State of Alaska
ALASKA RETIREMENT MANAGEMENT BOARD
MEETING

Location of Meeting
Hickel Room, Centennial Hall
51 Egan Drive, Juneau, Alaska

MINUTES OF
April 26-27, 2007

Thursday, April 26, 2007

CALL TO ORDER

CHAIR GAIL SCHUBERT called the meeting of the Alaska Retirement Management Board (ARMB) to order at 9:04 a.m.

ROLL CALL

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

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

Investment Advisory Council Members Present
Dr. William Jennings

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

Department of Revenue Staff Present
Brian Andrews, Deputy Commissioner
Gary M. Bader, Chief Investment Officer
Jerry Burnett, Division Director
Susan Taylor, State Comptroller
Jie Shao, Spec. Asst. to Commissioner
Steve Sikes, Accountant
Zachary Hanna, State Investment Officer
Casey Colton, State Investment Officer
Ryan Bigelow, State Investment Officer
Clay Cummins, Asst. State Investment Officer
Judy Hall, Liaison Officer
Bree Simpson, Asst. State Investment Officer

Department of Administration Staff Present
Rachael Petro, Deputy Commissioner
Patrick Shier, Director, Division of Retirement and Benefits
Kathy Lea, Retirement and Benefits Manager

Invited Participants and Others Present
David Slishinsky, Buck Consultants, Inc. (by teleconference)
Mike Barnhill, State of Alaska Department of Law
Jonathan Roth & Tim Maloney, Abbott Capital Management
Cheryl Maliwanag, Pathway Capital Management
Robert Barkley & Mark Giambrone - Barrow, Hanley, Mewhinney & Strauss, Inc.
Earl Gaskins & John Ford, Brandywine Global Investment Management LLC
Steven Bloom & Deborah Woods, Quantitative Management Associates
Lee Wanie & Corin Frost, Barclays Global Investors
Bleecker Seaman, Brad Howe & Afshin Kateb, Lowe Enterprises
David Weiner & David Stenger, Sentinel Realty Advisors
Anselm Staack
Elden Mulder
Tom Boutin
Miles Baker
David Teal

PUBLIC MEETING NOTICE

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

APPROVAL OF AGENDA

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

MR. BADER asked to amend the agenda by removing item #20, Defined Contribution Plan Overview, and replacing it with a report on CS Senate Bill 125. He said legislative staff members requested an opportunity to report to the board on potential legislation.

MR. SEMMENS moved to amend the agenda as described by Mr. Bader. MR. TRIVETTE seconded.

The agenda was approved as amended.

PUBLIC/MEMBER PARTICIPATION, COMMUNICATIONS AND APPEARANCES

ANSELM STAACK identified himself as Assistant Professor of Accounting at the University of Alaska Southeast and a member and beneficiary of the retirement plan. He made clear he was representing himself and not the University. He indicated he had sent an email to the Legislature about his feelings on certain items, and he thought it had its desired effect. He said his comments on the cost-sharing bill that is before the Legislature right now is a policy call, and he has no problems with it whatsoever. He said he worked very hard to get the funding dropped for the "let's sue the actuaries" bill. He could make the same kind of argument for benefit consultants or investment consultants that the board has had, or even board members. He did not think any of that would be a useful exercise. He indicated he was leaving two letters of additional requests for information from the board: one a change to the regular policy of how the board posts information and the second related to cost allocation among the plans. He said the ARMB has much more responsibility as one board because it has taken on the responsibilities of the former Alaska State Pension Investment Board, the Public Employees' Retirement System Board and the Teachers' Retirement System Board. The membership has been greatly cut out of the entire process. Therefore, some of his requests for information are how he would like the procedures changed that would probably alleviate some of that and help the board fulfill its mission. In conclusion, he said he sincerely hoped that healing in the retirement systems could begin, rather than the last two or three years that have been spent in a combative manner.

There was no one else present in Juneau or on line who wished to speak to the board.

APPROVAL OF MINUTES - February 8-9, 2007 and February 23, 2007

MR. WILLIAMS moved to approve the minutes of the February 8-9, 2007 meeting. MS. HARBO seconded.

The motion passed unanimously.

MR. WILLIAMS moved to approve the minutes of the February 23, 2007 meeting. MR. SEMMENS seconded.

The motion passed without objection.

REPORTS

1. Chair Report

CHAIR SCHUBERT welcomed Tom Richards as the newest member of the board. She also acknowledged new staff in the Alaska Department of Administration: Rachael Petro as Deputy Commissioner and Patrick Shier as Director of the Division of Retirement and Benefits.

CHAIR SCHUBERT thanked Larry Semmens for his very active participation and involvement on behalf of the ARM Board in the myriad of legislation going through the Legislature. She also welcomed former Alaska Department of Revenue Deputy Commissioner Tom Boutin in the audience and thanked him for his service. Finally, she noted that this was the last meeting for Susan Taylor, State Comptroller in the Treasury Division, and she thanked her for all the hard work she had done on behalf of the board and the Department of Revenue.

2. Committee Reports

A. Audit Committee

Committee chair MARTIN PIHL reported that the Audit Committee had a meeting on April 25 in which the emphasis was on compliance-directed efforts in the Alaska Departments of Revenue and Administration. People from State Street Corporation also were present to make a presentation on their internal controls and how the bank interfaces with the State's accounting staff to provide tight security and control of asset holdings. The committee stressed that compliance is the responsibility of everyone involved in handling the State's assets. The committee was happy that top-level management in the Departments of Administration and Revenue attended the meeting, demonstrating that compliance is a top-management concern.

MR. PIHL said that two recent hires in positions focused on the compliance function in the Treasury Division are a welcome addition. There is also increased scrutiny of accounting for alternative investment holdings. The committee looked at information about employer audits in the Department of Administration's Retirement and Benefits Division (DR&B). The committee heard that there have been very few audits done in the last three years, a period when audit staff was redirected to other related tasks. The new leadership in DR&B assured the committee that changes are forthcoming. There are about 260 employers to audit, and the committee informed the division that it would like to see a three-year audit rotation.

COMMISSIONER KREITZER stated that the Department of Administration and the new Director of the Retirement and Benefits Division are committed to working more closely with the Audit Committee.

3. Chief Investment Officer Report

[Backup staff memoranda and correspondence for this report were included in the meeting packet and are on file at the ARMB offices.]

Chief Investment Officer GARY BADER reported on the following items:

- Communication from McKinley Capital Management informing the board of certain staffing changes. There was nothing significant enough to require placement on the ARMB manager watch list.
- Actions that investment staff have taken to either meet the benefit payment requirement of the retirement systems or to bring allocations in an asset class back within the target bands:
  - Reduced Lazard Global assets under management by $50 million.
  - Reduced Lazard Global assets under management by another $50 million.
  - Reduced Jennison Associates assets under management by $15 million.
  - Reduced Trust Company of the West (TCW) small cap assets under management by $30 million.
  - Reduced Lord Abbett & Co. small cap assets under management by $5 million.
  - Increased Internal Fixed Income assets under management by $100 million.
  - Reduced Dresdner RCM large cap assets under management by $50 million.
  - Reduced Capital Guardian large cap assets under management by $50 million.
  - Reduced State Street Russell 1000 Growth assets under management by $100 million.
  - Reduced Internal REIT (real estate investment trust) investments by $7.7 million.
  - Reduced Internal REIT investments by another $17.1 million on February 15 for the purpose of meeting benefit payments and to slightly adjust the asset allocation.
- Communications from Imperiali, Inc.
- Notification to the board of upcoming investment manager contract renewals for UBS Realty Investors, T. Rowe Price Stable Asset Management, Brandes International, Barclays Global Investors, and Mondrian Investment Partners Limited.

Board legal counsel, ROB JOHNSON, stated that the investment management contracts are not subject to the State's procurement code because the board's appointment of investment managers is considered by statute as delegation. There are regulations for the ARMB that recognize that fact.

MR. BADER continued reviewing CIO Report items:

- New senior portfolio specialist in the fixed income division at T. Rowe Price.
- Changes to the Defined Contribution/Defined Benefit asset allocations. Every month cash comes into the new DC/DB plan, and that automatically puts the cash fund outside the board's target asset allocation. As soon as the cash comes in, staff is directed to rebalance to the proper accounts, usually about every two weeks. Of note is that, given the soaring stock markets recently, a cash drag will probably manifest itself in future return information.
- Update on cash securitization program. The ARMB approved a cash overlay program in February 2006 for frictional cash not invested by the equity investment managers. The overlay program was implemented in July 2006 through an arrangement with State Street

Bank, and the cash balances that managers do not have invested in equities are invested in futures. Because of the complexity of the accounting and wanting to let some things settle down, staff asked State Street to stop investing on international accounts. From July 2006 through March 31, 2007 the overlay strategy has returned about $10.7 million. Staff estimates that the cash would have earned $3.6 million if it was in the State's cash account. So the ARMB has earned an additional $7.0 million by implementing the cash overlay program. The strategy does not make money every month, but the record so far has been good.

MR. SEMMENS said he recalled the board's discussion in February 2006 and the estimate of a couple of million dollars in excess return over what the cash would normally earn. He said it appears that the cash overlay program has greatly exceeded the expectations and he commended staff on that idea.

COMMISSIONER KREITZER asked if the international situation that Mr. Bader mentioned had any impact on the loss recorded in February 2007. MR. BADER said no. There has been an issue regarding the valuations in buying futures on international equity accounts, and the issue is complicated by having foreign exchange. International has been turned off for about one month, and the ARMB may have missed out on some opportunities in recent weeks. Staff is prepared to turn it back on again but wanted to let the program settle and have the custodian work with the Treasury Division's accounting team. The situation is very close to being resolved.

MR. BADER explained that when the cash overlay program was established staff had indicated that they might recommend bringing the program in-house when appropriate. Staff may have a recommendation on that at the June meeting, as well as a simplified calculation of the amounts invested in cash.

MR. BADER continued reviewing CIO Report items:

- Notification from RCM about a proxy voting decision for Hewlett-Packard. A manager is required to notify the ARMB if the shares of a company on which they are voting the proxies constitute more than 3% of the portfolio.
- Le Nature litigation costs. La Nature was an investment in the high yield bond portfolio. There was a loss related to what some people consider to be double bookkeeping and defrauding investors. The high yield investment manager, ING Ghent, has recommended litigation to try and recover the losses. The cost is estimated at $15,000 at this point, which does not include the legal fees. Staff requested board action on this item.

COMMISSIONER KREITZER moved that the ARMB authorize staff to reimburse the Alaska Department of Law for reasonable and necessary costs associated with litigation to recover losses on the Le Nature investment by ING. MS. HARBO seconded.

On a roll call vote, the motion passed unanimously, 9-0.

- Staff's recommendation to remove Cornerstone Real Estate from the manager watch list. The firm had changes in investment management more than a year ago, and they have continued to have excellent investment performance over the year.

MS. HARBO moved that the ARMB remove Cornerstone Real Estate Advisors from the manager watch list. MR. TRIVETTE seconded.

COMMISSIONER KREITZER asked why staff changed their minds about Cornerstone since the board approved putting the firm on the manager watch list in February 2006. MR. BADER explained that investment firms are put on the manager watch list as a matter of course when top management changes.

Without objection, the motion passed unanimously, 9-0.

