incentive to find that information and submit it.

MS. HARBO said she assumed there was no means testing for Medicare Part A, as there is for Part B. She noted that her Medicare Part B premium per month has gone up about 400% since she started on Medicare. MR. HULLA stated that the Balanced Budget Act changed a lot of what Medicare B provided, and it added means testing and increased premiums. He said Part A is not means tested, but it does have annual increases based on Medicare's costs. The main economic advantage to Alaska's plan would be that Medicare Part A premiums are based on all hospital costs nationwide and the average age of retirees nationwide. The no-Part A retirees are much older, on average, so their hospital bills tend to be much higher.

MR. HULLA reviewed a more detailed explanation of the actuarial gain on the health care side that Mr. Slishinsky mentioned earlier (slide 42). The medical claims experience reduced the PERS contribution rate by 2% and the TRS contribution rate by 2.6%. That was essentially lower utilization of the health care plan, as well as lower-than-expected costs for hospitalizations and doctor visits based on prior data, due to improved provider discounts, etc. He stressed that the numbers are not just what happened last year projected forward. Buck looked at four years' worth of data divided into three groups: pre-Medicare, Medicare A and B, and no-Part A. They looked at the data separately for medical and prescription. A total of 24 data points were analyzed, and Buck looked at the changes over the last several years specific to the Alaska plan. There are 54,000 members in the group, but with 24 data points the data is not fully credible. So Buck factors in prevailing trends nationwide and in Alaska to roll all those data points forward to get the base claim costs for the year. Those costs are lower than Buck would have projected from last year's valuation, as a result of the claims experience analysis. TRS has a greater decrease to the contribution rate because the TRS current population has proportionately more pre-Medicare members, where the costs are greater.

Referring to a question from Mr. Bader in the morning's session, MR. HULLA explained that the process in building up the claims cost rates will automatically be an early warning or alert to when Alaska's plan-specific trends start picking up again and costs increase to where there are losses again. Buck will be looking at all the data points to factor into the base claim costs, which then drive the valuation.

MR. HULLA stated that the Alaska-specific trend is the single most significant component of the health care experience analysis. Buck actually saw one year where the Alaska trend was a decrease, but they do not expect it to continue for the next 30 years. In fact, they do not give it full credence even to get to the base line. The analysis indicated that the Alaska-specific trend rates building up to June 30, 2007 are favorable and a real trend and that Buck ought to reflect that, as opposed to simply bringing back the national trend data from three and four years ago. So Buck weighted the actual experience and the broader-based trend rates 50/50, and that is a significant reduction in the base claim costs rate. If Buck were to go with

Alaska-specific-only, there would be a bigger gain in the health care experience analysis, but that runs the risk of a bad year this year or next reversing the Alaska-specific trend.

MS. PETRO noted that a press release in the *Alaska Journal of Commerce* reported that Premera group rates in Alaska are going up 33% in May and for individuals up 29%. She said Mr. Hulla's last statement is quite well taken, but Premera's are extraordinary increases.

VICE CHAIR TRIVETTE said he had an article to bring in about a major lawsuit in which Premera is a defendant. He said Buck giving the Alaska-specific trend a 50% weight in the analysis was reasonable.

MR. HULLA said the comments highlighted an important issue in this analysis. He assumed the Premera rate increases were insured premiums, while the Buck analysis dealt with plan-specific costs. He stressed that premiums do not equal costs.

Continuing with his review of the health care experience analysis, MR. HULLA stated that Buck was able to include administrative fees charged by Premera and by the pharmacy benefit manager as an explicit component of cost, due to having better data. Overall, there were many favorable components of experience, so the health care cost contribution rate for PERS dropped from 24% at the 2006 valuation to 17.5% in 2007, and TRS dropped from 23.6% to 18.5%.

MR. SLISHINSKY next presented Buck's 30-year projections for each retirement plan. Starting with PERS, he reviewed the projected active and inactive member counts, projected employer contribution amounts, and funding ratio. He noted that the PERS defined benefit plan is a closed system, and as people retire/terminate and leave the active population, the active numbers are going to decline. The inactive member count is projected to increase as more and more people retire, but it will reach a point where deaths in the retiree group become significant and the inactive member count will drop off.

MR. SLISHINSKY said the PERS projected employer contribution amount for 2008 is $587 million. The expected contribution amount for fiscal year 2010 is $528 million, versus the expected contribution based upon the FY07 valuation result of about $499 million. That is the application of the rate that Buck is calculating in the FY07 valuation to the expected FY10 payroll. That is why there is an increase in the contribution rate from $499 million to $528 million for FY10. As those delayed gains on the actuarial asset side come in, there is a projected drop in the rates over the four years following 2010, and there will be a drop in the amount of the expected contribution. This is based on the pension fund earning 8.25% investment return every year, and assuming that those delayed gains are actually going to be realized. After that, the projected contribution amount starts going up again as the dollar payment to pay off the unfunded liability increases with increasing salary, until such time as the plan begins paying off those unfunded bases. The last full payment is in 2029, there is a residual base in 2030, and after that the plan is projected to be fully funded. The PERS funding ratio is calculated to increase from 68% in 2008 to 124% in 2038.

MR. SEMMENS pointed out that the projected contributions graph implied that in 2031 the PERS contribution would be a very small number. He asked why the funding ratio graph projected ratios over 100% — he thought if the plan hit 100% funded and there were no excess contributions, the funding ratio would be at 100%. MS. DeLANGE replied that because the plan is closed the assets are going to grow faster than the liabilities, because at the tail end people in the system are dying. With a closed plan, there are no normal costs added to the accrued liability because there is a tiny number of actives still around.

MR. SEMMENS said that when he looks at the funding ratio graph he questions why PERS employers are paying a high contribution rate now so that in the future the plan will be more than 100% funded, risking that the Legislature will add benefits. Instead of doing that, he would rather have a more gradual funding ratio path.

MR. SLISHINSKY said part of it is the need to pay off the unfunded liability over 25 years, and the graph in the book is a 30-year projection of contribution amounts for PERS. GASB says the unfunded liability cannot be paid over a period longer than 30 years, and the ARMB policy is to pay it off in 25 years. Once the payment is done, the contribution rate will drop right off.

MR. SEMMENS said his point was that the funded ratio would continue to climb after the unfunded liability was paid off in 2030.

MR. O'LEARY noted that if the current underfunding is amortized and the payments are finished after 25 years, a person would not expect to see subsequent improvement in the funding ratio. MR. HULLA said Buck could provide an illustration that shows the assets and liabilities separately and combined, and it would show that the funded ratio is at 100%, but with the closed group the liability is declining.

MR. O'LEARY observed that the definition of the liability is the present value of that future benefit stream at that point in time. MR. HULLA stated that based on the pattern of 8.25% investment returns and the demographics and how the benefits get paid out, it reaches the point where there are no more contributions and the investment earnings are in excess of the payouts for a period of time, and the funded ratio starts to increase over 120%. If the graph could be extended another 30 years until all the members have left the PERS system, the funded ratio would eventually come back down.

MR. SLISHINSKY stated that another element is the two-year delay in the application of the contribution rates. It is creating an additional contribution at the end. In actual practice, when the system gets to that point, no one will have to make that contribution. MS. DeLANGE added that the two-year delay does two things: when the system is underfunding, it costs more; when the system is overfunding, it really over funds.

MR. PIHL mentioned that a contribution shortfall occurs this year because of the two-year delay in applying the contribution rate. Yet the funded ratio for PERS goes over 100% in 2027. He said that does not track with him. MR. SLISHINSKY explained that right now the system is experiencing contribution shortfalls. But in the application of FY10 rates, provided that investment gains occur, there will be a contribution surplus in those years. MR. PIHL said he was not assuming any investment returns over 8.25% in any future year. He asked why, when the PERS system reaches 100% funded, the defined contribution payroll would still be paying toward the unfunded liability. MR. SLISHINSKY stated that once the unfunded liability is paid off, there is no amortization payment at all. What the Board is looking at is application of the contribution payment to two years hence when the unfunded is paid off. When it gets to that point, the Board can decide to change the contribution rate, so he doubted the plan would be overfunded.

Referring to the graph on page 48 showing the PERS projected contribution amounts, MR. O'LEARY said it would be helpful to see on the same graph the projected net benefit payments, to have a sense of how rapidly there will be a drawdown of the investment gains. Right now, the benefit payments related to the contributions are not troublesome, but they will become troublesome at some point. He asked for the definitions of the pessimistic case and the optimistic case shown on the graph. MR. SLISHINSKY said the pessimistic case is a 7.5% investment return each year, so it falls short of the assumed return by 75 basis points. The optimistic case is a 9.0% investment return per year, or 75 basis points above the assumed 8.25% return.

MR. RICHARDS commented that the same situation being discussed for PERS also occurs on the TRS graphs in the Buck materials. He said his concern is that legislators have always told him that if the unfunded liability went unchecked for many years, then the bill would be paid out of the General Fund. Seeing that the PERS funded ratio rises above 100% in 2027, he agreed with Mr. Hulla that it could be 100% of a small dollar amount at that point. He thought it was a reasonable projection, realizing that 10 or 15 years from now the Board members might be making adjustments to the contribution rate. The graph would be clearer if it showed that the Tier I PERS and Tier I TRS members were going to be taken care of by the assets under the guidance of the ARM Board.

Moving ahead in the presentation, MR. HULLA stated that there is a disconnect in terms of GASB 43 requiring, for accounting purposes, the use of a discount rate that reflects the funded status of each plan. He presented graphically an illustration of the impact of GASB 43 on PERS health care and TRS health care for FY10. He explained that for PERS the FY10 contribution rate for the average employer is 22.42%. That is the funding rate based on the current strategy of projecting the expected cash flow, etc. Fully funded, without regard to the retiree drug subsidy, the average employer contribution rate is 24.95% for FY10. That illustrates the impact of not recognizing prospectively the retiree drug subsidy payments. The disconnect of about 2.5% would be reversed at some point because the retiree drug subsidy payments would come into the system. Lastly, based on the fact that contributions for the appropriate lagged time periods were less than the actual cash payments for health care, the plan was "unfunded," in the term of the GASB world. So the discount rate used is 4.5%, and the accounting cost is 52% of pay. What that boils down to is that for a period of time, based on these disconnects (the accounting world versus the funding philosophy), the Consolidated Annual Financial Report (CAFR) will reflect an additional liability to the plan. The unfunded issue is very temporary because there has already been a move to contribute the full funding, which then allows the accounting to be flipped back to an 8.25% discount rate. This is an accounting world obligation and not an economic obligation.

MR. SEMMENS sought assurance that all the calculations in Buck's presentation were based on an 8.25% discount rate, but that the PERS financial report will not show exactly the same numbers. MR. HULLA said it will vary at different points in time.

[Chair Gail Schubert joined the meeting at this point.]

DR. WILLIAM JENNINGS, a member of the ARMB's Investment Advisory Council, observed that Buck has used 8.25% as an investment return assumption in every actuarial valuation report. The ARM Board will be considering some minor asset allocation changes tomorrow that would probably not lead to a revision if looked at year by year. But he thought the cumulative effect of all the asset allocation changes since 2005 might be sufficient to lead to a 0.25% change.

MR. SLISHINSKY stated that Buck would look at the asset allocation changes the Board is making and give an opinion as to whether or not they would recommend changes in the long-term investment return assumption.

DR. JENNINGS also suggested reviewing the inflation assumption at the same time.

VICE CHAIR TRIVETTE called a scheduled break from 2:47 p.m. to 3:10 p.m. CHAIR SCHUBERT assumed the chair duties when the meeting reconvened.

7. Barclays Global Investors (BGI)

[A copy of the Barclays presentation booklet, dated April 24, 2008, is kept on file at the ARMB offices.]

LEE WANIE, Barclays' client relationship officer, and MARCO MERZ, a strategist in BGI's global index and markets group, made a presentation about the three strategies totaling $252 million that the firm manages for ARMB:

- Equity Index Fund (S&P Index)
- Government/Credit Bond Index Fund
- Intermediate Government Bond Index Fund

MR. WANIE reported that all three strategies have been performing in line with the respective indices. He noted that there has been a lot of press coverage about the health and condition of financial institutions. While Barclays' latest earnings were not as robust as they had hoped, it was as expected. The business is doing quite well, their client relationships are healthy, and they have commitments from many of the largest pension funds in the world, particularly in the U.S. More than one-third of their business is from public entities such as the State of Alaska. Barclays has grown from 2,000 people globally to about 3,700, and they are about to move the San Francisco headquarters to a new building.

MR. WANIE stated that indexing is 80% of BGI's business in terms of assets, however, it is no longer the main contributor to profitability. The actively managed component of the assets under management contribute greatly to the bottom line. Also, the ETF (exchange traded funds) business, commonly known as iShares, has been a great way for BGI to repackage index funds and sell them to institutional and individual investors. They continue to have new products coming on line there for easy, liquid exposure to mainstream benchmarks. BGI is also known for its transition management, helping institutional investors move massive amounts of money from one mandate to new mandates at very low fees.

MR. WANIE said that BGI listens to what their clients say they want exposure to in the markets, and if BGI does not have a fund for it, they are typically a good resource for getting a new fund launched. Recent new products are a global equity market fund, a frontier markets fund, and a world small cap index fund.

MR. MERZ started his section of the presentation by mentioning BGI's in-depth knowledge about indexing acquired over 36 years in the business. That knowledge has benefited the ARMB's S&P 500 fund: since inception, that fund outperformed by two basis points after all transaction costs and management fees. All BGI index funds perform at or above index level, no matter what time frame is looked at. BGI does not view indexing as a status quo business; they strive to provide clients with new strategies, especially in the international markets. A good example is the global REIT strategy started in 2006, which allows clients to access securitized real estate equities in 22 developed markets. The frontier markets fund is a great way to invest in the Gulf States, Eastern Europe, and Africa.

MR. MERZ explained that BGI's core investment philosophy rests on three pillars: performance, cost and risk.

- Performance for an index fund is to meet the benchmark return. For most funds, BGI tries to accomplish that with full replication, where they hold every stock at the exact benchmark weight. For some funds they will use a representative subset to actually achieve the return of the benchmark.
- Costs are extremely important for an indexer. Indices are frictionless; they assume any add or delete to an index occurs at zero transaction costs. In the real world, BGI has to incur transaction costs to act on any index changes, making it prohibitive to actually meet that benchmark return. So avoiding cost wherever possible is a key issue for the management team. Cross trading is a powerful tool to do that. When BGI has to transact on the open market, their large footprint allows them to command wafer-thin commissions, which they pass on directly to the clients.
- Risk - there is nothing more risky in an index fund than cash because the index assumes full investment at all times. BGI has to hold some cash position to transact client buys and sells. They will use futures to equitize that cash, in order to minimize cash drag.

MR. MERZ spent a few minutes discussing the MSCI (Morgan Stanley Capital International) methodology changes that are happening right now. He said looking at the sector implications, the country implications, and the resulting turnover, one can see that the changes are not that material. However, it highlights a very important question of whether or not a client should hold international small cap assets. He said BGI suggests that clients should hold international small cap, very similar to having some small cap exposure in domestic equity holdings. Historically, MSCI sampled their constituents in an index, which caused two major issues: (1) some countries had large cap names missing (for example, Germany was missing BMW); and there was size inconsistencies (in the standard EAFE small cap exposure was overlapping with the EAFE small cap index). MSCI will now rank the largest to the smallest stock in every country, and the top 85th percentile will comprise the new standard index. If clients have assets that are benchmarked against EAFE, at the end of May the transition will be completed, and assets will be completely free of small cap. An earlier phase of the transition took place in November 2007.

MR. MERZ reported that MSCI has been calculating a frontier markets index since November 2007. BGI started managing assets to the frontier markets benchmark around February 2008. Frontier markets all grow economically much faster than even emerging market countries, and they have very low correlation to traditional asset classes. By contrast, the correlation of the EAFE Index and the S&P 500 Index in the last one or two years has gone up to 0.9, so there is no diversification benefit of holding international assets in the developed arena. Lastly, in the first three months of 2008, when there was tremendous down side pressure on equity prices, frontier markets were basically flat. So even in turbulent equity market times, frontier markets do offer diversification and are a great way to complement existing emerging market exposure.

CHAIR SCHUBERT said there was a bill in the State Legislature this year to have state funds divest investments in companies that do business in Darfur in the Sudan. That bill did not pass. MR. MERZ replied that BGI manages assets that are Sudan-free. He added that the issue is how to define exposure to Sudan. One school of thought is a targeted divestment approach that only requires divestment of companies that have some direct exposure to, or participation in, the genocide that is happening in Darfur. The Sudan Divestment Task Force is championing that approach, but right now for the S&P 500 Index the Task Force list has no names. The other school of thought basically followed by the Illinois legislation is a very broad definition of exposure: doing business in Sudan triggers a divestment, and tremendous names will have to be removed from a portfolio. That is a particular problem for international markets. Managing against the broader definition of exposure means divesting of 10% of the MSCI EAFE, which results in a tracking error of 50 to 60 basis points. BGI considers that almost as an active position because the tracking error that results from the divestment is so immense.

MR. O'LEARY recalled that the Illinois legislation excludes collective investment vehicles. MR. MERZ said the legislation was changed for collective funds very recently. BGI's Sudan-free client is still divesting right now. MR. O'LEARY stated that for a participant-directed account there might be an EAFE Index fund that could hold securities that would be otherwise prohibited were they managed in a separately invested account. MR. MERZ confirmed that was correct. He said sometimes legislation differentiates between separately managed accounts and collective trust funds, and in other cases between actively managed and passively managed assets.

MR. BADER asked the BGI people to review the funds in which the ARMB is invested.

MR. MERZ reported that the Equity Index Fund outperformed the S&P 500 Index by eight basis points in 2007, which was a bit more than BGI would expect an index fund to outperform. The was because: (1) this fund is a post-notified fund, meaning that participants transact at last night's close price, while BGI has to transact the following morning, and that added about two basis points during the year; (2) the securities lending program added about one basis point of return; and (3) payments from class action lawsuits that BGI filed on behalf of all its clients added four basis points. Since inception, the Equity Index Fund has produced two basis points of outperformance for Alaska, net of all costs and fees.

MR. WANIE reported that the Government/Credit Bond Index Fund outperformed the benchmark in 2007 by two basis points. Since inception, the fund has underperformed by three basis points. This fund is managed with a stratified sampling approach, meaning it does not own all the constituents in the Lehman Government/Credit Index. BGI is trying to replicate the characteristics of the index and perform closely to it. Predicted tracking error on this fund is plus or minus five basis points roughly, so the return is well within expectations. The Intermediate Government Bond Index Fund outperformed by five basis points in 2007, and since inception in 1994 it has tracked right on at 6.68%. This is also a fund that BGI manages using a stratified sampling approach. All in all, the three funds are delivering reliable returns, both net and gross of fees, at low risk and low cost.

MR. BADER requested information on the percentage of each commingled fund that might be out on loan for securities lending, what the split is between Barclays and the fund, and what type of investments are made with the collateral. MR. WANIE replied that the percentage out on loan varies by fund: the S&P 500 Index may be between 10% and 15% right now; and the bond fund is higher, probably up around 45%. The split between the funds and the clients is 50/50. The collateral is managed in a short-term investment account. BGI has strict controls in terms of credit counterparty analysis and a very broad, deep team to evaluate the counterparties. The assets with those counterparties are broadly diversified among them.

In closing, MR. WANIE thanked the Board for its commitment to Barclays.

8. Tishman Speyer Properties

[For detailed information on this presentation, please refer to the Tishman Speyer slides handout dated April 2008, on file at the ARMB offices.]

MR. BADER stated that Tishman Speyer has invested for the ARMB in a closed-end real estate fund for about three years. The relationship began when the previous board hired six real estate managers at once. He introduced FRED McINTOSH, who in turn introduced JULIE LURIE, the portfolio manager for Tishman Speyer Real Estate Venture Fund VI and Fund VII. The ARMB has invested $100 million in Fund VI and $30 million in Fund VII.

MR. McINTOSH reported that Tishman Speyer was very active in selling assets out of Fund VI in the first half of 2007, and they generated some great returns. They also made some acquisitions in Fund VII in the first half of the year. For both funds there was not nearly the kind of transaction activity in the second half of 2007. That was the result of what happened with the capital markets and dislocations in the credit markets in the second half of the year. The markets are still challenging as a result of the credit markets: the availability of debt capital for real estate transactions is not nearly what it used to be. But what is interesting is that for all the markets that Tishman Speyer operates it, the property markets are in fairly good shape. Vacancies are low and demand for space is good, so they are able to execute their value-added strategies in leasing or redeveloping space. Tishman Speyer expects the hold period for a lot of the assets to revert to historical norms of four to six years, instead of holding for 12 to 18 months and selling the asset for a substantial return. The longer period gives Tishman Speyer time to create value with the assets.

MS. LURIE next reviewed details about Tishman Speyer Real Estate Venture Fund VI and Fund VII. She said 2007 was a great year for Fund VI. At the end of the year, the projected net return was 21.5%, versus the initial target of 14% net internal rate of return (IRR). Fund VI is a fully allocated fund of $1.025 billion, which is why they moved on to offer Fund VII. Fund VI acquired 26 investments across all the target markets, which are primarily central business district (CBD) markets. Ten properties were sold in Fund VI, which resulted in a gross realized IRR of 84.3%. Tishman Speyer was able to distribute $643 million, or 63% of the fund commitments. All of that occurred in the first 2-1/2 years of Fund VI's operation. Fund VI still owns 16 investments that have a gross value of $9.5 billion. The Fund's share of that is about $940 million. One of their strategies is de-risking the investments by investing with joint venture partners and making sure they are not overly concentrated. The ARMB committed $100 million to Fund VI, representing about 10% of the Fund's investments.

MS. LURIE stated that in early 2007 they recognized that the investment sales market was quite strong in many of their markets. In addition, they had been able to achieve a lot of the leasing strategies and repositioning efforts that they had intended with the acquisitions. She referred to a table showing the ten properties that Tishman Speyer sold in Fund VI and explained some highlights of the successful sales.

At MR. BADER's request, MS. LURIE explained the "promote" investment structure that resulted in Tishman Speyer acquiring the New York Times building for $185 million and selling it for $525 million, earning nearly eight times multiple.

MS. LURIE highlighted several achievements in Fund VI during 2007 in the areas of development/redevelopment, leasing, and recapitalizations. She also reviewed what markets the 16 properties remaining in Fund VI are located in, noting that the bulk of the asset value is in New York and Washington, D.C. These are two of the strongest markets in the U.S. currently. Class A vacancy for midtown Manhattan is still around 6%, and Washington, D.C. is in the 7% to 8% range for the first quarter of 2008.

MS. LURIE reported that of the $100 million that ARMB committed to Fund VI, $88 million has been called, and Tishman Speyer has distributed back about $60 million. She drew attention to photographs of the current holdings in Fund VI and a following page that listed the particulars of each property.

MS. LURIE described the goals for Fund VI in 2008, which she characterized as a more challenging period than 2007 because of tighter credit markets. But Tishman Speyer believes the fund is very well positioned in markets that remain relatively sound, and the fund has the benefit of strong sales already locked in. Their goals are to be aggressive on leasing and to monitor market conditions. They will continue to maximize operating efficiencies, looking to cut costs where appropriate but still keeping tenant service levels and tenant satisfaction high. They will carefully evaluate the development but not necessarily move forward on a spec basis unless they believe the market fundamentals warrant it. They believe Fund VI has accomplished a lot in 2-1/2 years, and there is still plenty of value left to create within the remaining assets.

MR. O'LEARY asked for further discussion of the change in attitude toward commercial mortgage-backed securities (which presumably are used as a source of capital by the people to whom Tishman Speyer sells investments) and how that plays through to asset valuation, etc. MR. McINTOSH said there are two pieces: the spread widening in the asset valuation, and the availability of debt capital. Because the subprime crisis has morphed into something affecting the whole credit markets, debt capital is not as available for real estate as it was a few years ago. The life companies are still active though very selective, but a lot of the investment bank activity has basically shut down — so it is very difficult for highly leveraged buyers. Financing is one reason why transactions have slowed down dramatically. On the asset pricing, spreads have widened, but the PEG (Price/Earnings to Growth) rates have fallen, so the absolute cost of real estate debt has gone up some but not as much as the whole spread widening. Regarding valuation of assets, cap rates have probably gone up but how much is hard to figure out because there have been so few transactions to give a sense of what cap rates are today. Tishman Speyer is carefully looking for new investments for Fund VII. They have tested the waters to sell a couple of assets in Fund VI at a certain price, but they did not get that price and so continued with the value-added activities on those properties instead.

MS. LURIE next reviewed Fund VII, similar in strategy to Fund VI, and focusing primarily on office buildings with a secondary focus on residential and mixed use. The target markets remain the same, with the addition of Florida. The target net IRR is 13% to 15%, and the fund size is $1.5 billion. To date, there have been nine investments across the target markets, leaving about $800 million available for additional investments in the remaining three years of the closed-end fund investment period.

MR. O'LEARY noted that Fund VII currently owns a $2.5 billion interest in investments with a gross value of $25 billion, so clearly a minority position from a capital perspective. That raises questions about the strength of the other 90% of the assets and their ability to stick with it. He asked how Tishman Speyer mitigates that type of risk.

MS. LURIE said the total leverage of Fund VII is about 75%. Although Tishman Speyer has a minority interest in some of the investments, they are always the general partner or managing member of owning any of the investments.

MR. O'LEARY asked where it would leave the ARM Board, as a participant in Fund VII, if one of the coinvestors had financial problems and was unable to perform. MR. McINTOSH explained that if there is a need for capital on an individual property, there is a provision for the Fund to step in. He went on to say that one way in which the numbers look large on the total asset size and small on the Fund share is that Tishman Speyer acquired a company, Archstone Smith, and there is a small piece of the Fund investment that owns Archstone Smith. That helps extrapolate on the large end of the numbers.