- Correspondence from Investment Advisory Council (IAC) member Jerrold Mitchell that he was leaving The Boston Foundation at the end of March and joining Saltonstall & Co. as an investment advisor. Mr. Mitchell has indicated that he would like to continue to be on the IAC, although he is not able to say definitely what the demands of his new job will be. MR. BADER stated that Mr. Mitchell has been a real asset to staff, and they would like to see him continue his association with the board. Mr. Mitchell's contract expires June 30, 2007. Given the uncertainties of his availability, staff was asking the board to approve an extension of Mr. Mitchell's contract to December 31, 2008, when an evaluation could be made.

MS. HARBO moved that the ARMB approve an extension of Dr. Jerrold Mitchell's contract as an Investment Advisory Council member to December 31, 2008, at which time an evaluation can be made as to the effectiveness of his counsel and availability to the board and staff. MR. PIHL seconded.

There was a brief discussion about the terms for IAC members, the different procurement process used for their selection, and the 30-day contract cancellation provision.

On a roll call vote, the motion passed unanimously, 9-0.

MR. BADER reported that IAC member George Wilson had an injury that prevented him making the trip from Boston to Alaska for this meeting. Mr. Wilson volunteered to phone in, but staff decided it was not necessary.

MR. BADER indicated that the last item of his report dealt with the contract for the board's outside legal counsel. He asked Mike Barnhill, Assistant Attorney General with the Department of Law, to cover this topic.

MR. BARNHILL explained that this discussion began about four years ago when the Department of Law (DOL) underwent a review by the Conference of Western Attorneys General. One of the

recommendations in that review was that the DOL had a lot of outside counsel contracts and it was time to begin the process of internalizing some of that work. He was asked to review the outside counsel work that was done for the Alaska Permanent Fund Corporation and for the Alaska State Pension Investment Board (predecessor of the ARMB). There was interest at DOL in internalizing that work, but the clients expressed strong desires to maintain the status quo at that time. So he recommended to then Attorney General Gregg Renkes to maintain the status quo. Since then the status quo has changed. Ronald Lorensen, the outside counsel for the Permanent Fund, became ill and recently died. Rob Johnson is legal counsel to the ARMB, and his contract, which has no further renewal options, expires in June 2007. The DOL began re-evaluating the situation last fall in the wake of Mr. Lorensen's illness and decided to advertise a new assistant attorney general position within the DOL to do the work that Mr. Lorensen did. DOL did not complete that process and there was a change of Administration. DOL commenced the evaluation process under Attorney General Talis Colberg and concluded that it made sense to renotice the position but wrap in the work that Mr. Johnson has done for the ARMB and its predecessor board. That position was posted a few weeks ago, and there has been a lot of interest expressed and some applications received.

MR. BARNHILL stressed that none of this has any bearing whatsoever on the work that Mr. Johnson has done for the pension boards. That work has been superior in all respects. The DOL strongly encourages Mr. Johnson to submit an application. It is the DOL's view, particularly with the aggregate value of both the Permanent Fund and the pension funds approaching $60 billion, that it is really time for the funds to have dedicated legal counsel in Juneau so that they are readily accessible to the staffs. DOL has been working with the staff of the Permanent Fund and the staff of the Treasury Division to secure physical office space on-site so that this person can keep office hours at both locations and be readily accessible to provide the legal resources that are necessary for such large funds to operate.

Trustees asked Mr. Barnhill several questions about the application process for the assistant attorney general position, the compensation, and how the DOL anticipated the new legal counsel arrangement would work. MR. BARNHILL encouraged members of the ARMB to participate in the interview process.

MR. BADER provided a brief background on CS Senate Bill 125 about which the board would be hearing a presentation later in the agenda. He said it appeared that the Legislature was seeking the ARM Board's opinion on some of the things being proposed. He suggested that the board schedule a special telephonic meeting next week to respond to the presentation.

Trustees spent a few minutes talking about the process that CS SB 125 would be going through, including reviews by the primary and secondary actuaries.

After checking with trustee schedules, CHAIR SCHUBERT announced that a special board meeting would be held on Wednesday, May 2, 2007, at 9:00 a.m.

4. Fund Financial Report

State Comptroller SUSAN TAYLOR informed the board that the Accounting Section hired Scott Jones for the new accounting and compliance supervisor position. Mr. Jones is a CPA and will be taking over some of the day-to-day supervisory responsibilities from the assistant comptroller. She reported that she and Julie Pierce, the assistant comptroller, gave Tom Richards, the newest board trustee, a one-on-one briefing about Treasury Division operations and asset accounting. She offered to do the same for any other trustees when they are in Juneau.

MS. TAYLOR stated that fund financial reports in the future will present a net number for contributions and withdrawals, as was done once upon a time. Asset accounting staff will work with the Division of Retirement and Benefits for them to provide the detailed information about contribution and withdrawal activities to the board.

MR. PIHL said that contributions and withdrawals are something the board needs to track because the withdrawal numbers are alarming.

MS. TAYLOR mentioned that by the beginning of the next fiscal year the "Schedule of Investment Income and Changes in Invested Assets" will have all the real estate accounts broken out. The schedule also identifies with an asterisk the accounts that have been added in the current fiscal year.

MR. RICHARDS thanked the staff for the time they spent with him and recommended that other trustees take the half day to get better acquainted with Treasury Division operations if they have the time.

CHAIR SCHUBERT thanked Susan Taylor for her work in the Treasury Division and wished her well.

5. Private Equity 2007 Tactical Plan

State Investment Officers ZACHARY HANNA and RYAN BIGELOW made a presentation on the 2007 Tactical Plan for the ARMB's investments in private equity. MR. HANNA explained private equity as an asset class and then described the current private equity market. He also reviewed the ARMB private equity portfolio, followed by the 2007 Tactical Plan and proposed revisions to the Private Equity Policies and Procedures. *[A copy of the slides containing text, graphs, charts, and staff recommendations was included in the meeting packet and is on file at the ARMB offices.]*

MR. HANNA noted that general return expectations for private equity investments are 300 to 500 basis points over public equities. The ARMB's specific benchmark for its private equity managers is 350 basis points of return over the Russell 3000 Index. The appeal of investing in the private market is driven by three factors: (1) the universe of 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 strong alignment of interests between owners and management, and the ability to manage for longer-term value with less quarterly pressure than in public markets. This creates an opportunity for private equity partnerships to buy companies at low valuations, create value by making operational and financial improvements,

and then sell the companies at higher valuations. The less positive characteristics are that private equity investments are illiquid, there are high fees, the best managers significantly outperform, there are portfolio transparency and valuation issues, and the data and benchmarks for private equity are poor.

MR. HANNA described how investments generally are made through limited partnerships. Limited partners, like the ARMB, provide most of the capital, with liability limited to their investments. Limited partners often use advisors, like Abbott, Pathway and Callan. General partners provide the private investment expertise. They also share in the profits and have full discretion and liability. The limited partnership itself makes investments in underlying portfolio companies. Most partnerships have a 10-year life with the possibility of one-year extensions, and the limited partners making commitments of capital in the beginning stage.

MR. HANNA described the three primary private equity strategies: (1) venture capital funds that generally invest in early stage technology and life sciences companies; (2) buyout funds that invest in mature operating companies; and (3) special situation funds, a catch-all for groups that either have a multi strategy or a specialty focus. He explained that manager selection is critical in implementing a private equity program. Top quartile managers significantly outperform median managers; the average difference over the past 20 years is 12 percentage points. Median returns are generally not acceptable, in fact, public market returns are often in excess of the median private equity manager. Having access to the top-tier managers over time and careful due diligence and monitoring are required. Diversification is also important as private equity can be a very cyclical business. The portfolio of partnerships should be diversified by manager, by strategy, by industry, by geography, by investment stage, and by time.

Moving on to general market trends, MR. HANNA stated that fundraising set a new record in 2006, driven by buyout funds. Over the last several years private equity has become a mainstream alternative asset class with top managers in very high demand. Investments have been made at a similar pace for the last few years but were well below the level of fundraising. This raises some concern about an overhang of uninvested capital moving forward, particularly for buyout funds. The market for initial public offerings has been generally strong and focused on mature businesses. This is good for buyouts but not for venture capital.

At MR. TRIVETTE's request, MR. HANNA explained that some of the largest buyout funds are global in nature and have always had a carve-out to allow international investments. Over the past five years they have been using that carve-out, which has been increasing in size. It is not uncommon now for a very large buyout fund to be able to do 40% of their total investments internationally. He noted that it is hard to regard larger buyout funds, higher yield pricing, and increased leverage as a positive combination.

MR. HANNA next gave an overview of the ARMB private equity program that started in 1998. The allocation to private equity has increased from 3% of fund assets to 7%. 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 has also made direct investments in private equity partnerships. Since 1998, the ARMB and its advisors have built a high quality, well-diversified portfolio. Relative performance has also been good. In a vintage year comparison with partnerships that started investing in the same year, five out of the past eight vintage years were top quartile performance and three years were second quartile. The internal rate of return since inception is 10.1%. This compares favorably with the public market equivalent returns of 3.6% for the S&P 500 Index and 4.9% for the Russell 3000 Index. The time-weighted return for 2006 was 19.1%.

MR. BIGELOW reviewed details of the ARMB portfolio. He said contributions (capital calls) increased significantly in 2006 to $273 million, reflecting reasonable investment opportunities and the growing maturity of the portfolio. Through 2006, the portfolio had $1.8 billion in commitments, with $1.2 billion in partnerships. The total value at year end of $1.5 billion was 1.3 times invested capital. That represented $686 million in distributions and $823 million in net asset value.

MR. SEMMENS asked if 1.3 times invested capital was good, average, or what. MR. HANNA replied that for a portfolio of this maturity it is quite good. The bottom line is to have a number higher than 1.0. The portfolio is still at the midpoint in terms of reaching maturity, and the markets have been fairly volatile since 1998.

MR. BIGELOW provided information showing that the portfolio is diversified close to the guidelines of 25% allocated to venture capital, 40% to buyout, and 35% to special situations. During 2006 additional venture capital and buyout commitments increased the overweight to these two strategies, but the strategy exposure is well within policy bands. Staff expects strategy diversification to remain in line with long-term targets. He also reviewed diversification of the more than 2,000 portfolio company investments in the ARMB private equity program. He noted that international is now 29% of the portfolio, and staff will be recommending a change to the policy to allow for more international investments.

MR. BIGELOW reported that $261 million was committed to 22 partnerships in 2006. The commitments were in rough balance by strategy, with the bulk going to venture capital and buyout funds. Venture capital commitments by both Abbott and Pathway were strong compared to the past several years. There was also significant investment overlap in 2006: 29% of partnership commitments were made by both Abbott and Pathway.

Regarding the outlook for 2007, MR. HANNA said the private equity environment has been strong, but the increase in pricing leverage multiples will likely put downward pressure on returns. However, this has limited tactical value, since the long-term nature of private equity makes it particularly difficult to time. Venture capital fundraising is expected to be stable with a decrease in buyout fundraising. With respect to liquidity, the expectation is a continued high pace of distributions. At some point in 2007 or beyond, higher interest rates and increasing defaults may slow distributions. Valuation has also become a much bigger issue for plan sponsors and for general partners. There will be increased staff focus on valuation and likely an increase in the quarter-to-quarter volatility of private equity. As always, strong demand for quality private equity partnerships

will continue to make access a focus for the ARMB.

MR. HANNA stated that for the 2007 Tactical Plan staff is recommending a commitment target of $370 million in total: $135 million for Abbott, $160 million for Pathway, and $75 million for direct ARMB investments. He reviewed a table of the private equity allocation model showing projected commitments and investments in the next several years. The total fund exposure to private equity may fluctuate materially around the 7% target due to volatility but should stay well within the 5% allocation bands.