Investment Advisory Council member GEORGE WILSON requested more information on the Archstone Smith transaction. MR. McINTOSH stated that Archstone Smith was a publicly traded, multi-family REIT, and Tishman Speyer acquired the company for $22 billion. The capital structure is made up of a $500 million equity investment (which is $250 million Fund VII and $250 million Lehman Brothers from their balance sheet); $4.5 billion of equity that Lehman holds in addition; and about $17 billion of long-term debt that is in place. The strategy for Archstone Smith is to grow the company. The day it was acquired Tishman Speyer sold $1.5 billion of apartments into a 90/10 joint venture, where Archstone Smith owns 10%, the investor owns 90%. Archstone continues to manage the assets and collect property management fees. That is a model that Tishman Speyer is going to execute on going forward. Tishman Speyer is in the process of talking to several investors for joint ventures that will help recapitalize the company as well as grow the revenue stream. Archstone Smith also has a $5 billion development pipeline which was not rewarded in the public format, and that is something that Tishman Speyer can harness and go forward with in the private format.

MS. LURIE reviewed acquisitions in Fund VII. Alaska's investment of $30 million represents 2% of the Fund. She presented photographs of the current Fund holdings and briefly described the nine properties. The goals for the rest of 2008 are similar to the goals for Fund VI, in terms of operating the properties and development. Tishman Speyer will continue to selectively look for investments to further diversify Fund VII across the target markets. They have not made any acquisitions since October 2007. They will not invest just because the Fund has $800 million available, but will make sure that all the investments meet the target returns for the Fund. The Chicago portfolio has been a great performer on the operational side, exceeding expectations. They have been able to lease up nearly half a million square feet, and they have been able to cut expenses over 10% on the operational side since acquiring the portfolio last August.

CHAIR SCHUBERT thanked Mr. McIntosh and Ms. Lurie for the presentation. Because the next presenters were not quite ready, she re-ordered the agenda to take up the item that staff had earlier requested be added to the agenda.

9. UBS Agrivest Farmland Investment - Action Item

MR. BADER reviewed a written staff report handed out at the meeting *[on file at the ARMB offices]*. He said the ARMB authorized an increased allocation to UBS Agrivest in October 2007 in order to permit the possible acquisition of a portfolio of farmland assets with an estimated purchase price of $200-$250 million. It has taken longer for the seller to bring the properties to market than anticipated, but UBS now expects that the seller will accept all bids by April 30. If UBS acquires the farmland portfolio on behalf of the ARMB, staff expects that the investment will meet the overall return objectives in the farmland investment guidelines, which is 5% net real rate of return over rolling five-year periods.

MR. BADER stated that when the Board established the guidelines for the farmland portfolio, the anticipation was that properties would be acquired one at a time, not as a portfolio of multiple properties. The subject portfolio has about 41 properties. It has taken the Board a long time to acquire the properties in the farmland portfolio, and this acquisition would more than double the portfolio size.

MR. BADER said that before staff authorizes UBS Agrivest to proceed forward they wanted to bring some points to the Board's attention. The guidelines state that a farmland investment manager is expected to meet the overall return objective of the farmland portfolio, which is 5% net real rate of return over rolling five-year periods. The farmland guidelines also provide that the initial three-year projected income will exceed 5% for the entire portfolio and at least 4% for an individual property. Staff proposed that the Board consider a provision to treat the entire portfolio of 41 properties as a single acquisition. Some properties may not have a yield over 4%, particularly in the corn belt, where ethanol prices are anticipated to go up, and the farmland producing the corn may not have a current yield over 4%. If treated as a single acquisition, the portfolio will be expected to have a net real return over 5% and a yield over 4%.

MR. BADER outlined the second consideration: staff would like the Board to allow the investment manager one year to dispose of any properties that would have a yield of less than 4%. In this fashion, the manager would be able to act as a regulator to meet all the objectives in the Board's farmland investment guidelines, without being shackled in trying to attain those goals.

MR. BADER read aloud staff's recommendation encompassing the two parts he just explained.

MR. TRIVETTE recalled that one of the reasons the Board made an allocation to farmland was to diversify the overall portfolio because farmland is not highly correlated to the S&P 500 Index. MR. BADER said the diversification aspects of farmland are well documented. Another reason to try to reach the 3% allocation to farmland is that it has historically been an asset class that has positive returns in almost every market. At a time when many markets are dropping in value, staff reported to him yesterday that the two farmland portfolios both brought in fourth quarter returns in excess of 3%. The goal is not to hit home runs but to have a consistent rate of return that will meet the Board's goals.

MS. HARBO asked what crops the properties would support. MR. BADER replied that it is a very diversified portfolio geographically and in terms of the crops being raised.

MR. SEMMENS moved that the Alaska Retirement Management Board allow the large farmland portfolio acquisition being considered by UBS Agrivest to be considered as a "property" for purposes of the minimum going-in yield requirements of the farmland investment guidelines. Also, to grant a one-year grace period from the closing date for UBS Agrivest to execute asset sales in order to bring the overall farmland portfolio into compliance with the income requirements of the investment guidelines.
MR. TRIVETTE seconded.

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

The motion passed unanimously, 7-0.

10. Sentinel Realty Advisors

[Sentinel provided a booklet and slides containing details of their presentation and supplemental information, which are kept on file at the ARMB offices.]
DAVID WEINER and DAVID STENGER, portfolio manager and associate portfolio manager respectively, gave an investment review of the three real estate mandates they manage for the ARMB. MR. WEINER said Sentinel's relationship with Alaska extends over 20 years. He confirmed that the Sentinel management, policies, and assets under management have not changed since he talked to the Board last year.

MR. WEINER reported that the second half of 2007 contained a lot of surprises in many real estate sectors, including the multi-family sector that comprises about 90% of Sentinel's business. The lack of liquidity in the market is freezing transactions at the present time, to the point where sales activity is considerably slowed and values are up in the air. Properties are being offered for sale, and when the prices are not met, the sellers are pulling the properties back. The buyers with good credit or no need for financing are looking to discount their purchases; so there is a gap now between the bid and the ask on most good properties.

MR. WEINER said there is still a lot of interest in the multi-family sector from the institutional market, but the trading has become extremely difficult in terms of reaching common ground on a price. Sentinel is constantly in the market trying to buy and sell, and they have actually pulled back sales because the prices were not met. They have also been fortunate to see some transactions where discounts have been available.

MR. WEINER stated that, despite talk of interest rates and subprime fallout, the primary driver of where the market is going to go over 2008 is the economy. Cap rates have not gone up as people expected, but buyers' perception of the future has changed. So they are downgrading their expectations, and applying that with last year's cap rate, you wind up with presumably a low valuation. What will shake things loose is some confirmation that things are back on track with job formations. The multi-family area is driven by the demographics of the echo-boomers coming into their heightened growth period, the 18 to 34-year-old age group, which are primarily renters. If they do not have jobs, they are not going to be renting individual apartments. So the key driver is the economy. If the economy strengthens, many of the other issues will go away. There are buyers ready to buy multi-family properties, as long as they believe they can achieve their investment goals in the future.

MS. HARBO asked for comment on the reports that many Europeans are buying up good deals in the U.S. and how that is affecting sales. MR. WEINER stated that Sentinel actually has some overseas investors. Europeans are buying residential real estate at what amounts to a 30%-35% discount because of the currency difference. But the buying is not in the commercial area, where Europeans are backing away because they have lost confidence in the economy.

MR. WEINER reported that the multi-family business today is very much a property specific market, a submarket of a larger market. There are frequent reports about the subprime fallout and the overhang of unsold condominiums and houses. This is really occurring in only specific markets in the country. News about people losing their homes or not interested in buying a home and now becoming renters — that is also happening in different parts of the country and is very property specific. There is no way to paint one picture of what is happening in the multi-family market today. Experts say another 18 to 24 months will eat up the overhang, just by growth, and the market will be back to some sort of normal relationship.

MR. WEINER said the good thing with tightened credit is there is far less new construction coming onto the scene, so that will balance out in the future. The multi-family sector is in a holding pattern, but a broadly diversified portfolio is probably going to be okay because there are plenty of good solid markets out there. Sentinel believes the next six months will clarify whether there will be more liquidity put into the market. Fannie Mae and Freddie Mac are supporting, to a certain extent, the multi-family market with credit. But it is only going to the best borrowers and at far lower loan-to-value ratios than it was before, freezing out anybody who does not have a substantial amount of cash to buy. Cash is becoming king again, but the sellers are still waiting to see what happens and are not dumping quality properties on the market.

MR. BADER stated that Sentinel has a commitment of more money from the ARMB if they find an appropriate property for the separate account. The Board's position is that even though a manager has the money available to invest in properties, they want the manager to exercise discipline in investing that money. Sentinel has stayed with the Las Vegas and Florida multi-family properties in this portfolio for several years and has not forced the money into the market. He said he appreciated Sentinel's discipline and knows that when they find a property it will be the right asset for the ARMB separate account.

MR. STENGER next reviewed the particulars of the Vintage at the Lakes Apartments in Las Vegas, Nevada, and the Versant Place Apartments in Brandon, Florida, near Tampa. Both properties were acquired in 2000, and total about 750 apartment units between the two. External appraisals as of March 31, 2008 put the value of the combined portfolio at $86.9 million. That is a 2.2% increase over the values from internal appraisals done in December. Both markets had strong population and job growth in the past ten years, leading to a home purchasing boom, which was followed by a condo price increase. Condo developers acquired existing multi-family properties and converted them into condo properties. Many individuals bought homes and condos they did not occupy, intending to flip them and make a quick profit. Today, there is a softening national economy, and people pulled back from this market. Now people are covering carrying costs on a supply of individually owned homes and condos by renting them out. This has created a supply glut on the Las Vegas and Florida markets that will likely be worked out over the next 12 to 18 months. At the same time, falling home prices and tighter financing standards are making it harder for people to buy homes, even though they are more affordable. In certain markets, there are still pipeline properties that have yet to be completed. And some condo conversions that were not completed are now coming back onto the market as income properties. The bottom line is that the Las Vegas and Florida markets are getting hit on both the supply side and the demand side.

MR. STENGER reported that three new communities were completed in the Tampa market and are in lease up, and three more new communities are being developed for 2008-2009. The Versant Place operations were flat over a couple of quarters, but the last quarter saw negative revenue growth and negative income growth because of competition. Sentinel expects the property to be a bit soft over the new few quarters but that longer term the Tampa market is expected to have above-average population growth and above-average employment growth. In order to keep the property competitive with the newer communities coming on line, Sentinel is considering upgrades to keep it attractive to tenants and to enhance the property's value.

MR. STENGER spent a few minutes reviewing Vintage at the Lakes Apartments in western Las Vegas. There is not much new construction in this market; the new construction that is occurring is in north Las Vegas and east at Henderson. Las Vegas also experienced speculative buying in homes and condos, and single family home prices have seen about a 12% year-on-year drop. Sentinel believes that the Las Vegas market, at least with respect to this apartment property, may be through the worst of the down turn. Following a sharp down turn in the previous two quarters, the property posted a 3% increase in revenue in the last quarter and a 7% increase in net operating income. Sentinel is optimistic about the Las Vegas market long term because of big projects that are planned there. To keep this property competitive, Sentinel has implemented modest unit upgrades and plans to purchase more exercise equipment. They also intend to update the leasing office to improve people's first impression.

MR. TRIVETTE indicated he agreed with Mr. Bader's remarks about the discipline that Sentinel has shown. He asked if Sentinel had a feeling for where additional buying opportunities might come up in the next year or so. MR. WEINER responded that the ARMB's mandate basically puts Sentinel in a search for properties in high-barrier-to-entry markets. In recent months they have seen some properties that might otherwise fit that definition but the gross prices are typically out of range of the portfolio. He said that while they could argue that the desires and the allocation are inconsistent, the ARMB does not have to run into those markets: it will happen elsewhere, with patience. Some larger projects are coming on the market, where the equity requirements are higher for the developers. The last one Sentinel looked at in Los Angeles was in excess of $200 million. He noted that extreme caution must be applied with a small portfolio because a single property that works in the wrong direction really impacts the overall portfolio. He said there is no way Sentinel is going to let the ARMB own a property that he does not feel confident in.

RECESS FOR THE DAY

CHAIR SCHUBERT recessed the meeting for the day at 4:50 p.m.

Friday, April 25, 2008

CALL BACK TO ORDER

VICE CHAIR TRIVETTE assumed the duties of Chair and called the meeting back to order at 9:00 a.m. In addition to Mr. Trivette, trustees Gayle Harbo, Larry Semmens, Tom Richards, Martin Pihl, Commissioner Annette Kreitzer, and Commissioner Pat Galvin were present to form a quorum. Chair Gail Schubert was delayed in traffic and arrived shortly after the meeting started.

REPORTS (Continued)

11. Private Equity 2008 Tactical Plan
Resolution 2008-05 - Private Equity Plan

State Investment Officer ZACHARY HANNA provided staff's overview of the 2008 tactical plan for the ARMB's investments in private equity. He stated that Abbott Capital Management, Pathway Capital Management, and Callan Associates have all reviewed the plan and recommendations. *[A copy of the slides for this presentation, plus the more detailed annual tactical plan, are on file at the ARMB offices.]*

MR. HANNA began with an overview of private equity as an asset class, covering the motivation for this type of investing, and the attributes and structure of private equity. General return expectations for private equity are 300-500 basis points over public equities. ARMB's specific benchmark for private equity is 350 basis points over the Russell 3000 Index. The appeal of the private market is driven by three primary factors: (1) the universe of private investment opportunities is very broad; (2) private companies are generally less efficiently priced and less efficiently operated than their public counterparts; and (3) in a properly executed private transaction there is control and strong alignment of interests between owners and management, and the ability to focus on longer-term value with less quarterly pressure than in the public market. This creates an opportunity for private equity groups to buy companies of low valuations, create value by making operational and financial improvements, and then sell the companies at higher valuations. Other not-so-positive characteristics of private equity are: (1) illiquid, long-term investments; (2) high fees; (3) the best managers significantly outperform; (4) portfolio transparency and valuation issues; and (5) data and benchmarks are relatively poor.

MR. HANNA reviewed a flow chart of the private equity investment structure, involving limited partners that provide the capital (like the ARMB), general partners that execute the investments, and underlying portfolio companies. Most partnerships have a ten-year life with the possibility of extension. Through 2007, the ARMB is invested in 170 partnerships with 69 private equity firms.

MR. HANNA explained the three primary types of private equity strategies: venture capital, buyouts, and special situations. He also described portfolio implementation, where manager selection is critical. Top quartile managers significantly outperform median managers: the average difference over the past 20 years is 12 percentage points. In fact, public market returns are generally in excess of the median private equity manager. Diversification is also important, since private equity can be a very cyclical business. The goal is to build a portfolio of quality partnerships, well diversified by manager, strategy, industry, geography, investment stage, and time.

MR. HANNA next talked about the private equity market in 2007. Fundraising set a new record in 2007, driven largely by mega buyout funds targeted at large leveraged buyout transactions. Venture capital fundraising was more restrained, with a reasonable increase in fundraising from year to year. For the past several years private equity has become a mainstream alternative asset class, with top managers in very high demand. Venture capital investing continued at a healthy rate in 2007. There was a spike upwards in buyout activity, which occurred largely in the first half of the year, before the contraction in the credit market. Both pricing multiples and leverage multiples reached all-time highs in 2007. This is cause for some concern: a number of the deals that took place at these prices and with this leverage will be in distress in the coming year.

There were significant exits and strong liquidity in the first half of the year, but the turmoil in the credit market slowed activity dramatically in the second half. The IPO (initial public offering) market was fairly strong, with venture capital IPOs showing particular strength. There was also significant liquidity provided by corporate and private equity acquisition activity. Liquidity through leveraged recapitalizations that is increasing portfolio company debt to pay dividends to equity sponsors was a very significant source of liquidity for buyout funds, with $23 billion provided in the first half of the year. These leveraged recapitalizations halted almost completely in the second half of 2007.

MR. HANNA said the ARMB private equity program started in 1998, and the allocation to private equity has increased from 3% to 7% of the overall fund. There are two gatekeeper managers: Abbott Capital Management and Pathway Capital Management, and both have discretion to invest on the ARMB's behalf. The ARMB also makes investments directly in private equity partnerships. During the volatile period since 1998 the ARMB and its advisors have built a high quality, well diversified portfolio. Relative performance has been good. In a vintage year comparison with partnerships that started investing in the same year, six out of the past eight vintage years were top quartile and two were second quartile. Returns have also been strong. The internal rate of return (IRR) since inception is 14%. The time-weighted return for 2007 for one and three years are 34.6% and 27.7%, respectively. Staff calculates public market equivalent returns using the actual ARMB private equity cash flows to simulate buying and selling shares of public market indices.

The 14% IRR for the ARMB private equity portfolio compares favorably with public market equivalent returns of 6% for the S&P 500 Index and 6.7% for the Russell 3000 Index. These are particularly large excess returns: they mark a cyclical peak for private equity and will likely decline a bit over time.

MR. HANNA reported that 2007 was a very active year for the ARMB portfolio. Initially, partnerships call capital as they make investments in portfolio companies. The capital is then returned as the investments mature. For 2007, there was a 22% increase in distributions back to ARMB, to $329 million. Contributions also increased to $322 million, reflecting a high level of investment and the growing maturity of the ARMB's portfolio. Through 2007, the ARMB had $2.2 billion in total commitments to private equity, with $1.5 billion paid into partnerships. The total value at year end, which is also $2.2 billion, is 1-1/2 times the amount paid in. The IRR since inception of 14% has increased by 400 basis points since 2006.

MR. HANNA stated that the ARMB portfolio is well diversified by strategy and close to the target diversification of 25% to venture capital, 45% to buyout, and 30% to special situations funds. Staff expects strategy diversification to remain in line with long-term targets. He also reviewed the diversification by portfolio company investments, noting that international is now 32% of the ARMB's private equity portfolio.

MR. HANNA said that the commitment target for 2007 was $370 million, and during the year $336 million was committed to 23 partnerships. There was not significant investment overlap last year. Abbott and Pathway invested in three of the same partnerships, and the direct investment was with a group that Abbott also invested with. The commitments overall were in rough balance by strategy.

Turning to the private equity outlook for 2008, MR. HANNA commented that the middle of 2007 marked an inflection point. Financial markets have turned down, and the credit market remains largely closed. The investment pace for private equity will be slower. Leveraged buyouts are practically impossible to complete at this time. Exits and liquidity events will also slow. The public market is not receptive to IPOs, leveraged recapitalizations have halted, and acquisitions are a buyers market. The increased focus on fair value and the market declines will make for lower and more volatile private equity valuations, and returns will decrease from the recent high point. However, since private equity groups have a long-term focus and long-term capital, they are able to weather down turns better than most investors and are well positioned to take advantage of buying opportunities that come up. As always, strong demand for quality private equity groups will continue to make access a focus for the ARM Board.

For the 2008 tactical plan, staff is recommending a commitment target of $380 million: $145 million for Abbott; $160 million for Pathway; and $75 million for direct ARMB investments — with a gradual increase over the next five years. MR. HANNA presented a table showing the private equity funding schedule from 2007 to 2012. He said private equity is above its asset allocation target of 7%. This is largely due to decreases in the rest of the pension fund. This denominator effect tends to reverse when equity markets rebound. There also may be some write-downs in the private equity portfolio over the coming year, which will moderate the allocation. As a result, decreasing the level of annual commitments is not recommended at this time. Total fund exposure to private equity may fluctuate materially around the 7% target due to fund volatility but should stay well within the +/-5% allocation bands.

MR. SEMMENS asked for more information about the $75 million commitment recommended for direct private equity investments in 2008, as well as what has been done in the past. MR. HANNA explained that last year the ARMB delegated authority to the chief investment officer to make investments up to $75 million, with an overallocation of $50 million beyond that for special opportunities. Staff looks for high quality fund opportunities to invest directly with, and employs Callan to assist with due diligence on those funds. Before making those investments, staff needs the concurrence of Callan and the CIO's approval, and then gives a seven-day notice to the Board Chair before investing. Staff prepares an exhaustive write-up of these investments. Staff looked in depth at an investment last summer and ultimately ended up passing on that. There was one $30 million investment with Warburg Pincus late in the year. They looked at a third investment late last year that was made early in 2008. Staff is actively conducting due diligence on an investment and would like to look at one or two more later this year.

DR. JENNINGS asked what timeline was envisioned for phasing in the additional $350 million in private equity investments that would come from the pension obligation bonds, if the overall pension fund were to grow. MR. HANNA replied that staff would look at when those funds would be available and how the overall fund would grow over time and probably be underweight the private equity allocation for a while in order to maintain time diversification in the portfolio. There might be a moderate, but not substantial, increase in the level of annual allocation as a result of pension obligation bond assets.

MR. BADER added that staff discussed with the Board last year that the illiquid asset classes are running on the high side of allocations. So depending on the amount of the pension obligation bonds, it might just bring things back to targets. Staff has anticipated the passage of the POB legislation.

MR. ANDREWS asked if fees are built into the reported returns. MR. HANNA said the returns are largely net. The underlying fees at the partnership level, which are the most substantial, are included in the returns. Other fees to Abbott or Pathway or incurred by staff are not included.

MR. TRIVETTE inquired how many staff participate in the direct private equity investing. MR. HANNA said besides Mr. Bader, he and two others are involved in monitoring the asset class.

COMMISSIONER GALVIN noted that the ARMB portfolio was over the 40% target in the buyout strategy, and that by investment stage, buyout/acquisition is 65.7% of the portfolio. He asked if those were considered to be similar in terms of risk exposure. Further, if the Board should be concerned about how targets are being tracked and about inadvertently allowing a slippage towards a different risk profile than the target.

MR. HANNA said there are very wide bands around the strategy target allocations on purpose because private equity is a long-term asset class, and the targets can only be controlled over the long term. The strategy exposure is well within the policy bands. Regarding the second part of the question, he said the strategies tend to be a bit counter-cyclical. Venture capital, in particular, and buyout broadly defined tend to run counter to one another. This is the peak of the buyout piece of that cycle and not quite the trough for the venture capital piece. So the buyout piece is about as high as it is going to get in the portfolio. Special situations funds are largely buyout oriented in nature. So there is a difference between the slide showing diversification by strategy and the slide that drills down to the characteristics of the underlying portfolio companies. The ARMB portfolio is probably better diversified than most portfolios. Buyout over the past five years has squeezed venture capital out, in terms of the percentage of the pie, but the ARMB guidelines have forced discipline to maintain good exposure to venture capital in the face of the cyclical nature of the strategies. But clearly there is a big exposure in the portfolio to buyout, which has helped performance during this period. There is meaningful exposure to venture capital, and that will serve the portfolio well in the coming cycle.

COMMISSIONER GALVIN asked if there was recognition, in staff's discussions with Pathway, that they are the ones primarily driving the portfolio in the buyout direction. MR. HANNA said staff had a lot of discussions with Pathway about this a couple of years ago, but much of this is a product of timing. Pathway was hired in 2001, at a time when the tech bubble had burst after venture capitalists had raised huge funds, and there was not a lot of high quality venture capital funds in the market in the early 2000s. The ARM Board would not want Pathway to force the money into a strategy unless it was with the very best groups. The strategy targets are something that staff focuses on in the oversight role, and they have discussed this with Pathway often. As the cycle has turned, Pathway also has been making some very good commitments in the venture capital space.

COMMISSIONER GALVIN asked if staff anticipated using the direct investment program to balance the strategy allocations of the two gatekeepers, Abbott and Pathway. He noted that the direct investments are entirely in special situation funds. MR. HANNA said that, given the size of the direct allocation and the resources available to explore a limited number of partnerships every year, there is not much of a top-down tactical approach to it. It is something that enters the thought process, but it is not the real role of the direct investment program. The real role is to build direct relationships with some high quality private equity groups, and the ARMB has enough scale to be able to do that.

MR. PIHL inquired if there was a limitation on the percentage of the total private equity investments in any one fund and how that was managed. MR. HANNA said the policy limitation is 20% exposure of the total net asset value of the private equity to any one group. Staff has a monitoring role but at the same time is acting as a gatekeeper making direct investments. When staff invested in Warburg Pincus last year, they discussed it with Abbott and knew that they were considering the investment as well. When making that direct investment, staff took into consideration being comfortable that the aggregate allocation was positive for the portfolio. There may be circumstances where Abbott, Pathway, and staff invest with the same partnership. The overlap investments are happening for a reason, generally because those are some of the very best private equity groups in the business: so precluding direct investment in those areas is probably not the best strategy. But staff does consider moderating overall exposure to any one fund or to any particular group. The ARMB portfolio is very well diversified right now: there is probably no exposure as high as 10% to any one group collectively.

MR. O'LEARY asked if the direct investments tend to be in larger funds. MR. HANNA said that was fair to say. He added that the direct investments tend to be inherently a little more diversified such that the direct investment pool does not have an overabundance of firm-specific risk or sector-specific risk. The larger funds tend to be easier to access. Venture capital investing is the most difficult strategy for the ARMB to do through direct investment.

CHAIR SCHUBERT commented that the gatekeeper managers continue to do due diligence after making investments, and they sit on boards of funds as part of that. She asked if the ARMB would have to do the same, as its direct investments in private equity continue to grow. MR. BADER replied that the direct investment portfolio currently has only two funds, one being Warburg Pincus and the other a distressed debt fund. Staff is in constant communication with the investment manager, and they will be relying heavily upon that firm. Staff does not anticipate sitting on any boards with governance responsibility, other than perhaps an advisory board. MR. HANNA added that with the increased focus on fair value of private equity assets, the level of staff monitoring and oversight of investments that Abbott and Pathway are making has increased substantially over the past two years. The type of oversight that staff does for direct investments is very similar to what they do for the Abbott or Pathway portfolios.

MR. TRIVETTE asked, in light of the turmoil in the markets, if staff expected more regulation in the next few years that would make it more difficult to invest in private equity. MR. HANNA said he did not expect that, but it was a good question for Abbott and Pathway to address in their presentations. Private equity has become a lot more visible than it was several years ago, and that should continue.

MR. BADER indicated that Mr. Hanna substantially presented the details of the 2008 tactical plan in his presentation.