MR. TRIVETTE asked if the ARMB was okay in terms of late-stage buyout exposure. MR. HANNA said it is the nature of the ARMB allocation strategy — 25% to 30% venture capital, and the rest is buyout and special situations. Most special situation funds are really buyout-like with a type of specialty focus, so there will naturally be 60% or so of the portfolio that is inclined to be exposed to later-stage companies.

MR. O'LEARY asked staff to highlight an issue that has been catching a lot of attention with regard to audit requirements for plans such as the ARMB. MR. HANNA said there is a move within alternative assets towards fair value accounting and, more specifically, towards FAS157 as a specific definition of how fair value will be applied for fiscal years starting after November 2007. So private equity general partnerships will be required to be GAAP compliant to use the more rigorous FAS157 definition of fair value. There is also a dramatically increased focus on valuations by auditors looking at plans like the ARMB, including expanding the role of staff's responsibilities in terms of valuations. Staff has done a lot of work internally to increase the frequency of staff's oversight of private equity, to expand the amount of documentation of oversight of private equity, and to put more specific focus on how valuations are monitored. Staff is starting to look at quarter-to-quarter analysis of material changes in underlying portfolio company valuations to make sure that they are reasonable and that they reflect fair value. It is a big issue, and all the large accounting firms are developing a specific audit process for alternative investments.

MR. O'LEARY said he asked the question because it is becoming an issue in the industry and it really affects hedge funds, private equity, and other alternative investments. The bottom line is that while there may not be answers, a clear implication is that the internal workload associated with these areas will expand significantly. The board should be advised of this in its planning.

MR. TRIVETTE inquired if the ARMB was adequately staffed to handle the $75 million in direct investments proposed in the 2007 Tactical Plan. MR. HANNA said that, with consultant resources, he believed the staffing was adequate. With respect to what ultimately becomes the audit-driven requirements for monitoring private equity, management will have to wait and see how that develops. Staff has a process in place now, anticipating that the independent audit in August will have a heavy focus on alternative investments.

MR. HANNA next reviewed the recommended revisions to the Private Equity Policies and Procedures. He noted that a full redlined version of the policy document was included in the board

packet.

1. The first recommendation is a revision to the strategy allocation structure. In the existing structure there are specific allocations to sub-strategies that are restrictive and not necessarily consistent with the ARMB's goals for the asset class. Staff is recommending that the board move to a summary structure with 15% to 40% allocated for venture capital, 30% to 60% for buyouts, and 20% to 40% for special situations.
2. The next recommendation is to increase the international allocation from 30% of the portfolio to 35%. International markets are a growing part of private equity.
3. The ARMB has made direct investments in the past, and staff is recommending an annual allocation to address opportunities available directly. Since private equity investments move quickly, staff is also recommending delegation to the chief investment officer in a manner similar to making real estate fund investments. Annually the ARMB would set an allocation for direct investments and delegate authority to the CIO to engage the ARMB's private equity consultant, Callan Associates, Inc., to commit up to $50 million per investment. The consultant's concurrence would be necessary for investments with private equity partnerships new to the ARMB but not for investments with existing partnerships in good standing. The CIO would also have authority to commit up to $50 million beyond the ARMB's allocation to balance asset class exposure or address specific opportunities. The CIO would notify the Chair of the ARMB seven days prior to committing to any direct investment.
4. The final recommendation is to increase the flexibility of the Tactical Plan format without losing content.

Resolution 2007-07 - Policies and Procedures

MR. TRIVETTE moved that the Alaska Retirement Management Board adopt Resolution 2007-07 approving the revised Private Equity Partnerships Portfolio Policies and Procedures. MS. HARBO seconded.

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

Resolution 2007-08 - Private Equity 2007 Tactical Plan

MR. SEMMENS moved that the Alaska Retirement Management Board adopt Resolution 2007-08 approving the 2007 Annual Tactical Plan for Private Equity. MR. PIHL seconded.

On a roll call vote the motion carried unanimously, 9-0.

CHAIR SCHUBERT called a scheduled break from 10:38 to 10:53 a.m.

6. Abbott Capital Management, LLC

JONATHAN ROTH, Managing Director, and TIM MALONEY, Senior Investment Associate, 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 details graphs, charts and statistics, and these are on file at the ARMB offices.]*

MR. ROTH began by reviewing Abbott's 2006 investment activity and what they are seeing in the marketplace, past and present. In 2006 Abbott made 11 commitments for ARMB, six to venture capital and growth equity funds, two to buyout funds, and three to special situation funds. Venture capital and growth equity funds tend to invest in smaller, faster-growing technology or health-care oriented types of underlying portfolio companies. Buyout funds tend to invest in mature, cash-flowing, larger types of companies. Special situations are funds that employ elements of buyout strategies but are specialized, so they could be an industry focused fund or a mezzanine strategy, etc. The 2006 commitments totaled approximately $124 million, which is consistent with their target plan to commit $125 million last year.

MR. ROTH briefly discussed the history of the deal flow since the ARMB portfolio began in 1998, noting that on average Abbott looks at 325 to over 400 investment opportunities a year. Abbott remains extremely selective, within the confines of trying to build a portfolio as outlined in the ARMB Private Equity Policies and Procedures. The Abbott portfolio is approximately one-third to venture capital, one-third to buyout, and one-third to special situations, which is well within the ARMB guidelines. Abbott has a bottom-up approach, looking first for the best teams of people with the best track records. That led them to commit to six venture capital funds in 2006, four of which were existing relationships in the portfolio. So the portfolio is mature enough now that existing relationships are raising new funds, and Alaska is in an excellent position to get sizable stakes in these new funds. But when an opportunity that is new to Abbott and its clients presents itself, they are keen to seize on those opportunities. Two of those in 2006 were healthcare focused funds. The two buyout funds that Abbott made commitments to in 2006 were European funds, and both were existing relationships. The two special situation fund commitments were also existing relationships. The key for Abbott in 2006 was maintaining discipline in the portfolio. They could have committed in the order of two to four times the amount of money in the buyout and special situations categories. But not over-committing in any one vintage year is an important strategy that Abbott will always adhere to.

MR. ROTH spent a few minutes talking about the private equity marketplace. The world is awash in liquidity, and that is a good thing for the ARMB portfolio of over 1,000 companies because it means it has things to sell. Certain industries and certain types of companies are very attractive, and exits or sales of companies for IPOs led to about $141 million of cash flow coming back into the portfolio, about the same level as in 2005. It was a strong year for buyout-backed IPOs. On the flip side, venture-backed IPOs remained quite sluggish in 2006, but the merger and acquisition activity was the source of liquidity of venture companies. Strategic acquirers are selective, but they are starting to come out more and more and become competitors to private equity players.

MR. ROTH said that with all this money coming back to the likes of institutional investors, particularly those that have sizeable portfolio exposure to buyout and special situation funds, these investors get very excited about the high rates of returns they have enjoyed and they bring it right back to the marketplace. There was nearly $300 billion raised across nearly 650 funds in 2006, and the bulk of that went to a new class of category funds, the mega buyout funds that were raising as

much as $15 billion to $20 billion. The limited partner demand for the entire asset class remains extremely strong because, like in the case of the ARMB, it was another very strong year. Abbott cautioned the ARMB to be extremely disciplined along the lines of the Tactical Plan.

MR. ROTH stated that the pace of investment in venture and buyout funds increased versus 2005. This asset class has become part of the mainstream, with 15%-20% of the overall mergers and acquisitions market now being private equity. That potentially is a good thing to the extent that the ARMB has been in this asset class since 1998, and many companies are now in a position to be harvested.

MR. MALONEY reviewed details of the ARMB portfolio in 2006. He discussed the commitments to funds, the capital actually paid in, distributions received back, the latest valuations, and the portfolio's internal rate of return (IRR).

MR. SEMMENS asked if Abbott expected the 8.32% IRR to grow. MR. MALONEY said that is the hope, as Abbott's target return is 300 basis points over the S&P 500 Index.

MR. O'LEARY stated that the ARMB can negatively or positively, through accident or over- or under-enthusiasm, influence the internal rate of return. Looking back on the history of the pension system's exposure to private equity, the board doubled the allocation target to private equity at the wrong time. That affects the IRR and is independent of the manager's skill set. When Callan evaluates managers in this area they go through an exercise of using the S&P 500 and the same cash flow pattern as Abbott used to calculate an IRR to see whether the manager has actually added value over the S&P 500 on a similar basis. There are issues with that methodology, but he is very pleased with the 8.32% IRR for 2006, and even more pleased with a 9.0%-plus IRR through March 31, 2007. Barring a calamity of some type, Callan would expect the IRR to continue increasing. It is superior to the S&P 500 Index on a comparable basis.

MR. O'LEARY said that Abbott has had a much greater emphasis on venture capital funds than Pathway Capital Management for the ARMB private equity program. There are cycles within the private equity cycle, and there are times when venture capital does exceedingly well, the late 1990s being one such time. Other times buyouts do really well. Fortunately, right now is a great time for buyout funds. So part of the structure overall is that the ARMB portfolio is diversified between venture capital and buyouts, but the preponderance of the assets are in buyout-related funds. It is very important that the ARMB portfolio have significant venture capital exposure. It is Callan's impression that the ARMB has more meaningful venture capital exposure than the typical large public fund which has forced money into buyouts.

MR. ROTH agreed, saying that the ARMB, with about one-third of its commitments into the venture capital strategy, would be the envy among larger institutions that probably have closer to a 20% venture capital exposure and 80% in buyouts. Those allocations look great for the last two to four years, but there are cycles. If the tech market begins to show different signs and the credit market changes, the ARMB portfolio will absorb some challenges on the buyout and special situations side,

but it is also well positioned to enjoy higher returns on the venture capital side (to the extent that those cycles play off each other).

MR. TRIVETTE asked if risk was higher in the mega-buyout funds than in venture capital funds. MR. ROTH said there are different risks with different strategies, so he could not say there was a higher risk. A large buyout fund generally entails a price risk; if they overpay for an asset, it is a very difficult mistake to make up over time. The other risk is how they structure an investment; if there is an excessive amount of leverage imposed on a portfolio company, and the economy hits a down turn and the underlying portfolio cannot make its interest payments, it creates pressure. On the other hand, they are buying very established businesses that tend to have predictable and well-established cash flows, which is why they are able to leverage these companies. The venture capital risks can be very unproven business plans, the markets may not even exist, management teams are perhaps not as well developed, and they may not even have any revenues to begin with.

MR. PIHL initiated a discussion with MR. ROTH on how long Abbott holds stocks before they sell them. MR. ROTH said Abbott's policy is to liquidate those positions within 30 to 60 days from the date of distribution, and their goal is to capture 95% of the distribution price. Oftentimes, once the stocks come into the hands of all the limited partners, many of them rush to sell, and the price of the stock goes down.

MR. O'LEARY commented that the most challenging period was in 2000 and 2001 when the technology wreck was happening. There would be a distribution and the stock would be trading down 10% or 15% the next day.

MR. MALONEY next reviewed aggregate information about the underlying portfolio companies in the partnerships.

MR. ROTH gave a brief update on the Abbott firm, noting that there has been no turnover in the investment staff, and they are looking to add another investment associate soon. There also have been no changes in Abbott's client base.

MR. O'LEARY asked Mr. Roth to comment on Abbott's current business strategy. He noted that many in the private equity business have moved away from managing separate portfolios to fund-of-fund approaches.

MR. ROTH said that when the ARMB hired Abbott in 1998 they were predominantly a separate account manager. In the mid-1990s Abbott added a fund-of-funds product for smaller institutions, essentially because separate accounts had to be able to deploy over $250 million to this asset class. Today Abbott has five funds-of-funds, and that is where they have focused on adding clients.

At MR. O'LEARY's request, MR. ROTH described how Abbott allocates investment opportunities pro rata across all the accounts, to the extent that they have capital to commit that year. Abbott has been deliberately constraining itself in terms of annual capital commitment targets by the separate

accounts and for the funds-of-funds. An example is that the fifth fund-of-funds was $858 million, but they had demand in excess of $1.0 billion. The prior fund was $735 million, but they could have gone to $1.5 billion. Abbott is not trying to grow the assets under management to be the biggest. Rather, they are trying to figure out how many funds they can invest in without worrying about the quality of the portfolios they are building and the quality of the partnerships they are getting into.

MR. BADER said the ARMB's allocation to investment opportunities must be less than it was before Abbott grew its fund-of-funds business. MR. ROTH said the ARMB dollar amount per year has varied from as low as $150 million to as high as $225 million. Once the board added another private equity manager, the dollar amount that Abbott was receiving each year was lowered. He agreed that the ARMB's proportion is somewhat smaller because the fund-of-funds business has gotten larger. Abbott has not taken on any new separate accounts, however, they are evaluating those accounts that may be inactive so they can create more capacity for the other separate account clients. Abbott is aware of the potential conflicts in terms of investment allocation, and they are as transparent as possible in the pro rata allocation process when a partnership is not able to accept Abbott's full desired investment.

CHAIR SCHUBERT asked how much Abbott has under management. MR. ROTH said about $6 billion. He guessed that before the ARMB hired Abbott they had about $4 billion, so the growth in assets under management between 1997 and 2007 is actually a very small increase relative to many of its competitors. Abbott is consciously keeping their assets under management much lower than is possible.

Concluding the presentation, MR. ROTH said an attractive deal flow of high-quality partnerships should enable the ARMB to commit $135 million in 2007. Liquidity remains strong in 2007, and in the first quarter the ARMB received back $50 million. If something changes in the debt markets and the IPO markets, of course that will have an impact. But at this point it looks like a good steady level. Private equity is a long-term asset class, and it is tough to make short-term tactical changes because the partnerships have long lives, they have five-year investment periods, and it is very difficult to predict what the exit market is going to look like in five years. That is why the portfolio is diversified and why Abbott is very deliberate in its due diligence process. They have not automatically re-upped with all the partnerships, many of which have done extremely well for the ARMB. If there are concerns about fund size, scale-ups, or potential misalignment of interests, Abbott has made the difficult decision to pass.

MR. TRIVETTE asked if the 8.32% internal rate of return was net of fees. MR. ROTH said it was net of all the underlying funds' fees but it was gross of Abbott's fees.

7. Pathway Capital Management

MR. BADER indicated that James Chambliss had a family emergency and could not attend this meeting as scheduled. He introduced CHERYL MALIWANAG, a partner with Pathway Capital Management. *[A copy of Pathway's slide presentation is on file at the ARMB offices.]*

MS. MALIWANAG started with an overview of the Pathway organization and reviewed the firm's investment philosophy and process. She then reviewed the 2006 Tactical Plan and the results. She noted that in addition to the $125 million allotment for 2006, Pathway used the 10% additional allocation allowed in the ARMB's policies and procedures because 2006 was an active year. Some of the existing relationships in the ARMB portfolio performed very well and came back to market to raise capital, so Pathway re-upped for those and also started new relationships. Regarding the 2006 commitments, she said the bottom line is that Pathway is making sure that the portfolio is constructed of managers that are employing different investment strategies. A group may all be called buyout, but Pathway does not want them employing the same strategy.

MS. MALIWANAG said Pathway committed a bit more to venture capital funds in 2006 because that market has been recovering since 2004 after the technology wreck in 2001. Special situations declined slightly primarily because there have been some great distributions from some of the earlier funds. The 428 underlying portfolio companies are well diversified by strategy and geographic region. Most of the non-U.S. investments are in the United Kingdom and Western Europe where private equity is more developed. There is a growing interest in Asia, and the general partners that Pathway has been talking to are taking a cautious and prudent approach. Some GPs are establishing offices in Asia, but Pathway does not want them to feel compelled to make investments if they truly do not understand the environment. So while the U.K. and Western Europe will represent the bulk of non-U.S. investments, the board can expect to see some additional investments in Asia.

MS. MALIWANAG reported that as of September 30, 2006, Pathway has made a total of $642 million in commitments for the ARMB portfolio, and contributions represent a little less than half of that. The portfolio has received $127 million back as of December 31, 2006, which is very quick progress and likely driven by the current buyout environment. The net internal rate of return as of September 30, 2006 was 27.2%. By December 31, 2006, the net IRR had gone up to 31%, and the return will probably be up again in the first quarter of 2007 due to a couple of large IPOs that have been announced recently.

MS. MALIWANAG stated that the ARMB portfolio returns have exceeded both public and private market indexes across all time periods since inception in 2002. The portfolio is still relatively young, but early indications are that it is performing very well. She drew attention to spreadsheets showing performance by vintage year and by strategy. She mentioned the top-performing funds since inception, noting they have been primarily buyout and special situation funds.

MS. MALIWANAG said the 2007 Tactical Plan is similar to 2006 except that total commitments will increase to $160 million. Pathway did not do any restructuring funds last year, but she expects they will do one or two in 2007. They plan to invest in as many as 15 private equity partnerships for ARMB in 2007. They will continue to ensure that the portfolio is well diversified, but the bottom line is that they are looking for the strongest and best investment managers. Already in 2007 they have committed roughly one-third of the total allocation for the year.

MR. BADER inquired about Pathway's current view on distressed debt. MS. MALIWANAG replied

that Pathway's view has not changed, that it is a very hard market to find. In 2003 managers were saying that in two years the market would break but they still have not seen a significant increase in defaults. Now the managers are not making those predictions. Pathway is trying to be with the best managers, like OCM that has a lot of experience, to be in the right position in the distressed debt cycle. Some periods will have lower returns, but these will be offset by significantly higher returns as the distressed debt cycle progresses.

MR. PIHL noted that most of the data in the report was from September 30, 2006. MS. MALIWANAG explained that at the time Pathway had to prepare the presentation they did not have all of the audited financial statements for year end from some of the general partners. Most of the GPs are trying to comply with the new GAAP accounting requirements, so it is taking them a bit longer to provide the mark-to-market valuations. The next quarterly report will include all the year-end numbers.

LUNCH RECESS

CHAIR SCHUBERT recessed the meeting for lunch at 12:01 p.m. and called the meeting back to order at 1:15 p.m. Trustees Harbo, Pihl, Richards, Schubert, Semmens, Trivette and Williams were present.

REPORTS (Continued)

8. Manager Review

MR. BADER first introduced BREE SIMPSON, Assistant Investment Officer. He said they would review where the pension fund is now, how it can be improved, explain how one of the tools available works, examine three of the public market investment pools using this tool, and, lastly, put forth a request to terminate three investment managers.

MR. BADER referred to two graphs showing the pension fund's favorable performance results in recent years. He said they were important because of the way those favorable results were achieved, namely, asset allocation. Over the last four years, this board and its predecessor board have broadened the number of asset classes the pension fund is invested in. For example, the real estate allocation has increased from 7.7% of the fund to 10.8%, and private equity has gone from 2.6% to 6.2%. There was nothing in high yield five years ago, and now the asset class represents 1.8% of the fund. There was nothing in absolute return, and now 3.3% of the fund is invested in absolute return strategies. Other asset classes, like farmland and energy, have gone from zero to 1% of the portfolio. Five years ago these types of investments totaled 10.3% of the portfolio, and today they total 23.1%. The five asset classes — real estate, private equity, high yield, farmland, energy — had a one-year return of 17.5% at March 31, 2007. So clearly the board's actions in having these other asset classes have resulted in improved returns.

MR. BADER stated that staff believes there is potential to improve the ARMB relative returns by continuing to diversify, and staff is recommending two additional asset classes to the board later in

this meeting (timber and TIPS). In addition to diversification, the board has focused on cost cutting. The board has terminated managers, negotiated lower consultant fees, increased the number of low-cost indexing funds, and instituted a cash equitization program. The ARMB can also improve returns by better implementation of the things it is currently doing. Technology can be used to evaluate managers and the allocations to those managers to improve the overall returns. One such tool is the Z-scores that are part of the Performance Evaluation Program (PEP) software that the Treasury Division has purchased from Callan Associates.

MR. BADER invited MS. SIMPSON to give the board an overview of Morgan Stanley Capital International (MSCI) Z-scores.

MS. SIMPSON explained that Callan Associates purchased the MSCI Z-scores from Morgan Stanley. They are referred to as "standard" or "normal" scores and are a holdings-based measure of value or growth attributes of a stock or portfolio, based on fundamental financial ratio analysis. They can be measured a few different ways — individually as value or growth, or as a combined Z-score. She went on to explain the five financial variables that make up a growth Z-score and the combination of three variables that make up a value Z-score. A combined Z-score is obtained by subtracting the value Z-score from the growth Z-score. A significantly positive combined number indicates strong growth characteristics of a stock or portfolio of stocks, whereas a significantly negative number indicates strong value characteristics. A score that is close to zero indicates a core-like portfolio.

MR. BADER stated that using the Z-score staff has a far better idea of the style bias of the ARMB's active equity managers. In November 2006 the board approved staff's request to add and expand the indexing capabilities to include five indexing tools. These will enable staff to address the style bias of the active equity managers. The ARMB has done better than average in all its asset classes except domestic equity. Over the past five years, nine out of ten public funds have exceeded the pension fund's domestic equity returns. By December 31, 2006, the domestic equity portfolio had about an average return, but average is not good enough. A large part of the underperformance is attributed to style bias — a growth bias versus a value bias. Using the Russell 3000 Index as a proxy for institutional equity returns, it is clear that for the past five years the markets have favored value. Using the Z-scores of the active equity holdings, it is clear that the ARMB has had a slight growth bias at a time when the market favored the value style.

MR. BADER said the large capitalization equity managers McKinley Capital, RCM, and Capital Guardian tend to invest in growth stock fairly consistently. Consistency is good because if they can be consistently strong in one area of the broad index then the ARMB can build a strong equity portfolio by complimenting strong growth managers with value managers or value indexes. Measured against a growth index, these managers have done very well for the past three, five and seven years. Typically the board looks at the managers measured against the S&P 500 Index without taking a look at precisely what it hired the managers to do. They were hired to be growth managers, and over time they should exceed the S&P 500 Index return. But over shorter periods of time it is reasonable to look at their performance relative to a growth index.

MR. BADER stated that Tukman Capital is an ARMB manager that has a core to growth bias. Looking at Tukman's performance over the past five years there have been extremely good years and some extremely poor years. For the past five years their performance has been 3.41% versus the S&P 500 Index return at 6.19%. Staff believes that the board can do better.

Looking at the combined Z-scores for small cap equity managers, MR. BADER said that four out of the five active managers tend toward being growth managers. TWC small cap fund is a core to value manager. Of the growth managers, the only one with a significant history with the ARMB and ASPIB is Turner Investments. For the past two years Turner has beaten the growth index (10.16% versus 8.65%). Looking at TCW small cap fund as either a core or a value manager over the past four years displays a disturbing record of performance. In that period the value index returned 14.03% versus TCW's return at 7.86%. The board hired TCW to be a value manager, and they have had five years to beat the index. Recent performance has been good, but staff does not believe it compensates for the five years of performance they have had with the pension fund.