MR. TRIVETTE moved that the Alaska Retirement Management Board adopt Resolution 2008-05, adopting the 2008 Annual Tactical Plan for private equity. MS. HARBO seconded.

The motion passed unanimously, with trustees Galvin, Harbo, Pihl, Richards, Semmens, Trivette, and Schubert voting.

12. Abbott Capital Management, LLC

THAD GRAY and TIM MALONEY made a presentation to the board about the private equity portfolio that Abbott Capital Management, LLC has managed for the ARMB since 1998. *[Abbott provided a copy of their slides used in the presentation, containing detailed graphs, charts and statistics, and these are on file at the ARMB offices.]*

MR. GRAY began by reviewing highlights of the portfolio over the last year. It was clearly a banner year for private equity, and fortunately the ARMB portfolio was no exception to the strong market performance. The one-year time-weighted return on the Abbott-managed portion of the ARMB private equity portfolio was 42.6% in 2007. Distributions of cash and securities increased 52.5% over 2006, to approximately $215 million. This distribution activity peaked in the third quarter of 2007 and declined substantially in the fourth quarter and into the first quarter of 2008. Abbott reviewed over 400 partnership opportunities on behalf of the ARMB in 2007 and committed to 11. Over 90% of the capital that Abbott committed for the ARMB was to groups to which Abbott had made commitments in the past.

MR. GRAY said the pipeline of opportunities for 2008 remains very strong, in spite of the down turn in the market. From January 1, 2008 through today, Abbott has committed $45 million to three partnerships on behalf of the ARMB, including two European buyout partnerships and one captive subordinated debt partnership, all managed by groups with which Abbott has had long prior experience. Two smaller secondary opportunities also closed in the first quarter, resulting from the disposition of a large number of partnership assets held by another large public pension plan. Five partnerships are in advance stages of due diligence currently, with closing anticipated prior to June 30. An additional five partnerships managed by groups with which Abbott has had substantial prior experience are currently in the market, and due diligence is in initial stages. Several other groups have announced their intentions to begin fundraising, either in the third or fourth quarter of 2008. So in spite of the slow down in the capital markets, new fund formation activity remains very robust. Abbott is confident they will hit the $145 million commitment target proposed in the 2008 tactical plan.

MR. GRAY stated that it has been a privilege and honor to manage capital on the ARMB's behalf, as the relationship reaches it tenth year.

MR. GRAY briefly discussed the history of the deal flow since the ARMB portfolio began in 1998, noting the substantial pick-up in activity after a less-active period between 2002 and 2004. He also described how $132 million in commitments was allocated to partnerships in 2007. While buyouts comprised over 56% of the total, the allocation within the buyout segment was very well diversified between small, medium, large and mega buyout funds.

MR. GRAY gave an overview of the private equity market. Last year was unprecedented for private equity, in particular in the buyout end. Relatively benign economic conditions, low interest rates, and abundant credit markets combined to create to a "Goldilocks" environment for completing leveraged transactions. This lasted until July 2007, when suddenly the credit markets reversed themselves in a dramatic fashion, and the overall economy began a contraction, the magnitude of which remains unclear today. Record-sized buyout and special situations funds were raised, and record-sized deals were announced in 2007. Abbott believes that the greatest impact of the credit market contraction will be on the large end of the buyout market and that diversification will be a paramount factor in riding through the current cycle. The ARMB portfolio is very well diversified.

MR. GRAY stated that fundraising in the venture capital and growth equity segment of the market is still lagging dollars that are being invested by the venture capitalists themselves, which implies a slightly shrinking overhang in that end of the market. The key trend in the venture capital and growth equity sector has been a continued shift in strategy towards the later stage and growth equity transactions, largely as a result of ten years of underperformance by the early stage venture capital funds. Venture capital funds are also increasingly aggressive in new geographies, namely China and India, and in emerging sectors, namely clean technology, forming the beginning of what could be a bubble in that area.

MR. GRAY described Abbott's outlook and the various issues for the private equity market:

- The leveraged transaction activity will clearly slow down. However, this offers a potential advantage to groups in both the special situations and growth equity areas that do not rely on financial engineering or leverage to complete their transactions. The ARMB portfolio has a number of such groups that will be relatively unimpacted by the disappearance of leverage and the contraction in the credit markets.
- There has been continued investor interest in private equity, driving a healthy pace of fundraising. However, Abbott has noted over the last several months that a number of groups are not getting to the targets they set quite as easily as they did in 2007.
- Access remains an issue, in terms of top-quality groups, and this provides a strong advantage to investors, such as the ARMB, that have a long-established presence in the private equity markets.

- The increasingly public nature of private equity continues. However, with a decline in the large and highly visible leveraged transactions, the press seems to be turning their focus to other areas, namely the weakness of the economy.
- There is a potential impact as a result of the fair value accounting regulations, otherwise known as FASB 157. Some of the impacts appear to be positive, in the sense that there should be more consistency in the way groups value their portfolios. Some aspects may be negative, in the sense that there could be more volatility across valuations in the private equity segment. Also, valuations tend to take a lot more time on the part of the general partner and the limited partners.

MR. MALONEY reviewed details of the ARMB portfolio in 2007. He discussed the commitments to funds, the capital actually paid into investments, distributions received back, the latest valuations, and the portfolio's internal rate of return (IRR). He also presented aggregate information about the underlying portfolio companies in the partnerships.

Responding to the statement that about 67% of the portfolio companies are currently valued at or above cost, MR. TRIVETTE asked if that was reasonable, given the economic recession. MR. MAHONEY replied that the vast number of companies are venture capital and growth equity, and venture capital companies tend not to be written up until later in the fund's life. Also, with a recession, it is likely that some of the buyouts and special situations companies will get written down in the years to come.

COMMISSIONER GALVIN asked if the ARMB portfolio having about one third of the investments in the one-year and less than one year range was normal. MR. MAHONEY said it is not uncommon to see the first year have a large number of companies because it includes the past year's commitments, which is the largest overall amount of money committed to the market. The one-year total also includes funds committed to in past years that have made investments in the last year. MR. GRAY added that the "age of investments" graph reflects that the exit markets have been quite strong, more mature investments have been sold off, and so there are not many companies left that have four or five or six year maturities. This leave a portfolio of largely younger investments. If the exit markets weaken, as they appear to be in the process of doing, more companies will pop up in the longer duration segment, which will increase the overall age of the portfolio holdings.

MR. O'LEARY noted that boards typically have a difficult time understanding the rate of investing in buyouts versus venture capital. He said the failure rate in ventures tends to be significantly greater, and the name of the game is to dole out the money very slowly and recognize when something is not working and cut it off. In the buyout area, the capital goes into a transaction up front, and the name of the game is to make sure it isn't a failure.

MR. GRAY stated that Abbott spends time looking at loss rates across both venture and buyout funds, and they consider that a key metric of risk. In this asset class, there is no capital asset pricing model the way there is in the public market. Abbott's analysis of a database of approximately 10,000 companies in both venture capital and buyouts shows that loss rates in buyout funds tend to be 15% to 20% of capital invested, and loss rates in venture capital funds tend to be around 40% to 45% of capital invested. For a venture fund to hit its target return, there must be two or three investments that achieve a ten times investment or better, and that will make up for all the losses. Because the loss rates in buyouts are much lower, there only has to be two or three investments in a buyout fund to generate a five times investment or better, or the majority of investments to generate a three times investment or better. Loss rates in buyout funds have been declining sharply over the last five years. In fact, a couple of buyout funds recently wrapped up their portfolios without a single loss.

MR. MAHONEY continued with his presentation, reviewing the company diversification of the ARMB's portfolio by industry, geography, and initial stage. He drew attention to a list of the top ten companies in the portfolio, which represent about 9.6% of the overall portfolio net asset value.

MR. GRAY gave a brief update on the Abbott Capital organization, noting that in 2007 they completed a management transition from the founding partners to a second generation of partners led by Jonathan Roth as president, Katie Stokel as chief operating officer, and Thad Gray as chief investment officer. Their partner Matthew Smith will relocate to London in June to further investigate opening an office for the firm in Europe in the future and to increase Abbott's due diligence effectiveness in Europe and Asia. MR. GRAY listed additions and promotions that took place in the organization in 2007. There have been no departures at the management level in 2007 or 2008.

MR. O'LEARY asked for an overview of the assets under management, and an indication of whether the firm is open to new business, and if so, how that is accessed. MR. GRAY replied that assets under management are approximately $7 billion. Abbott is currently raising a $1 billion fund of funds. They also recently closed on a select buyout fund that will be about $300 million. That is all the new business that Abbott is currently taking. They have not taken on a new separate account in the recent past and have no plans to do so. Almost all of the growth in the business has been through the fund of funds vehicles.

CHAIR SCHUBERT said she was surprised that Jonathan Roth was appointed as president at his age, and asked if that was expected. MR. GRAY stated that in the firm's view Mr. Roth is the right person for that job as he is very good working with people and internal management issues, skills a company president needs.

In closing, MR. GRAY stated that because private equity is a long-term asset class, short-term changes in the economic environment should not influence long-term strategic portfolio decisions. As always, discipline and due diligence are important in evaluating private equity groups and building a well-diversified portfolio.

MR. O'LEARY said the huge buyouts that Mr. Gray mentioned were made at a time when interest rate spreads were very narrow. Bridge financing is often employed between the commitment and the actual completion of the transaction. There often is a need for refinancing during the life of the buyout. He asked, if spreads stay the same, what type of returns could be expected from major buyouts that have already been consummated.

MR. GRAY replied that some of the deals financed in 2007 were done at such attractive interest rates and capital structures for the buyout funds that they could not be refinanced on any better terms. Companies that are in distress will take big hits in their equity, in the absence of strong credit markets. Some of the larger buyout transactions announced in 2007 were in industries that are not considered cyclical, so they will not likely experience distress in a recessionary environment.

DR. MITCHELL said Mr. Hanna presented information that the average private equity firm does no better than the public stock market, while first quartile firms do far better. He asked what happens to the third and fourth quartile private equity firms.
MR. GRAY said sometimes partners see that they are not going to make a lot of money together and split up and go in separate directions. Some are successful raising much smaller funds, while others fade away.

MR. GRAY explained for COMMISSIONER GALVIN how portfolio companies either merge and/or go public. He said that if stock is distributed from a partnership, Abbott then liquidates it.

MR. WILSON asked if Abbott had data about where the ARMB portfolio stands in the top quartile and how Abbott's performance measures up. MR. O'LEARY replied that Callan reports that information by manager and by vintage year at a special meeting annually. MR. GRAY said Abbott has the information across all clients and by specific clients, and could provide it to the Board if they wanted it. MR. WILSON said he would get it at the special annual meeting.

CHAIR SCHUBERT mentioned reading about a Carlyle fund imploding and asked if the ARMB was faced with any situations like that. MR. GRAY said that was a debt fund, not Carlyle's main private equity fund. Abbott has never invested in any Carlyle funds, partly because they have been so aggressive in constantly raising funds. Abbott prefers to invest in groups that do one thing and do it well.

CHAIR SCHUBERT called a scheduled break from 10:25 a.m. to 10:35 a.m.

13. Pathway Capital Management

AL CLERC and JAMES CHAMBLISS made a presentation to the board about the private equity portfolio that Pathway Capital Management has managed for the ARMB since 2001. *[A copy of Pathway's slide presentation, containing detailed graphs, charts and statistics, is on file at the ARMB offices.]*

MR. CLERC reported that 2007 was a very good year for private equity, with a 27% return for the asset class, and Pathway had over a 40% return in its portfolio. He spent a few minutes reviewing the firm, saying they have grown the most in the areas of compliance, accounting, information technology, and administration over the last year. They added one new principal in 2007, Alex Casbolt in London. There has been no senior level turnover in the past year.

MR. CHAMBLISS reviewed Pathway's investment philosophy and approach to investing in private equity. Their primary focus is to invest with the most experienced and most successful private equity fund managers in the world on behalf of their clients. Private equity partnerships are only available to invest in every two to five years as they raise new funds, so Pathway must be flexible in its approach. They are willing to sacrifice short-term diversification year by year in order to invest with these best funds. Pathway's selective process means that over the past five years they have invested in about 3% of the opportunities that they reviewed for the ARMB. In 2007, they reviewed 413 limited partnership investment opportunities on the ARMB's behalf, did 277 due diligence meetings, and that resulted in 11 investments.

MR. SEMMENS asked if the 400 opportunities represented 400 different partnerships, or 100 separate partnerships with four funds each, etc. MR. CHAMBLISS replied that it probably does not represent 413 unique general partner teams, but the vast majority of them are unique. He estimated that between 25 and 50 of those general partner teams have more than one product that they bring to Pathway every year.

MR. CLERC presented a market review and Pathway's outlook for 2008:

- There has been a lot of interest in venture capital over the last several years. The pace of investment has picked up significantly, with a focus on later stage investments. There is more interest in emerging regions, such as China, India, and Israel. Liquidity has picked up in the venture sector over the last year. But overall, post-1999 venture capital performance remains relatively weak compared to the bubble period experienced prior to 1999. The biggest issue is that there was a limited number of high quality venture fundraisings during 2007, despite the growth in the overall dollars that went into the private equity asset class. Pathway committed to three high quality venture capital funds on the ARMB's behalf during 2007.
- Buyout funds have achieved record levels of investment through 2006 and 2007, and that has been fueled largely by favorable debt markets. Today, the subprime meltdown had led to a credit freeze, which has stalled new investment activity, particularly on the larger end of the market. There were reports of a backlog of

approximately $300 billion in committed but not yet placed leverage loans, but the latest news is that the backlog has fallen to about $100 billion. Until all that is gone, it will be a while before the banks are willing to lend significant amounts of capital to big buyouts. Today, it is very unusual to see buyouts over $5 billion in size. The greater focus is on mid-size transactions. Lending multiples and pricing of deals are coming down, and there are fewer recapitalization opportunities and longer expected hold periods.

- The possibility of a recession, and the severity of a recession, could also result in industry worldwide valuation write-downs in the portfolios. Certain sectors have been written down, but largely the private equity companies are still performing well.
- Opportunities are beginning to emerge from the credit turmoil for buyout managers. Funds with a lot of unfunded capital are going to take advantage of this environment over the next couple of years. The issue is how quickly that will start happening. Until sellers and buyers can agree on what the market price is, the next couple of quarters will be slow.
- After a three-year period of outstanding performance, returns are expected to moderate for acquisitions. Longer hold periods, more equity in deals, and then write-downs in certain industries.
- The only debt-related products that ARMB is in are distressed debt funds. Contrarian managers are seeing attractive opportunities from: (1) the potential increase in the flow of stressed or distressed credits in the market; (2) the debt of high quality companies that has been oversold; and (3) relieving underwriting banks of leveraged buyout debt at discounted prices.

MR. CHAMBLISS briefly reviewed the 2007 tactical plan. Pathway committed $173.4 million to 11 partnerships. They used the provision in the ARMB policies and procedures that enables them to go 10% over the amount allocated in any 12-month period, because a significant number of existing fund managers came back to market to raise funds during 2007.

MR. CHAMBLISS also presented the portfolio diversification by investment strategy. He noted that beginning in 2004-2005 Pathway made a concerted effort to find more high quality venture capital funds for the ARMB portfolio. However, they would never force any strategy into the portfolio simply for diversification's sake. They upped the percentage of venture capital in the portfolio from 2005 to year-end 2007, and 33% of the capital committed so far in 2008 is in venture funds.

MR. CHAMBLISS reviewed portfolio diversification by geographic region in the U.S. and outside the U.S., and in 13 industry sectors. The ARMB portfolio is invested in 25 countries outside the U.S., but the vast majority of that money is in Europe.

MR. CLERC stated that to date Pathway has committed $820.9 million to 55 limited partnerships for the ARMB; $456.8 million has been invested in portfolio companies, with a total value of $674.3 million, and $214 million of that value has been distributed back to ARMB. The net IRR since inception rose to 32.2% as of September 30, 2007, up from 27.2% the year before.

MR. CLERC presented more detailed performance information by vintage year and by investment strategy. He also compared the portfolio performance to public and private market indices over various time periods.

MR. BADER inquired what Pathway thought generally about the distressed debt asset category. MR. CLERC said that distressed debt is always a good place to have a small percentage of the portfolio invested. It is probably the only sector that can be somewhat timed. That is why Pathway has committed money to OCM recently and has added another distressed debt manager to the ARMB's portfolio. Pathway believes this is a period when distressed debt fund managers should be buying, but it is hard to determine where the bottom is. These managers will be buying assets because the FASB 157 fair market value accounting rules will result in some private equity write-downs.

MR. CHAMBLISS said the 2008 tactical plan looks very much like the plan for 2007. Pathway will make up to $160 million in commitments to 10 to 15 partnerships, most of those with existing relationships but adding one or two new partnerships that will complement the portfolio well. To date in 2008, Pathway has invested $40.5 million into three partnerships.

MR. O'LEARY asked if Pathway was open for new business. MR. CLERC said yes. The firm raises a small fund of funds every year and only take on small to mid-size investors for that fund of funds. ARMB is a discretionary separate account, not a fund of funds investor. Pathway has several separate accounts grandfathered in since they stopped taking on those types of clients. They will take on a separate account fund of funds for a very large investor.

14. Performance Measurement - 4th Quarter 2007

MICHAEL O'LEARY of Callan Associates, Inc., the ARM Board's general consultant, gave a presentation on the pension fund's performance for the calendar year ended December 31, 2007. He noted that 2007 was a great year, and his comments would be focused on the performance data for that period, but the first quarter of 2008 was terrible. *[The Callan slide presentation containing all the detailed graphs, charts and narrative is on file at the ARMB offices.]*

MR. O'LEARY stated that interest rates declined starting in the third quarter of 2007, and subsequent to year end they have declined a lot more. The yield spread over Treasuries had been narrow prior to the last half of 2007, but the Lehman Brothers high yield spread over Treasuries had reached 6% by the end of the year. He displayed a graph of duration adjusted "excess" returns for various Lehman Brothers indices to illustrate how extraordinary the credit markets were in 2007. The vast majority of actively managed, investment-grade bond portfolios did more poorly than the index because those portfolios tend to have a greater emphasis on so-called spread product.

MR. O'LEARY reviewed a series of slides showing market returns for the year:

- For the year, the Russell 3000 Index was up 5.1%, while the Lehman Bond Index was up 6.97%. So despite the underperformance of the spread product, the index that includes the spread product was up handsomely during the year.
- International equity, as measured by the EAFE Index, outperformed domestic equity, 11.2% versus 5.1%. In local currency terms, the EAFE Index was up only 3.5%. Over the preceding five years, the ARMB has done better investing in international equities than in domestic equities. The currency "wind" has been favorable for a long time because the ARMB's allocation to international stocks has never been greater. The managers have the authority to hedge defensively, but there will likely be discussion in the coming months about whether ARMB should be doing something else on that front.

DR. JENNINGS pointed out that the recent trend and the overall volatility of the chart on page 9 might encourage the idea of hedging, but the long-term average being so close to zero is a counter-argument. MR. O'LEARY agreed, stating that he mentioned it, not to encourage the Board to hedge, but to make the point that with the pessimistic outlook for the dollar, one may be comfortable being unhedged. The graph on page 9 shows that even though the dollar has declined significantly, it has done it for a very long time, and currency trends often overshoot. So the dollar could still be in a long-term secular decline, but there could be a two- to five-year period where the dollar is stronger. If that happened, the returns from international stocks during that period would be uncomfortable. When the Board first started investing in international stocks in the early 1990s, people questioned the investment because returns were better in domestic stocks.

MR. O'LEARY continued with the series of market slides:

- Large cap stocks did significantly better than small cap in the year; 5.5% for the S&P 500 Index and -1.6% for the Russell 2000 Index.
- Growth stocks finally outperformed value stocks in 2007, and by a huge margin. Finance is the biggest sector in the value index, and insurance companies, banks, brokers, etc. were decimated.
- Over the very long term, REITs (real estate investment trusts) and direct real estate will generate somewhat similar returns. But in the short run, they can look like there is no relationship — and 2007 was one of those years.

MR. O'LEARY reviewed the Supplemental Benefit System asset allocation as of the end of 2007, as well as the returns for the various investment options compared to their benchmarks. The Board, earlier at this meeting, put the Brandes International Fund on the

Watch List for underperformance. Capital Guardian's Global Balanced Fund also had a poor year, although the five-year return number is still attractive. The Citizens Core Growth Fund had a good year in 2007, but the longer-term record is less attractive. This fund is a later agenda item. Callan and staff have been watching the T. Rowe Price Small Cap Trust closely, and it did a bit better than the Russell 2000 Index for the year. The Stable Value Fund did well on a pre-fee basis. The component funds that T. Rowe Price uses to develop the balanced portfolios and target date portfolios all had competitive performance.

MR. O'LEARY stated that the Deferred Compensation Plan had over half a billion dollars in assets at year end. The Interest Income Fund is a big part of the Deferred Comp Plan. He commended the investment staff for the steps they have taken with T. Rowe Price to simplify the structure of the Interest Income Fund and improve transparency and communication to the participants.

MR. O'LEARY presented the asset allocation for the defined benefit plans as of December 31, 2007, highlighting that the funds are underallocated to domestic equity and overallocated to international equity. Compared to other public funds, the Alaska funds' domestic equity exposure is comparatively low, the domestic fixed income exposure is very low, real estate is comparatively high, and international equity is above the average allocation. Not many public funds have a discreet allocation to international fixed income, which the ARMB has had for a long time. Also, relative to other public funds, Alaska has a comparatively high allocation to alternative investments.

Looking at total fund performance for PERS and TRS, MR. O'LEARY said the return was negative 40 basis points for the December quarter, while the target index was down 81 basis points. The outperformance was attributable to manager performance in international equity and private equity. The shortfalls in other asset classes were not major. For the full year, PERS returned 10.17% and TRS 10.20%, versus the target return of 7.64%. The funds also beat their targets over three- and five-year periods.

MR. SEMMENS pointed out that over five years the manager effect on returns has been a positive 25 basis points, but he understood that was before manager fees. MR. O'LEARY said it was mixed on fees, because private equity and real estate returns were reported net of fees. MR. SEMMENS said the red flag to him was the manager effect on domestic equity returns of negative 44 basis points. MR. O'LEARY agreed that domestic equity has been the "problem child." MR. SEMMENS recalled a staff report that active management is appropriate in this area. MR. O'LEARY reminded him that a big component of domestic equity is passively managed. He added that there were also areas of underperformance in domestic equity that the Board has addressed, but the data is still "tainted" by the earlier numbers. If it were to persist, it would make a stronger case for domestic equities being one hundred percent passively managed.

MR. SEMMENS observed that over the last 12 months the manager effect has been positive for domestic equities. He asked if the Board's split between active and passive domestic equity management is the right thing or if there should be more passive management, given the performance results. MR. O'LEARY replied that the Board is doing the absolute right thing with regard to small cap domestic equities, where active management can and should add value, net of fees. He said the Board has taken significant corrective action in the large cap equity arena to become better balanced by style. He said he is comfortable with the managers in place in large cap domestic equity. He expects that, in aggregate, they will add value in the future, as long as the balance is maintained. The authority given to ARMB investment staff to utilize style-specific, capitalization-specific indices to maintain the balance is a very useful tool. That change has been in place for about one year.

MR. O'LEARY drew attention to a graph of calendar year performance relative to Callan's public fund database. He said it is always important to look at the individual periods to see if what appears to be consistent underperformance over longer periods may just be attributable to extremely poor performance in the most recent period — a time period bias. For three of the five years from 2003 to 2007, the ARMB pension funds have done better than other public funds on average. But in the other two periods, the fund is close to median return. The combination of those two things is why the cumulative five year number is so attractive.

MR. O'LEARY reported that over 16-1/4 years, the PERS fund earned 9.35% annually versus the target of 9.11%. He said the current fad is to have lower discount rates than the 8.25% used by the actuary, and 8.25% does look high compared to every person's thoughts. He thought that 8.25% was a stretch, but the actuary pointed out yesterday, in response to Dr. Jennings, that their return number includes an assumption about a higher level of long-term inflation (3.5%) than Callan believes likely. The risk premium that seems to be the starting point in markets today is comparatively low, which leads him to think the 8.25% target is difficult to attain.

MR. BADER stated that a common factor in the last three or four years of returns is the addition of asset classes, such as high yield and absolute return, and increasing the real estate allocation. He asked how that plays into the more recent returns, because he thought it helped even out returns. MR. O'LEARY said that was the beauty of diversification. There is some disagreement about whether REITs or direct property better represents the real estate market today. He thought that private equity detracted from returns for several years as the program matured, and now it has made a huge contribution for being a comparatively small part of the overall portfolio. Farmland and energy are generating positive returns, while much of the portfolio saw negative returns in the second half of 2007.

MR. O'LEARY provided commentary on each asset category and then on individual investment manager performance in 2007, as follows:

- At 6.40%, the in-house fixed income portfolio was very close to the median return of the core bond style group over the last year. The custom index was 6.97% for the year, making the index a top quartile performer. The index is below median for longer time periods. A strategy of the in-house portfolio includes building in an income advantage to the index, which is done through having more spread product.
- Large cap domestic equity was up 4.72% for the year, which was below the Russell 1000 Index and the S&P 500 Index. The large cap value managers were put in place during the second quarter of 2007, so there was only six months of return from them.
- The small cap pool had a positive return of 2.5% for the year, relative to the benchmark being negative. The small cap pool has been in place for about three years and is basically performing as expected, although a bit bigger premium is desired. TCW was the only manager terminated from the pool.
- Total international equity includes developed markets and emerging markets, and performance has been very good compared to other public funds' international exposure.
- Total international excluding emerging markets has done better than the EAFE Index.
- Emerging markets equity pool was up almost 41% for the full year, slightly better than the benchmark. The Board's changes to the emerging markets pool late in 2007 are not reflected in the pool return numbers.
- Global equity pool, represented by Lazard, was 9.45% for the year, below the MSCI All Countries World Index (ACWI) but above the MSCI World Index (Lazard's contractual benchmark).
- Non-dollar bonds, managed by Mondrian, were up 11.33% for the year, illustrating the influence of currency in addition to Mondrian doing well.
- The internal REIT portfolio was put on the Watch List for underperformance earlier at this meeting. Of note is that this portfolio is fairly small, the spread in returns in REIT portfolios tends to be very narrow, and these returns are pre-fee. The fees in this area are typically 50-60 basis points up to a full percent. On an adjusted after-fee basis, the Board would not likely be having a Watch List discussion, but the performance in 2007 was not wildly attractive. Callan looked at the holdings in the portfolio, and the drag of the value orientation being out of favor was a strong factor during the year. The portfolio seems to be broadly diversified, and the negative returns were spread across the holdings. This is one of the only areas of the stock market where the return was positive in the March 2008 quarter.
- Absolute return - Mariner was put on the Watch List for underperformance earlier at this meeting. The one-year return was positive at 2.4% but well below the median. About one-third of Mariner's portfolio is in fixed income arbitrage types of strategies, and that sector of the market did very poorly.
- Cadogan absolute return did significantly better than Mariner, earning 14% for the year.
- Crestline absolute return had a return of 9.59% for 2007.