CHAIR SCHUBERT said she knew the board was not supposed to be market timers, and she wondered if TCW should be terminated based on their past performance despite their recent improved performance.

MR. O'LEARY stated that TCW's performance characteristics in what they have done for the ARMB is characteristic of the way they manager money. For short periods they look like either the smartest kid in the class or the dumbest kid in the class. TCW has had extreme relative performance over short periods. He said if he were going to terminate a manager he would prefer to do it after a period of very strong performance, particularly when a manager has that pattern of performance. In TCW's defense, he said he did not think that they changed — the market environment has been pretty extreme. But a characteristic of their approach is a "hero or goat" type of performance pattern because they are so unbenchmark-like. In the pension fund's small cap pool technically all four managers are charged with beating the broad market. Every manager has some bias or another, and TCW's was clearly supposed to be a value bias. But almost from day one they have had a very meaningful exposure to technology, and that has really dominated their performance. It is very unusual for a manager with a value orientation to have a meaningful portion of the portfolio in technology stocks.

MR. WILLIAMS said it appeared that the value style of equity investing has beaten the growth style over the last several years, and there is some indication that that bias is waning. He asked Mr. O'Leary what market indications he sees that would shine some light on TCW's situation.

MR. O'LEARY stated that Callan firmly believes that every client's starting point should be to not have a pronounced style or market capitalization bias. Either of those two potential biases can explain most aggregate portfolio over- or underperformance. A client may perceive that one style will produce a greater long-term return, and at one point when Dr. Bob Haugen was an IAC member there was that perception at the ASPIB. That existed until dot.com, at which point people said

goodbye to Dr. Haugen and goodbye to the value bias. That is the perfect illustration of why the vast majority of the funds should not have a bias because they tend to alter the bias at the long term. The common wisdom in the market today is large cap growth has underperformed for so long that it should be the area that performs. He would not counsel anybody to have a bias against large cap growth, but that is in the context of never having a bias against large cap growth. The average stock has so outperformed the weighted average stock that this is a dangerous time to have a smaller cap bias. But that is not relevant to the discussion about TCW. The board has four active small cap equity managers, and in aggregate they should be like the broad small cap market. The challenge with TCW is that you don't know where they are going to be, and the best way to deal with that is with a different type of manager.

MR. PIHL said he thought the board hired TCW at the wrong time. Looking at their performance in the last year, he said TCW should be given another six months or until the end of the year. If the stronger performance does not continue, then he would support terminating them at the end of the year.

MR. JENNINGS said his opinions on TCW are well documented. He added that Mr. Bader has the ability, through the style-specific Russell 2000 Value Fund and Russell 2000 Growth Fund, to balance out the overall portfolio, to be able to take the one more-value-oriented manager off the table (TCW) and still have a portfolio that meets the standard of not having a value or growth bias. So the board can focus its decision on TCW as a manager, without having to worry about the portfolio consequences of that decision.

Responding to MR. SEMMENS, MR. O'LEARY explained that TCW is not a deep value manager, nor are the other three small cap managers aggressive growth managers. That was by design. Part of the problem with these particular measurements and the style indices is that financials now account for a huge proportion (over 30%) of the Russell 2000 Value Index, and REITs account for about 11% of the total Russell Small Cap Index. Most active managers have not made extensive use of REITs, which have blown the socks off everything else in that index. Nonetheless, TCW has demonstrated throughout their history with the ARMB a willingness to see opportunities in depressed growth stocks. That is the primary driver for their poor relative performance over 4-3/4 years versus the broad universe of small cap managers, when they should have had the wind at their back.

MR. SEMMENS observed that although TCW's performance in the December quarter was an impressive 8.30%, the Russell 2000 Value Index return was 9.03%.

MR. PIHL recalled that TCW's performance for several years before the board hired them was outstanding. MR. O'LEARY agreed, adding that in 2003 TCW looked like geniuses, but 2004 was not so good. Using the Callan performance report, he spent a few minutes delving into the details of TCW's past performance. He noted that the quarterly data reveals that TCW had more down than up quarters relative to the broad small cap index. For a manager that has any value orientation to not have done better than the broad small cap index over a long period is damning evidence. Last year

was a very good year for TCW compared to active small cap managers.

CHAIR SCHUBERT said this brought to mind the broader discussion about terminating managers. There have been a number of managers she thought the board should have terminated at one point, RCM being one example, after dismal performance for a long time. She recalled that the ASPIB discussed terminating RCM and then gave them another chance, followed by another chance, and then they showed some improvement.

MR. O'LEARY stated that RCM's performance relative to other growth managers has been very good over the life of the relationship with the pension fund. There were multiple year periods that coincided with portfolio management changes where RCM was underperforming other growth managers. Referring again to the Callan performance report, he said that over 11-1/2 years RCM is ahead of the broad market, and over the last year they are in the 26th percentile of large cap growth managers. So RCM has been very competitive relative to their peers.

MR. BADER pointed out that the Z-scores illustrate that TCW has not behaved like a value manager, and they were hired to be that in the small cap portfolio. TCW's returns have not matched the value manager, and the investment style has not matched the value manager. It makes it very difficult for staff to balance out the small cap equity portfolio. Nine out of ten public funds beat the ARMB's small cap portfolio last year, and staff is trying to bring to the board a strategy for improving on that. He recalled a staff recommendation to fire RCM at one time, and the board chose differently. Staff has reviewed that recommendation and found that if the money had been put in an S&P 500 Index fund it would have outperformed by as much as $20 million. Staff also recommended firing Capital Guardian small cap and had the same type of board reaction to that. In the small cap arena, staff believes that on the value side the pension fund would be better off with a value index fund than an active manager. This does not mean that the board could not find an active small cap value manager, but one that is core-like and unpredictable is not one that staff can engineer around. If the board should choose to give TCW more time to bring up their returns, he suggested that the time start from now. Half way through 2007 TCW has a good record, but staff is suggesting that it is just part of their overall pattern of performance — good returns some months and terrible returns other months.

Continuing with the staff presentation and looking at emerging markets equity, MR. BADER stated that JP Morgan has underperformed the broad index for four years and significantly underperformed in the last three years. In 2006 JP Morgan was nearly 10% behind emerging market growth and value indexes. For the past two years the JP Morgan fund was in the bottom 2% of Callan's emerging markets fund universe. That is why staff is recommending their termination.

MR. PIHL <u>moved that the Alaska Retirement Management Board terminate Tukman Capital Management as a large cap equity manager for the pension fund and invest the assets in index funds</u>. MR. TRIVETTE <u>seconded</u>.

<u>Roll call vote</u>

Ayes: Harbo, Pihl, Richards, Semmens, Trivette, Williams, Schubert
Nays: None

The motion carried unanimously, 7-0. Trustees Galvin and Kreitzer were absent for this vote.

MR. SEMMENS moved that the Alaska Retirement Management Board terminate Trust Company of the West as a small cap equity manager and invest the assets in the Russell 2000 Value Index Fund. MR. TRIVETTE seconded.

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

The motion passed, 4-3. Trustees Galvin and Kreitzer were absent for this vote.

MR. PIHL moved that the Alaska Retirement Management Board terminate J.P. Morgan as an emerging markets equity manager and authorize the chief investment officer and Callan Associates to conduct a search for emerging markets equity manager candidates for potential replacement(s) by the board. MS. HARBO seconded.

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

The motion carried unanimously, 7-0. Trustees Galvin and Kreitzer were absent for this vote.

9. Large Cap Value Manager Search

MR. BADER stated that even before staff used the Z-scores analysis and talked about changes in the large cap equity manager line-up, they identified the need for a large cap value manager. He said the board approved Callan Associates to conduct a manager search and to work with staff.

At MR. BADER's request, MR. O'LEARY reviewed the steps that Callan takes in vetting potential investment managers for the board to consider. MR. BADER also described how the internal staff team evaluated Callan's list of six semi-finalist candidates. The staff team looked at how much of a value manager these firms were, the consistency of returns, and the process the managers used to make their security selections. Staff's review resulted in three finalist managers being invited to make presentations to the board at this meeting. Staff was not recommending any particular manager, leaving it to the board to select the manager that is the best fit for the pension fund.

MR. O'LEARY added that there are distinct differences among the three candidates that he would be happy to discuss with the board after it has listened to the presentations. He noted that at least two of the three had been candidates previously, although none of them actually got to the point of making a presentation to the board.

A. Barrow, Hanley, Mewhinney & Strauss, Inc.

MARK GIAMBRONE, CPA and ROBERT BARKLEY, JD, two partners at Barrow, Hanley, Mewhinney & Strauss, spoke to the board about their firm's large cap value equity product. *[A copy of the Barrow, Hanley, Mewhinney & Strauss presentation booklet, dated April 27, 2007, is on file at the ARMB offices.]*

MR. BARKLEY said he understood that the board wanted to add a deep value manager to balance the pension fund's large cap equity exposure, in other words, a product that does not overlap too much with the existing large cap portfolios. To do that the value manager should stick to that style, even when the value style is out of favor. He understood that this manager should generate returns net of fees that are better than a passive approach.

MR. BARKLEY reviewed the background of the Barrow, Hanley, Mewhinney & Strauss (BHMS) company, covering its history and the equity investment team structure that has developed the next generations of investment professionals.

MR. GIAMBRONE presented the BHMS investment philosophy and process for building portfolios. He said they look for good companies that are down for reasons they can identify and believe are temporary. It is a combination of "cheapness" and "change." Cheap means a price-to-earnings (P/E) ratio that is below the market, a price-to-book ratio that is below the market, and a yield that is premium to the market. They define good companies as those with earnings growth rates that are above the market, returns that are at a premium to the market, and lots of cash flow so the companies can pay a substantial dividend but have enough money to reinvest in that business to propel the growth rates and returns going forward. Combining valuation characteristics that are below the market and growth rate returns and cash flows that are above the market leads to a portfolio of opportunities.

MR. GIAMBRONE explained the BHMS process for finding value, focusing on their qualitative analysis which he said is where BHMS adds value. He said they have to be able to identify the key issues, be able to get good information around those key issues, and then put those together to make investment decisions. BHMS is uniquely qualified to do that because of their experienced investment team and because they have tremendous access to information and can get to the top-level decision-makers in a business. Their portfolio of about 80 stocks has a low 25% to 30% annual turnover rate, meaning there about 20 new companies per year that they need to pick from the portfolio construction process. There are 17 members of the investment team, meaning they need about one new idea a year per person. Because they are not constantly looking for new ideas, they have plenty of time to pay attention to incremental changes in information for the companies that are already in the portfolio and then only bring their best, well-researched, well-understood ideas forward that end up in the portfolio. The sell decision is just the opposite of the process behind the buy decision. When a company starts to lose the characteristics that are important — P/E or price-to-book being more like the market, or yield below the market — that generally

triggers them to start selling the stock.

MR. GIAMBRONE drew attention to a representative large cap value portfolio of 88 stocks. He said the weights are going to be different than that of the benchmark, and the weights are the end process of the stock selection. Right now they have overweights in health care and industrials and underweights in financials. It is an active portfolio where they pick one stock at a time, and they are cognizant of the benchmark but are not dictated by it in any way.