- Most hedge fund related strategies had negative performance in the first quarter of 2008, and the typical fund of funds is down 2%-3%.
- ING - high yield bond portfolio. Rogge is purchasing ING, and the firm has been placed on the Watch List for management change reasons. The one-year performance is above the benchmark.
- Capital Guardian large cap had a terrible fourth quarter of 2007, leading to a poor one-year return. Cap Guardian reports that they have outperformed in 67% of the rolling three-year periods of their history, in 75% of the rolling five-year periods, and in 90% of the rolling ten-year periods. ARMB's experience with Capital Guardian tends to support that analysis — the long-term results have been very attractive and well above the market. The explanation for the most recent underperformance is them being overweight finance and underweight energy.
- McKinley Capital had a good quarter and year.
- RCM large cap was up over 13% for the year and beat the benchmark. Their performance over 12-1/2 years is a testament to active management in large cap equities.

CHAIR SCHUBERT recalled that the previous Board was considering terminating RCM's large cap portfolio at a time when Bill Price's retirement coincided with a period of poor performance.

MR. BADER stated that investment managers can have underperformance over three-year periods, and RCM was one of those for a while. It was a difficult time, and RCM was given three months to improve performance, then a little more time, and eventually they turned performance around in a very positive way.

MR. O'LEARY said that when Callan is conducting manager searches they like to look at seven years' worth of data and rolling three-year periods within the seven years, relative to the market benchmark and to a style group. There have been times when none of the candidate firms in a universe outperformed both the market benchmark and their style group.

MR. O'LEARY resumed his review of individual managers:

- Relational is a concentrated equity manager with an activist approach that has had finance sector exposure in a very difficult market environment. They contributed importantly to the underperformance of the large cap pool during 2007.
- Small cap managers Turner, Jennison, Lord Abbett, and Luther King all performed above the benchmark for the year individually.
- Brandes international equity, the separate account in the defined benefit plan, was a bit behind the index for the full year, but the three-year and five-year performance numbers are good.
- Capital Guardian international did well for the year.
- McKinley Capital international also had a great year.

- State Street Global Advisors was the problem for the year, mostly attributable to the post mid-year problems. It was common to see the quantitatively oriented managers have a difficult time. SSgA is on the Watch List because the group that managed this portfolio left at the end of December.
- Capital Guardian emerging markets portfolio earned 38.58% for the year, underperforming the benchmark.
- J.P. Morgan emerging markets had a great year, up almost 44%. The three-year number is well below the benchmark. Deciding not to liquidate this portfolio but to identify the new managers and make a transition proved to be beneficial, in retrospect.

MR. O'LEARY briefly discussed market events subsequent to year end. In summary, stocks were down about 10% in the first quarter of 2008. Several graphs depicted what has been happening with housing, inflation, unemployment, the federal deficit, the Fed funds target rate, etc.

LUNCH RECESS

CHAIR SCHUBERT recessed the meeting for lunch at 12:05 p.m. When the meeting reconvened at 1:20 p.m., trustees Schubert, Trivette, Harbo, Semmens, Pihl and Richards were present.

15. Investment Actions

15(a). Resolution 2008-06 FY08 Retirement Health Trust Asset Allocation
MR. BADER reviewed the staff report in the board packet. He related that in June 2007 the Board approved Resolution 2007-26, which adopted an asset allocation for the Retirement Health Trust of 100% cash. In September 2007, the Board adopted Resolution 2007-33, adopting a revised asset allocation based on Buck Consultants' projections for health care contributions and benefit payments. It was assumed there would be one trust for the retirement health plan, and it would be predominantly funded by much of the $400 million that the Legislature appropriated in the 2008 budget. It was also anticipated that distributions from the account would be de minimus because there was another account in the Department of Revenue to pay retiree health benefits from that would be spent down before there were expenditures from the Retirement Health Trust.

MR. BADER reported that there has now been a determination that there should be three health trusts, rather than one: PERS, TRS, and Judicial. Also, much of the account that was in the Department of Revenue to pay retiree health care cost disbursements has been exhausted, and draw-downs now must be made from the Health Trust. There is no history yet for inflows and outflows for three health trusts. The Division of Retirement and Benefits is working on an estimation to provide to

Treasury staff. In the meantime, staff has calculated that the income into the larger trust would be $25 million a month, and expenditures around $26 million.

MR. BADER explained that Resolution 2008-06 builds on the resolution that the Board approved in September 2007. The only change is to allow the Retirement Health Trust to have a higher cash balance up to 9%. Staff does not anticipate going that high, but the greater flexibility allows reasonable comfort in being able to make disbursements from the trust without being in violation of Board policy. He asked the Board to approve Resolution 2008-06.

MR. TRIVETTE asked who was recommending that the health care assets of each retirement fund be segregated. MR. BADER replied that DR&B was asking Treasury Division staff to do it, so the Division director could answer that question best. MR. SHIER stated that DR&B has been working with Ice Miller, the State's external tax counsel, on establishment of the Retirement Health Trust. There will be a final submission to the Internal Revenue Service for a private revenue letter that will forgive the State for having all the assets in one account and that will sanction the move into three separate health trusts. That approval is expected by July 2008. Three is the minimum number of accounts that DR&B could get Ice Miller to agree to. The Division recognizes that having the assets together makes it easier for Treasury investment staff to manage.

MR. TRIVETTE inquired if anyone has reviewed Ice Miller since they started working for the State. MR. SHIER replied that Mike Barnhill, assistant attorney general in the Alaska Department of Law, has been instrumental in reviewing the issues. MR. JOHNSON said he has discussed this issue with Mr. Barnhill, and it is calling a lot on the expertise of Ice Miller, the tax counsel working on issues specific to pension funds. There is a greater tendency to require the creation of separate trusts for different entities. Subtle tax law issues are involved that Ice Miller is hopefully advising the State on. He said Mr. Barnhill is highly qualified and is hearing Ice Miller's opinion and how to apply the tax law to Alaska's statutes. This is an ongoing issue.

MR. SHIER offered an example of a TRS retiree and PERS retiree couple who are consuming health care services, and how the benefits are coordinated and which retiree trust pays for the benefits has become an item of some significance. DR&B expects to see more of that type of analyses occur in the future.

MR. SEMMENS said he was not educated about these types of trusts, but he thought it was appropriate to have separate health trusts as a practical matter.

MR. SEMMENS <u>moved that the Alaska Retirement Management Board adopt Resolution 2008-06 approving the revised Retirement Health Trust Fund asset</u>

allocation for the Public Employees', Teachers' and Judicial Retirement Systems, effective immediately. MS. HARBO seconded.

MR. WILSON said that the State of Massachusetts faced similar issues that resulted in the equivalent of separate trusts but with the ability to manage the money in one pool, like a mutual fund concept. MR. BADER replied that staff is moving in the direction of managing everything together, and the only change in the resolution is an expansion of the bands around the cash allocation.

MR. TRIVETTE expressed his concern, especially with health care, that one fund would need more money than another in a given year. He recalled being told that once a health care fund is set up, the money can never come out of it. So he did not want to segregate the money any more than it has to be.

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

The motion carried unanimously, 6-0.

15(b). Citizens/Sentinel Reorganization Update
MR. BADER stated that Citizens gave notice at the February board meeting of their intent to be acquired by Sentinel Investments, which is part of Vermont National Life Insurance Company. As part of due diligence, staff visited Sentinel and concluded that it was a quality organization with highly skilled people to implement the socially conscious investment strategy formerly done by Citizens. However, it is a mutual fund format, and the underlying investment guidelines described in the prospectus were not aligned with the investment guidelines that staff is pursuing for defined contribution plan investment options. For example, some of the investments that are permissible under the Sentinel guidelines is that they can go 100% cash; they can have a heavy allocation to international securities; and there is no portfolio transparency to Treasury investment staff to conduct due diligence on behalf of the plan participants because Sentinel's is a mutual fund governed by rules of the SEC.

MR. BADER stated that while the ARMB may have to settle for a mutual fund format in some investment types, this is one that staff does not believe the Board has to accept. Sentinel's investment guidelines are written very broadly because they are for retail consumers and would probably never be subject to any sort of scrutiny. But the ARMB is an institution and has the staff and the responsibility to do that due diligence.

MR. BADER reported that, with the Board's approval, staff entered into discussions with Sentinel about the possibility of them managing a separate account for the

ARMB. There was a special Board meeting to bring the Board up to date on the status of the Citizens/Sentinel merger. While the ARMB voted the proxies "No," the acquisition of Citizens by Sentinel was completed. At the meeting, the Board directed staff to attempt to enter into a novation agreement with Sentinel to take over the Citizens contract. Sentinel declined to enter into the novation agreement with the ARMB. Although Sentinel initially had indicated that they were interested in entering into a separate account agreement, they ultimately declined and suggested another investment manager within the Sentinel organization and another investment mandate to follow. Staff determined that was not the best route to go on behalf of the plan participants.

MR. BADER stated that the situation with Sentinel at this time is that they are investing the money placed at Citizens, and the transition has gone seamlessly. Staff has not heard anything from plan participants, nor has DR&B communicated that there has been any difficulty related to the transition from Citizens to Sentinel. However, staff does not have the type of monitoring tools for the Sentinel investment going forward. Staff pursued talking to some other investment firms about the possibility of a separate account, among them RCM Asset Management. RCM was sent the same guidelines that staff had sent to Sentinel that would allow staff to monitor the accounts: what the holdings and sector weights are, agreement not to exceed sector weights by a certain percentage, agreement not to hold too much cash, that they are not going to be overweight any particular type of security, etc. Staff would also like to see lower fees than what Sentinel is charging.

MR. BADER said that RCM Asset Management has been operating socially responsible mandates for several years. Staff discussed this with Mr. O'Leary of Callan Associates, who researched the products and evaluated what RCM has been doing. Staff asked RCM to define a universe of socially responsible investment stocks, and invest within that universe with the intent of achieving the same return as the S&P 500 Index. RCM agreed to explore that proposal and subsequently responded that they could do that using the KLD Large Cap Social Index. That index explicitly prohibits investment in tobacco, firearms, alcohol, military weapons, gambling, and nuclear power. Additionally, there are certain restrictions related to environmental, social, or governance activities. RCM is scheduled to make a presentation later at this meeting.

The Board did not have any questions of Mr. Bader on this update report.

16. Adopt Asset Allocation

CHAIR SCHUBERT asked staff if the asset allocation resolutions could be adopted in a block. MR. BADER said yes.

MR. BADER explained that these are different asset classes than what the Board has seen in the past, but the change is that the underlying investments have been aggregated separately. For example, within the broad domestic equity category are large cap growth, large cap value, small cap growth and value, and the cash overlay programs. In the global U.S. are global equity ex-U.S., international stocks, and emerging markets stocks. Private equity remains the same. The fixed income category includes high yield, Lehman Aggregate, and international fixed income. Real assets category includes real estate, farmland, energy, timber, TIPS, and REITs. The absolute return category is as the Board is accustomed to seeing it. Cash remains the same.

MR. BADER said what changes at the margin in these asset allocations is that there is a slightly larger allocation to international equity in global equity ex-U.S. by 2%. Absolute return was 4% and now it is 6%. There are different combinations of asset categories in the resolutions, but they are all using the same asset classes. These recommendations come to the Board after review and discussion by the Investment Advisory Council, Mr. O'Leary and ARMB staff. They are consistent with previous asset allocations that the Board has adopted.

MS. HARBO <u>moved that the Alaska Retirement Management Board adopt the following resolutions relating to asset allocation of retirement systems: 2008-07 Defined Benefit Plans PERS/TRS/JRS; 2008-08 Defined Benefit Plan NGNMRS; 2008-09 PERS/TRS/JRS Health Trust; 2008-10 Defined Contribution PERS/TRS Retiree Major Medical Health Insurance; 2008-11 Defined Contribution PERS/TRS Health Reimbursement Arrangement Plan; 2008-12 Defined Contribution Death & Disability Funds PERS, TRS, Peace Officers, Firefighters and all others; and 2008-13 Defined Contribution Plans PERS/TRS Transition Cash Accounts.</u> MR. TRIVETTE <u>seconded</u>.