MR. BARKLEY discussed a section of their report called "Distinguishing Characteristics." He said most value managers will say they generally have a low P/E strategy. But BHMS found in the late 1990s that many value managers had a low P/E strategy until that wasn't working, then they decided to become growth-like. This was the result of unchecked momentum in the market and the effect of technology stocks, where investors were willing to pay higher and higher prices for stocks. Not only did this take place in the S&P 500 Index, which at one point was 30% technology, it took place in the average value manager's portfolio. BHMS stubbornly adhered to a low P/E value strategy, with a P/E somewhere around 8 to 15, while many managers drifted in style. In early March of 2000 the P/E started to crash and the speculative air was let out of the bull market. BHMS's performance has been strong in the last seven years because they stuck to the low P/E strategy, they continued to be that value manager in their client portfolios, and it paid off in substantial excess returns. BHMS cannot say when that phenomenon will happen again, but it will happen again.

Referring to the BHMS style graph, MR. JENNINGS asked if their position on the graph meant they had more of a mid cap bias than some of their competitors. MR. BARKLEY said they have some mid cap exposure, but most of their competitors will also have that mid cap bias. That is where substantial value has been.

MR. O'LEARY commented that it is more a byproduct of more equally weighting the positions.

MR. GIAMBRONE said their second distinguishing characteristic is their use of dividends in their strategy. In the 1900s, dividends contributed 48% of the total return from stocks. BHMS believes dividends are an important part of the overall returns, and the proof is that BHMS is one of the highest yield managers in the large cap value peer group.

Turning to performance, MR. BARKLEY stressed that one of the reasons they have been able to generate excess positive returns is that the BHMS strategy has a propensity to protect assets in difficult markets. He also focused on a graph depicting risk control standings and pointed out that over any time period BHMS is one of the better managers in the large cap universe for protecting assets.

MR. BARKLEY commented that BHMS had companies in the portfolio that were purchased by other corporations. In the past 12 months private equity funds have raised

billions of dollars, and there is a merger/acquisition mania taking place right now. So far in the first quarter there has been $180 billion in takeovers. He said he was not telling the board that the BHMS strategy is to try to find companies that are being taken over, but the ARMB portfolio would have companies that have very fair valuations and good free cash flows that can be used to pay down the debt that they take on in these acquisitions. This is not going to go on forever, but it is going to go on for a while. BHMS thinks it will be a part of boosting the performance, and the ARMB would be well positioned to take advantage of what is going on.

MR. GIAMBRONE stated that the value style has had a cyclical run recently, after the growth style had a big cyclical run. The underperformance of growth has been to the benefit of the value manager and the BHMS portfolio. Some companies have underperformed for so long that their valuation parameters have come into the BHMS universe. These companies grow slower than they used to, but they still grow nicely and have very high levels of return. This has given BHMS the ability to buy a much higher quality company today without changing their valuation parameters. He drew attention to a list of recent purchases that BHMS made in the portfolio — high quality, good growth names historically, having some type of a current problem that has brought their valuations down. The most recent purchase was American Express. So the portfolio is well positioned going forward, regardless of what may change in the growth/value cycles.

MR. BARKLEY closed by saying they understand the board's goals for a large cap value manager, and BHMS will give the pension fund that consistent value exposure. They have experience managing large portfolios and a history of meeting their clients' objectives.

MR. SEMMENS asked by how much BHMS expected they could outperform the large cap value index and over what time period. MR. GIAMBRONE said it is hard to predict the future. But if one looked at their large cap product that has been around 28 years it has outperformed the market by about 200 basis points. That is a fair proxy to think about over a reasonable period of time, because it's the same team, same process, same philosophy.

MR. BARKLEY said he would have answered 100-150 basis points if asked the same question six years ago. Their performance over the past five years is not predictive going forward. But if they can hit 200 basis points (in excess returns) in a diverse large cap strategy net of fees they would be very happy. It won't happen every quarter or every year, but most of the time over three years they can beat the market. He said three to five years is a reasonable cycle, and maybe three years is more appropriate when the board is funding a new manager.

CHAIR SCHUBERT thanked Messrs. Giambrone and Barkley for their presentation. She noted that things were ahead of schedule on the agenda. She suggested moving ahead and taking up the next item on the agenda while waiting for the second manager candidate to arrive at the scheduled time. The trustees agreed to take up "10. Adopt Regulations" next.

MR. JOHNSON advised the Chair that it would be appropriate to provide an opportunity for public comment on the proposed regulations at some point during the discussion.

10. Adopt Regulations:

Crediting Rate: Health Reimbursement Arrangement Plan

MR. BADER reported that SB 141 had a provision that required PERS and TRS employers to contribute 3% of the total payroll into a retiree health reimbursement arrangement plan trust. Those contributions would be posted to individual employee accounts. SB 141 also provided that earnings would be posted to those individual employee accounts. This requires the ARMB to adopt regulations to determine how those earnings will be posted to the accounts.

MR. BADER stated that staff struggled a lot with these regulations because they have to stand the test of time. One particular issue was how to post earnings to the accounts. The ARMB cannot assume that the earnings environment that we see today will be the earnings environment of the future. The whole intent of SB 141 was to avoid developing large unfunded liabilities for the retirement plans. The Retiree Health Reimbursement Arrangement Plan could be in that situation if the board is not careful of the type of regulation it adopts. Investment staff spent several hours modeling the potential investment returns, including the experience of the plan if this regulation had been implemented 15 years ago. They found there were periods when the bull market was raging and the plan would have been extremely overfunded, and then in the bear market the plan was extremely underfunded. He worked closely with Bob Mitchell and Zach Hanna, and they had to reject just simply trying to find a backward-looking plan for posting earnings. The plan they settled on was to post earnings once a year. At fiscal year end there would be an audit of the plan, there are investment earnings or losses, everyone knows the account balances, and those earnings could be posted to the individual employee accounts. There was support for posting more frequently than once a year so that there would not be a lag effect, because people entering or exiting the plan would be advantaged or disadvantaged, depending on when they terminated. But after a great deal of researching, staff came up with the proposed strategy.

MR. BADER stated that the Division of Retirement and Benefits wished to have other things taken into account when posting earnings. There is a provision in SB 141 that when a person terminates the plan and they come back several years later the rate of inflation will be posted to their Health Reimbursement Arrangement Plan. But who knows how many are coming back? Both DR&B and Treasury were concerned about how to pay the investment management fees for the Health Reimbursement Arrangement Plan. So they devised an expense and reinstatement reserve account so that at the end of the year they could look at the number of people who were reinstated to the plan, what the expenses were, subtract the expenses from the earnings, and then post to the employees' accounts.

MR. BADER said the proposed regulation was published for public notification as provided by law. There was one comment from Charlene Morrison, whom staff had worked closely with in developing the regulation. Ms. Morrison had suggested posting earnings monthly and going back and calculating the average monthly balances for people who had left the plan. Staff looked at AS 39.30.380, which provides that the account balance "shall be restored in the amount recorded on the date of termination from the trust..." Staff believes that posting earnings to an employee's account after their termination would be in conflict with the statute.

MR. BADER said staff was recommending that the board adopt the proposed draft regulation and that they be allowed to make minor changes that might come from the Department of Law review.

MR. TRIVETTE moved that the Alaska Retirement Management Board adopt the proposed draft regulation for computing the Health Reimbursement Arrangement Plan earnings rate, as presented in the board packet, with the understanding that non-substantive changes could be made by the regulations attorney following submission for review. MS. HARBO seconded.

MR. WILLIAMS mentioned that inflation is also addressed in AS 39.30.380. He asked if the regulation accounted for the extreme event that the investment return of the Health Reimbursement Arrangement Plan was not sufficient to cover inflation.

MR. BADER said Mr. Williams had pointed out something that could happen: there could be a sustained bear market, and people who had terminated and come back would get the rate of inflation during that period, while everybody else was suffering negative earnings posted to their accounts.

MS. HARBO said she thought that when a person terminated the money in the Health Reimbursement Arrangement Plan and the Major Medical Account went back to the employer. She asked if those accounts are held in perpetuity.

MR. BADER replied that the Medical Account is a defined benefit account. There has been some discussion about the Health Reimbursement Arrangement (HRA) Plan balances being eventually returned to the employer or used as an offset against the employer's contribution. He did not believe the accounts would stay in the HRA Plan forever, but the plan administrator would likely make that determination.

KATHY LEA, Retirement and Benefits Manager, said the State is not far enough into the HRA Plan to make some of these decisions.

MR. JOHNSON pointed out that the instruction to the ARMB were to adopt regulations on a fairly finite area. There was no intention for the board to adopt regulations to accomplish all

possible circumstances.

MR. SEMMENS asked Mr. Bader to comment on section (e) of the proposed regulation, the funding of the expense and reinstatement reserve account, in light of modifications that are laid out further on in section (i).

MR. BADER explained that section (e) simply says that there needs to be money in there to pay the expenses of the plan. The goal is to try and have five times the estimated expense needs of the plan to cover most bear markets. Section (i) is the understanding that it is a bit extreme to suggest that a participant in the plan would not get anything posted to their account.

MR. JOHNSON stated that the whole concept is premised upon the employers making contributions to individual employee accounts. Internal Revenue Service (IRS) rules appear to state that you cannot invade the actual corpus of the employer contributions to pay expenses of the plan. So expenses come out of the potential earnings, and that is why an expense and reinstatement reserve account was created.

CHAIR SCHUBERT inquired if there were any members of the public who wished to comment on the proposed regulations. There were none.

On a roll call vote, the motion passed unanimously, 7-0. Commissioners Galvin and Kreitzer were absent for the vote.

Transfer of Non-Vested DB Employees to Defined Contribution Plan

KATHY LEA from the Division of Retirement and Benefits explained that the proposed regulation establishes transfer procedures for non-vested members of the defined benefit plan transferring into the defined contribution plan, and deals with some of the outstanding questions that were left after the passage of SB 141. Clean-up legislation in HB 475 was to address these issues, but that bill did not pass last year. So the Department of Administration adopted emergency regulations, and the proposed draft regulation before the board today is one of the key pieces that allowed the Division to include the IRS requirements. The subject was vetted thoroughly by the Department of Law, the Division of Retirement and Benefits, and its outside tax counsel, Ice Miller LLC.

MS. LEA stated that the employers had raised a concern about the open-ended nature of the conversion to the defined contribution plan. The employer would not be able to adequately budget for the required matching of employee contributions if they had no idea how long it would take until all their non-vested employees who had the option to transfer to the defined contribution plan had left. This regulation sets a 12-month window that the employer can make the decision to offer the conversion for 12 months, and non-vested employees can make their election at any time during that 12 months or up until the point that they vest. This allows the employer to estimate their costs of the matching contributions and budget for

it. The PERS employers that want to participate in this election are required to amend their PERS contract with the State of Alaska. The TRS employers must have a resolution passed by their governing body to participate in this election.

MS. LEA explained the IRS rules that set limits for matching employer contributions transferred in one year. She also reviewed the membership service earned in the defined benefit plan that could be transferred to the defined contribution plan and how that transferred service could be used.

MS. LEA stated that staff recommended that the board adopt the proposed draft regulation.

MR. JOHNSON said the question could be asked, why is the ARMB adopting these regulations? The reason is because the DOA Division of Retirement and Benefits adopted emergency regulations to resolve IRS qualification issues that become permanent regulations. However, the statute does delegate to the ARMB the process to adopt these regulations rather than the commissioner. So in order to be compliant with the statute, the board is being asked, in almost a parallel fashion, to adopt some regulations that were adopted by the commissioner of Administration.

MS. HARBO moved that the Alaska Retirement Management Board adopt the proposed regulation dealing with the transfer of non-vested members of the defined benefit plan into the defined contribution plan, with the understanding that non-substantive changes could be made by the regulations attorney following submission for review. MR. WILLIAMS seconded.