MR. TRIVETTE inquired if Mr. O'Leary or the IAC members wished to make any comments. MR. O'LEARY noted that this is another small step in the evolution of the ARMB's investment programs. The largest single change was a 2% increase in absolute return. He said he was very comfortable with the recommendations.

MR. SEMMENS referred to the asset allocation for the Retirement Health Trust Fund and asked why the range for real assets was -8% for an allocation that is 8%. MR. BADER explained that on day one there might not be any real assets in the portfolio, and having a range that goes to -8% means the asset allocation will not be out of compliance at the start.

MR. WILSON indicated that he supported the revised steps. He said he told his former peers at the Massachusetts Pension Fund that their decision ten years ago to overweight international equities and underweight bonds put the fund in the top one percent of all pension funds. The continuing move to globalization at this point in the cycle, given the tremendous run-up in currency, is the magical question for the next ten years.

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

The motion passed unanimously, 6-0.

17. RCM Asset Management - Socially Responsible Fund

MELODY McDONALD and PETER GOETZ of RCM joined the meeting to talk to the ARM Board about the firm and to present information about their socially responsible fund. MS. McDONALD related that she has been with RCM for 22 years in August and has been working in client relations with Alaska accounts since that time. MR. GOETZ has been with the firm for nine years and is a senior portfolio manager for U.S. large cap equities, with 20 years of management experience. MS. McDONALD explained the management transition happening at RCM: Scott Miliori has been appointed deputy CIO to work with CIO Peter Anderson over the next couple of years; Seth Reicher is leaving the firm to look at other investment opportunities; and Ed Painven and others are taking over Mr. Reicher's accounts.

[A copy of the RCM presentation handout, "SRI Proposal for ARMB from RCM," is on file at the ARMB offices.]

MS. McDONALD stated that RCM has been managing restricted accounts since 1986, with restrictions both on the social front and on a religious basis. RCM uses their same investment process — fundamental research, GrassRoots research, and an automated screening system to ensure compliance with the client's restriction list.

MR. GOETZ reviewed performance of a representative U.S. large cap blended growth composite portfolio with social screens. In this representative account, the benchmark is a blend between the S&P 500 Index and the Russell 1000 Growth Index. RCM has been able to work within the guideline constraints and still deliver competitive, strong returns over longer periods. He also presented performance of a representative U.S. large cap select growth composite portfolio with social screens, measured against a Russell 1000 Growth Index benchmark. He said he recognized that the ARMB was looking for an account measured against the S&P 500 Index, but he wanted to show the returns of restricted accounts against non-restricted accounts. For periods going back five years, the accounts with social screens actually had better relative performance than the benchmark; it slipped a bit over the seven and ten years; and performance is basically in line with the benchmark since inception in 1986. He stressed that there is no opportunity cost to using the social screening. Accounts that did not have social screens and accounts that had social screens performed in a similar manner over long time periods.

MR. GOETZ spent a few minutes reviewing KLD Research and Analytics, the source of the

KLD Large Cap Social Index, and how the index is constructed. In June, KLD will be segregating the index into a large cap universe (the 400 largest companies) and a mid cap universe. The large cap universe is what RCM would start building an SRI portfolio with.

MR. GOETZ briefly mentioned RCM's large cap philosophy and process, noting that the Board is familiar with this through other RCM products. He presented a model ARMB large cap SRI portfolio that incorporates KLD's current screening process and the strategies that RCM has in place for the non-restricted portfolios. The weighted average market capitalization is $62 billion, and the weighted median market cap is $38 billion, a bit smaller than the S&P 500 — probably more from RCM's strategy than it is from any constraints of the screening process. The P/E ratio is very similar to the S&P 500. The three industries with the greatest challenges to matching the S&P 500 Index are the industrials, energy, and utilities. However, RCM is able to select stocks in these sectors that they are confident will perform well, and even be overweight without feeling constrained. Eight of the top ten holdings are similar to the top ten in non-SRI portfolios. The two that are different are oil service companies that perform similar to the counterparts in the non-SRI portfolios.

MR. BADER asked if the opportunity set with the reconstituted Russell 1000 Index is now smaller than the Domini 400 Social Index. MR. GOETZ said he did not compare the two of them, but his sense is that it is not. He added that the people at KLD have indicated that the 400 Index will have as good an opportunity set, and potentially a better opportunity set, once they do a reconstitution.

MR. TRIVETTE inquired about the management fees on this account. MS. McDONALD replied that fees would normally be 60 basis points on the first $100 million. The ARMB would get a discount to 50 basis points, based on the long-standing relationship with RCM. The fees on the next $100 million are normally 55 basis points, and that would be reduced down to 50 basis points.

MR. PIHL asked why nuclear power is excluded. MR. GOETZ replied that nuclear is beginning to be embraced as a solution to global energy needs. He believes that when social screening first took place, the inability to dispose of nuclear waste products was a concern. He thought that KLD would be reassessing the ban on nuclear power stocks in the KLD Large Cap Social Index, and it may not be a hard and fast constraint anymore.

MR. O'LEARY stated that one of the biggest challenges for any manager is identifying a clear standard to use in excluding securities. The KLD family of indices is the most broadly used and widely accepted for those who wish to invest in a socially restricted manner. Each person might have different preferences as to what should be excluded for social reasons, but the RCM product is accepting that family of indices.

MR. PIHL <u>moved that the Alaska Retirement Management Board authorize staff to enter into a contract with RCM Asset Management to manage a socially responsible fund as a</u>

separate account, subject to the negotiation of investment guidelines, contractual terms, and fees. MS. HARBO seconded.

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

The motion carried unanimously, 6-0.

CHAIR SCHUBERT asked if a motion was necessary to terminate Sentinel for this mandate. MR. BADER indicated that the ARMB's action should be part of the record, without constraining staff in notifying participants and working with RCM.

MR. SEMMENS moved that the Alaska Retirement Management Board terminate Sentinel, subject to successful negotiation with RCM to replace the Sentinel mandate. MS. HARBO seconded.

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

The motion carried unanimously, 6-0.

UNFINISHED BUSINESS

1. Disclosure Reports
MS. HALL stated that the report of disclosures since the last regular Board meeting was included in the packet, and there was nothing unusual to report.

2. Meeting Schedule
MS. HALL added a May 7 meeting of the Defined Contribution Plan Committee to the calendar. She still has to finalize the date of the Board's educational conference in Seattle with trustees.

3. Legal Report
MR. JOHNSON reminded the Board that while there were at least two major bills that affected the ARMB this year (HB 13 - pension obligation bonds, and SB 125 - rate setting), there are other pieces of legislation that have an effect. For example, the Legislature passed a bill that would provide for cutting off future pension benefits to a legislator or other state officials. A provision in that bill entrusts to the ARMB the authority to make determinations if a spouse of such a person should be given a waiver or exclusion from that removal from pension benefits. He urged the Board to keep an eye on those types of legislation, because trustees may be regulating something they never thought would be

their responsibility.

MIKE BARNHILL, Assistant Attorney General, speaking by teleconference, reported that the Department of Law is into active discovery in the Mercer case, and the parties are exchanging discovery requests and responses. The Department of Law will be beginning another document collection effort, which will involve the trustees, and he would be contacting them personally to discuss that in the very new future.

NEW BUSINESS - None.

OTHER MATTERS TO PROPERLY COME BEFORE THE BOARD - None.

PUBLIC/MEMBER COMMENTS - None.

INVESTMENT ADVISORY COUNCIL COMMENTS

DR. MITCHELL presented a list of things that he had learned at this ARMB meeting, noting that sometimes these are new things and sometimes they are confirmation of existing knowledge:

- Properly executed, indexing delivers what it promises for every period, cumulative or year by year. How many times has the Board heard excuses from active managers as to why they underperformed a benchmark or their peers or failed to deliver on what they promised when they made their marketing pitch? The Barclays presentation, once again, underlined the value of indexing. No surprises, no excuses, predictability, and very low cost. He has not given up on active management. He would never give Barclays a mandate to index frontier markets, for example, and he would never index any other small, inefficient or narrow market. But indexing delivers for the big stuff.
- Diversification is a friend. He respects both Tishman Speyer and Sentinel, real estate managers who made earlier presentations. But investing in two properties rather than 26, two geographies rather than 12, carries with it risks that one might not always want to take. So whether it is asset classes or managers or investment styles, diversification, and more diversification, and more diversification should be the Board's mantra.
- Private equity does indeed provide meaningfully higher returns than public equity. Maybe not every vintage year, maybe not in the case of every single private equity manager or every gatekeeper, but for the most part the possibility of higher returns through investing in first quartile private equity partnerships (which he advocated for over ten years ago) has come to pass and should continue in the future.
- He will never fully understand actuarial science nor its application in the real world. Is 8.25% a good estimate for future returns? Sure it is. And other good numbers are 5%, 6%, 7%, 8%, 9% and 10%.
- The ARM Board and its staff are doing an excellent job. Mr. O'Leary pointed out that

> recent returns are superior by almost every measurement. This is not an accident. It stems from investing more money in international, more in less liquid assets, and more in newer asset classes. These were carefully thought out, but bold, moves, and decisions came after much discussion among Board members, staff, and advisors. Congratulations are in order and encouragement to keep up the good work.

DR. JENNINGS stated that currently the international portfolio, both developed and emerging markets, is actively managed. He encouraged adding index funds there, particularly as the international equity allocation increases. He would look at both value and growth funds, to give staff the kind of flexibility that they have in the domestic equity portfolio. In addition to the generic pro-indexing comments from Dr. Mitchell and Mr. Semmens' questions, it will be a cash management tool. The international allocation was increased overall by 4%. Indexing would be a quick way to get pension obligation bond proceeds deployed. And it will be an important tool for staff to help dampen any kind of manager imbalances or biases within the international portfolio.

Regarding the investment return assumption of 8.25%, DR. JENNINGS said every quarter of a percent does matter. Getting the actuarial assumptions right has big impacts on what the unfunded liability looks like and will influence the overall environment that this Board operates in. The actuary's 3.5% inflation assumption is far too high. Absent a serious change in the Federal Reserve's overall monetary policy, it is likely that that actuary's inflation assumption is three-quarters to a full percent high. It is three-quarters of a percent higher than Callan's five-year inflation projection. It is higher than the survey of professional forecasters' 10-year inflation number. Looking at the Treasury market versus inflation-indexed bonds, there is an implied inflation rate that is almost a full percent lower than the actuary's number. Given the high 3.5% inflation starting point, the 8.25% investment return assumption that is causing concern is actually only a 4.75% real return. Focusing on that, all the positive changes that have been made in asset allocation are probably a quarter percent higher than the return assumption was in 2005 when Buck Consultants started their projection process. One way to tackle it would be through the inflation and focusing on what the real return is. Since the ARM Board is officially setting the return assumption, with the advice and input of the actuary, it is a number that needs to be examined. Raising the real rate of return is going to lower the present value of the liability stream, and that is a reason to look closely at this.

TRUSTEE COMMENTS

MR. SEMMENS reported that people he talked with were not too pleased with having to file the new conflict of interest documentation with the Alaska Public Offices Commission (APOC). He thought it was over the top that he had to report the hourly rate of pay for his wife and son. He said he wrote a note of protest. He said he was glad that his fellow trustees were still here, having had to make that level of disclosure for themselves.

MS. HARBO thanked Kevin Worley for providing her with the Medicare Part D retiree drug subsidy rebate amounts. The FY07 rebate was $3.3 million; and so far in FY08 the rebate has been $12 million, with another $2.3 million coming in. That is a total rebate of $17.6 million to offset the retiree prescription costs.

MR. TRIVETTE expressed appreciation to Dr. Jennings for his comments about the impact of the investment return assumption. He thought the Board should consider that when it sets contribution rates at the next meeting. Addressing Mr. Semmens, he said he agreed that the APOC disclosures were onerous — and he has minimal assets. He supports the concept of public disclosure and wants to know what politicians are doing that could impact their decisions, but the disclosure system has gotten out of whack. Who is responsible for that is not clear. In closing, he thanked the Treasury staff, IAC members and consultants for working with the Board and contributing to the great results in the pension funds in recent years.

MR. PIHL expressed appreciation for being reappointed to the Board.

MR. RICHARDS said he, too, was reappointed and appreciated the support of the group that acted on his behalf. He said he continues to enjoy the meetings and working with his fellow trustees and the ARMB staff.

FUTURE AGENDA ITEMS - None.

ADJOURNMENT

THERE BEING NO OBJECTION AND NO FURTHER BUSINESS TO COME BEFORE THE BOARD, THE MEETING WAS ADJOURNED AT 2:25 P.M. ON APRIL 25, 2008, ON A MOTION MADE BY MS. HARBO AND SECONDED BY MR. RICHARDS.

Chair of the Board of Trustees
Alaska Retirement Management Board

ATTEST:

Gayle W. Harbo

Corporate Secretary

Note: Outside contractors tape recorded the meeting and prepared the summary minutes. 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
Juneau, Alaska