MR. TRIVETTE discussed with MS. LEA a possible situation involving a former employee returning to work in the system after the 12-month period when the employer was offering the option to convert to the defined contribution plan.

CHAIR SCHUBERT opened the floor to public comment on the proposed regulations. There was no one who wished to speak.

Staff called the roll, and the motion passed unanimously, 7-0. Commissioners Galvin and Kreitzer were absent for the vote.

9. Large Cap Value Manager Search (Continued)

B. Brandywine Global Investment Management LLC

EARL GASKINS, Managing Director and Portfolio Manager, and JOHN FORD, Director of Marketing, appeared to present their firm's fundamental large cap value equity product for the ARMB's consideration. *[A copy of the Brandywine Global presentation booklet, dated April 27, 2007, is on file at the ARMB offices.]*

MR. FORD began by briefly describing the $40 billion firm that focuses exclusively on the value investment approach, its five different product teams, its client list, the investment objectives, and the fundamental large cap value equity team co-managed by Paul Lesutis and Earl Gaskins.

MR. GASKINS talked about the Brandywine Global studies that show there is an inverse relationship between excess returns over time and valuation. The lower valuation stocks tend to produce excess returns over time. That belief is their starting point. They also believe they can enhance the returns and minimize the volatility by doing a few other things:
(1) Pair the low valuation with good fundamental research so they understand the companies they buy.
(2) They have seasoned value investors who have learned from their mistakes.
(3) They tend not to look at forecasts, which invariably don't come true and can set you up for failure. They prefer to buy stocks that are devoid of forecasts or stocks that have very negative forecasts because they tend to surprise to the up side instead of disappointing.
(4) Knowing where you are in the economic cycles can be just as important as low valuations or the individual characteristics of a particular company. A low valuation without a conducive environment — be it economic, the interest rate, or the capital cycle — is not likely to make any money.
(5) Understand the sensitivities of the portfolio as a whole. In the late 1990s there were many brokerage firms that were actually behaving very much like technology firms, and the market to some degree treated them similarly. And understand who is buying stocks with you and how they are likely to see the future. In the early 2000s there were a lot of momentum players who previously had been buying technology stocks but then started buying more of the service stocks because that seemed to be a new momentum, particularly natural gas. It is important to understand when those momentum players are buying the stocks that you are buying because when the momentum changes they are likely to exit at all costs, and you won't make the returns you thought you would.

MR. GASKINS gave an overview of the investment process that starts with an initial screening of the universe to find the 500 or so stocks that are cheap. The second step is to determine which of those cheap stocks is actually cheaper than normal or relatively cheap versus their own histories or their sectors. This second step is done by an analyst. The third step is to put together a portfolio of 60-75 cheaper-than-normal stocks that have the ability to return to a more normal valuation. The third step is where they do the fundamental research on one stock at a time. Analyzing a stock is the heart of what Brandywine does and where most of the time is spent. They look for the answers to: Is a company truly undervalued? Does it merit the undervaluation? (what is the market afraid of?) Does it deserve a better valuation? Is it likely to get a higher price going forward? And does it make sense?

MR. GASKINS explained how they sell a stock when they have been right and it ceases to be undervalued, or when they have been wrong because the anticipated catalysts fail to happen or an unexpected event undermines their reason for owning the stock.

[Commissioner Kreitzer rejoined the meeting at 3:15 p.m. Commissioner Galvin also returned about the same time.]

MR. FORD said he just read a paper that said the valuation gap between growth and value has very rarely been this small. He expected that the next five to ten years would be good for the growth style because these things go in cycles and growth companies are very cheap. He said they understood that Brandywine Global would play a role in the pension fund portfolio, and it might be time for the growth managers to carry the load instead of the value managers that have been doing it for so long. If it does turn to a growth market, Brandywine can slightly tinker with its valuation at the margin. There is a time to be deep and a time to be a little more relative, but they will always be a core value manager. He drew attention to Brandywine's performance in the last growth cycle in the late 1990s and noted that most value managers did very well in the early 2000s once the bubble blew up.

MR. O'LEARY referred to a Brandywine chart of calendar year performance and asked them to comment on the period 1996 to 1999, which must have been very painful and probably resulted in lost clients. He noted that the Russell 1000 Value Index did better than Brandywine in several years of that growth period. He said they had talked about Brandywine's flexibility in the definition of value during growth-oriented markets, so he wondered if they have changed since then.

MR. GASKINS replied that they have not changed since then. He said Brandywine did not change with respect to their concept of value, and it was very painful, and they did lose some clients. But had they changed, he did not think they would have been as well positioned as they were in 2000. Also, the late 1990s was an unusual period in that it was dominated by size. Most of the returns during that period came from the top ten holdings in the portfolio, and unless a portfolio tended to have the same kind of concentrations, it probably was not going to do as well as the indices did. The S&P 500 and the Russell 1000 Value Index did not do substantially better than most active managers. Brandywine tends to take a much more equal-weighted approach. So while in the energy sector they might have had a 2% position in Devon (an independent) and a 2% position in Exxon, the index would have had a much larger position in Exxon. If the market rewarded holdings in very large capitalization stocks, then Brandywine would have underperformed because of their more equal-weighted approach.

MR. O'LEARY said that some managers think of risk in terms of being different than the benchmark. So if Exxon is currently 7% of the index, some managers might have 7% or 8%. But if Brandywine really liked Exxon, they might have 3% or 4%. MR. GASKINS said no more than 5% but chances are they would be closer to 3%-4%.

CHAIR SCHUBERT thanked the gentlemen for their presentation and called a scheduled break at 3:21 p.m. The meeting reconvened at 3:29 p.m. to hear from the next candidate manager.

C. Quantitative Management Associates

STEVEN BLOOM, a principal of the firm, and DEBORAH WOODS, Vice President and Portfolio Manager, made a presentation on QMA's Value Equity product. He said they represented two of the three senior people who have been with the QMA value product for 20-plus years and who are responsible for the entire record being presented. *[A copy of the Quantitative Management Associates presentation booklet, dated April 26, 2007, is on file at the ARMB offices.]*

MR. BLOOM said the QMA value product is part of a larger group called the Quantitative Management Associates that manages in aggregate $60 billion. They are a wholly owned subsidiary of Prudential and manage portfolios for other large state public funds.

MR. BLOOM said the conventional approach to value investing is to identify which companies are cheap, try to understand why they are cheap, and then to identify what catalyst will make things turn for the better. QMA believes that approach does not work, and value managers are notorious for underperforming the value indices. QMA's thinking is that they need to be different from other managers and to be right in order to succeed in value investing. They want to not only avoid making the same errors that other people make but to note those errors and set up processes to capitalize upon them.

MR. BLOOM drew attention to a performance graph showing Callan's universe of large cap value managers over 15 years. He noted that over the longer periods 70% or more of the value managers are not even keeping pace with the passive benchmark, the Russell 1000 Value Index. He said the statistics are actually worse, because the figures are before fees and are not adjusted for survivor bias (the worst managers often drop out of the database altogether). There is always a small group of large cap value managers that is outperforming the benchmark, but that group is a rotating group. QMA's return over the 15-year period was 14.38% versus the Russell 1000 Value Index return of 13.03%. QMA's target outperformance is 1.0% to 1.5% per year, which they have achieved over the longer term. To some people that may not sound overly ambitious, but achieving that magnitude of outperformance over extended periods is quite enough to put QMA in the top decile of competitors over time.

MR. BLOOM said QMA looks at what other investors are doing to see the errors they are making in their procedures that systematically cause them to underperform over time. Other investors often avoid deep value stocks, which QMA has in its portfolio. QMA can get better performance by finding companies that are very, very bad at a point in time, owing them, and having them improve enough to be just merely bad. Other investors are often too slow to move in, waiting until things at a company have already turned for the better before they buy the stock, so they are too late. Another mistake that value investors make over time is not sticking with value stocks. Not understanding the market history of value stocks outperforming the "good" stocks over time makes it very difficult for people to stick with

value stocks through periods when they don't perform well. The best example was the late 1990s when the market was infatuated with technology, telephone, and everything dot-com related. To invest in and stick with underperforming stocks that had problems related to them was very difficult for people to do. QMA is proud to not only stick with the underperforming stocks but to become even more emboldened and more aggressive in that direction when things are not working their way.

MR. BLOOM said QMA is not a concentrated deep value manager, but they have a good representation there. They have a diversified group of value stocks, and this not only helps deliver good performance but it provides good diversification to a plan sponsor's overall line-up. QMA wants to have a lower correlation to the Russell 1000 Growth Index than other value managers do, and that makes them a good diversifier. QMA's risk-adjusted returns show that they have been right in terms of getting good performance, and they have also been different in terms of how they have delivered it.

MS. WOODS described the value equity investment process, which is disciplined and systematic and driven by quantitative criteria. QMA's selection universe is the S&P 500 because it is diversified and contains seasoned companies. They look at adjusted earnings to determine the P/E ratios of companies, thereby eliminating any accounting items that distort the earnings. QMA believes that when to buy is as important as what to buy, so their model calculates the P/E ratios over several years. They are looking for persistent low valuations combined with negative current price momentum. This confirms that a stock is attractively valued and out of favor. On the sell side the process is just the opposite: they are looking for persistent high valuations combined with positive stock price momentum. The resulting portfolio contains 125 to 200 stocks.

MR. O'LEARY and MS. WOODS discussed when stocks are considered "holds" and the specifics of QMA's sell process.

MS. WOODS said that because QMA's approach also seeks to make money as a stock goes from being really bad to just okay or perhaps good, their product does not need a catalyst in order to achieve meaningful alpha (outperformance relative to the average stock). QMA does not intentionally look for or wait for catalysts before buying stocks. They have found that waiting for catalysts often results in missed opportunities. They assemble a diverse group of overly discounted stocks and patiently wait for those stocks to return to their normal valuations over time.

MR. BLOOM briefly reviewed a graph of the QMA value equity five-year rolling tracking error, and another graph of the return record compared to competitors. He said that as much as QMA would like to be awarded the ARMB business, he encouraged the board not to focus on the performance that QMA has delivered over the last five to seven years too much because the wind has been at their back during that period. From 2001 to 2006, when the market favored the value style, QMA's returns have been in the top quartile of Callan's value

universe. From 1997 to 2000, when the growth style was in favor, QMA was second or third quartile. For the earlier periods of 1992 to 1998, when the market was somewhat style neutral, QMA had second and first quartile performance. In a composite of different types of market environments, QMA has been top quartile about two-thirds of the time.

In closing, MR. BLOOM indicated that for a $300 million single client account that the ARMB was considering, QMA would be able to offer a management fee below their normal fee.

D. Board Discussion and Selection

CHAIR SCHUBERT asked the chief investment officer for his comments on the three large cap value candidates.

MR. BADER said there was a question in his mind about how reliable and consistent Brandywine Global would be relative to the ARMB's large cap value mandate. Brandywine's process sounded fine until the end of the presentation when they suggested that maybe they would move over a bit to the growth side when the market was favoring the growth style. He said that staff can deal with the changing market conditions if a manager stays consistent with their style. But if Brandywine has a moving strategy, then it is hard to figure out what the style would be.

MR. BADER stated that he understood the investment process and discipline of Barrow, Hanley, Mewhinney & Strauss, Inc. (BHMS) very well. He said he was impressed with Quantitative Management Associates (QMA) and believed they knew what they were doing, but he was not sure he knew what they were doing. QMA's process would require a great deal of faith on the board's part. They have a proven methodology that they spread over a lot of stocks, so they likely will have a certain degree of consistency. So the first and third presenters were his strongest picks.

MR. SEMMENS said he felt the same way as Mr. Bader.

At MR. TRIVETTE's request, MR. O'LEARY spent some time explaining a manager performance chart in the Callan Associates manager search booklet. He noted that the range in ranking for each product for each period gives some idea of the volatility of the shifts in performance ranking. He said the board could not use the charts as a crutch to justify hiring any of the three candidate firms. If it were down to two firms, the biggest difference in his mind was that QMA is a quantitatively oriented manager, very broadly diversified, and there is judgment in developing the process that they use and the data that drives the model. But there is very limited discretion with regard to the securities that QMA selects. On the other hand, BHMS and Brandywine are much more traditional. Their concept of risk is the risk that an individual stock in the portfolio is not going to do what they expect it to do, while QMA's concept of risk is much more sensitive to the risk of a big stock in the index doing well and QMA not owing it - more of a relative risk assessment. QMA has wonderful results

over a long time, and their comments about doing large cap value investing with substantial assets and not as a specialty product on the side to see if it worked are valid points. Any of the three managers are absolutely fine, and the question he would ask himself if he were a board member is which one of these organizations would he be the least likely to fire when, not if, they have a two- or three-year period of underperformance. The answer to that would determine which firm he selected.

MR. TRIVETTE asked if Mr. O'Leary meant a period of underperformance for value stocks like 1996-1999. MR. O'LEARY said that was a two- or three-standard-deviation event, so hopefully no one here will ever see that again. But the other side of that is that the market in the last four years has also been a two- or three-standard-deviation event. So the board is not going to see as favorable an environment for these value managers as we are looking back on now.

MR. TRIVETTE commended Mr. O'Leary and the Treasury investment staff for bringing three such qualified managers to the board.

MR. BADER stated that the board is not required to hire only one large cap value manager. If the board were to hire two value managers, it would impact staff's ability to negotiate fees slightly because each manager would have a smaller portfolio under management, but it is not that significant. Given that the ARMB does not have any other active value managers in the pension fund portfolio now, the board might think it is appropriate to hire two managers.

MR. RICHARDS said he liked the perspective that Mr. O'Leary just planted in his head to think about which manager he would be least likely to fire after a prolonged period of underperformance. He said that QMA described how they look for bad companies at the bottom that they expect to improve to sort of good companies. After a couple of down years for value stocks it would be hard to justify firing a manager that bought companies that were at the bottom already. On the other hand, Mr. Bader just raised a good point about not having any active large cap value managers in the portfolio now, so he was intrigued about the notion of hiring two managers.

MR. SEMMENS stated that when he read the presentation materials before the meeting he was most favorably impressed with BHMS, and they did not disappoint in person at all. But he was very impressed with QMA's long history of top-quartile performance. He doubted it was right to award a contract on that basis, but he also liked QMA's investment methodology which seems to have been proven to work. Lastly, he was pleased that QMA mentioned their fee structure, because no one else brought up fees at all.

CHAIR SCHUBERT inquired if QMA's quoted returns were composite. To illustrate his point that every value manager will have protracted periods of underperformance, MR. O'LEARY referred to page 21 of QMA's presentation booklet. He said that from 1989 through 1999 QMA's returns were worse than the Russell 1000 Value Index returns about

two-thirds of the time. During some of those years the value index was doing better than the broad market and conversely. He said one could see the same sort of thing in the Barrow Hanley history, except that they only have 6-1/4 years of history for their large cap value product. He cautioned the board about presentation comments such as "consistently outperforming," etc.

MR. O'LEARY stated that the Brandes Research Institute recently published a paper about the mutual fund world where they identified the top quartile and top decile performers over ten years. The study looked at how many years these top mutual funds underperformed the market, and it was at least 25% of the time. So that is part of active management.

MR. SEMMENS asked for comment about the QMA chart that indicated 70% of value managers have underperformed the value index over 15 years. MR. O'LEARY said that today everyone accepts the use of style indices. The reality is that people historically have only hired active managers to beat the broad market. Hiring a manager and giving them a style-specific benchmark has only been in practice for five to six years, maybe ten years at the outside. Callan was the first consulting firm to develop style peer groups in the 1980s. The measuring tool eventually became the basis for hiring a manager, and it remains to be seen whether that has been an appropriate shift. Ultimately, if a manager does not beat the broad market over the long run, why have them? At the end of 1999, 81 stocks or less constituted half the market value of the S&P 500 Index. The S&P Growth Index represented those 81 stocks. The other 419 stocks in the S&P 500 were in the S&P Value Index. So if you blindly followed an index that was constructed that way, you were becoming growthier as growth stocks became more dominant in the market.

MR. PIHL inquired of staff what the prospects were of the ARMB increasing the allocation to the active large cap value category. MR. BADER said there was about $300 million invested with Tukman that would be reallocated to one or two new value managers. He said he believed there would be increased contributions to the pension fund. The large cap equity target in the proposed asset allocation that the board will be taking up tomorrow is the same as the existing target. The portfolio is right at or slightly below the target for large cap equities. There are a couple of ways to balance the portfolio. One is to reduce some of the growth equity manager holdings. There are also a lot of holdings in the value index fund. Regarding the prospects of increasing the allocation, he thought the value managers would be very pleased to have the $150 million in business.

Further responding to MR. PIHL, MR. BADER stated that the overall strategy looking forward is to have a barbell approach of growth equity managers and value equity managers. If the growth managers beat the growth index and the value managers beat the value index, put together in the proper proportion they will beat the overall index. That is the premise upon which staff is making its proposal to the board.

MR. PIHL <u>moved that the Alaska Retirement Management Board award $150 million each</u>

to Barrow, Hanley, Mewhinney & Strauss, Inc. and Quantitative Management Associates for a large cap value equity mandate, subject to successful fee negotiations. MR. TRIVETTE seconded.

MR. TRIVETTE solicited a comment from the IAC member present. MR. JENNINGS said the board could not make a mistake with any of the three candidates. He added that he had asked BHMS about the capitalization size of stocks in their portfolio and they had indicated they tended to find more value in the mid cap range of stocks. Similarly, QMA is probably deeper value than the others. So within the value style box there are tilts that the board needs to understand in order to ask the consultant if these tilts influenced part of the performance when evaluating these two managers two or three years from now.

MR. RICHARDS asked if the dollar amount of the allocation in the motion was fixed because he understood from Mr. Bader's earlier comment that the proceeds from liquidating another account (Tukman) would be split between the two new value managers.

There was a brief exchange between CHAIR SCHUBERT, MR. WILLIAMS and MR. BADER *[but it was inaudible on the tape recording — maybe staff can recall the gist of the exchange and if it is even important to include it in the minutes?]*

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

The motion passed unanimously, 9-0.

RECESS

CHAIR SCHUBERT recessed the meeting for the day at 4:29 p.m.

Friday, April 27, 2007

CALL BACK TO ORDER

CHAIR SCHUBERT called the meeting back to order at 9:00 a.m. Trustees Trivette, Harbo, Galvin, Pihl, Semmens, Williams and Richards where present when the meeting reconvened. Trustee Kreitzer arrived at 9:55 a.m.

CHAIR SCHUBERT indicated that she would be leaving in about 20 minutes to attend a bill signing at the Governor's Office and would return as soon as possible.

REPORTS (Continued)

11. Performance Measurement - 4th Quarter 2006

MICHAEL O'LEARY, Executive Vice President of Callan Associates, Inc., the ARMB's general consultant, gave a presentation on the pension fund's earnings performance for the periods ending December 31, 2006. He indicated that because there was a fairly extensive discussion yesterday about the managers that were terminated and the portfolio structure, and in light of this meeting being well into the year to be taking up 12/31/06 data, he would talk about some other things of interest to the board besides performance. Because of this late date, the final real estate numbers are available in the performance reports. *[The Callan slide presentation containing all the detailed graphs, charts and some text is on file at the ARMB offices.]*

MR. O'LEARY stated that calendar year 2006 was a marvelous year for total pension fund returns. The only area of concern continues to be in the domestic equity area, and the board and staff discussed that yesterday.

Looking at the yield curve graph, MR. O'LEARY said that rates moved up slightly in the December quarter. This is the major issue that many investors are focusing on, that is, the Federal Reserve stopped raising short-term rates eight or nine months ago. The economy has remained stronger than many had anticipated, although today a very low GDP (gross domestic product) preliminary growth number was announced. The GNP (gross national product) deflator that was part of that release was put at 4%, and that, in the eyes of some, will be sufficient cause for the Fed to continue to drag its feet about reducing rates because they are concerned about the possibility of an acceleration in inflation. He said he would not put too much weight on those numbers because they are so sensitive to revision. The initial look-through to the underlying explanation of the slow-down in the first quarter is that government spending was low, inventories were not replenished, and residential spending was down significantly. But otherwise consumer spending was comparatively strong, and that was taken as a bright spot.

MR. O'LEARY said the total pension fund did so well in 2006 because of asset allocation, but it also did well relative to other public funds. Compared to others, the ARMB has a low bond exposure, and bonds have been the poorest performing major asset class for a while. Extending that thought, if

there is an environment where bonds do very well, that will be a challenging environment for the current asset allocation. Another factor that helped performance compared to other funds was that the ARMB has a big international equity weighting. One issue to consider very seriously in the asset allocation discussion coming up is that there are some funds that have removed the home country bias (most institutional investors have more in their local markets than they have outside their local markets). Some funds have moved to have the international exposure equal to the domestic exposure, but the vast majority have not gone that far yet. The movement gets reinforced when international equity returns have been so much greater than domestic returns.

MR. O'LEARY stated that currency and regional factors were both very powerful in explaining why international stocks have done better than domestic stocks. During 2006 the yen declined relative to the dollar, and the euro and the pound were both strong relative to the dollar. That helps explain the difference in performance between those international portfolios that had a European tilt and had a strong currency tail wind, and international portfolios that had a significant Japanese exposure and had a head wind because currency was working against them.

Responding to MR. SEMMENS, MR. O'LEARY said that although investments are denominated in foreign currencies Callan calculates the performance in U.S. dollars. The managers have the flexibility and authority, if they think a currency is going to go down, to maintain their investment in Japan and hedge defensively (sell yen and buy dollars forward). Most of the ARMB managers do not do that. There are some managers who actually try to capitalize on currency as another source of potential value added. He said that Mr. Bader has spoken to him about maybe having an educational forum on currency. Callan's Janet Becker-Wold has been working for two years on a currency project with the California State Teachers' Retirement System.

MR. O'LEARY stated that in the fourth quarter of 2006 small cap equity did exceedingly well, but it is somewhat deceptive because the Russell 2000 Index was up 8.9% for the quarter and 18.4% for the trailing year. The S&P 600 small cap index, at 15.11% for the year, was actually up less than the S&P 500 Index. It is very unusual for there to be that big a difference in small cap indices. Part of it is believed to be attributable to two primary factors. One is the strength of real estate investment trusts (REITs), which were up 35% for the year, and they account for a decent portion of the small cap index. Most active managers and the S&P 600 Index do not have as heavy a weighting in REITs as the Russell 2000 Index. A second factor was that there was an explosion of exchange traded funds (ETFs) during 2006. When money flows into those things, they are attempting to replicate an index, so they will try to buy a good sampling of what is in the index. The stocks within the small cap universe that tended to do best were lower quality, less liquid names. The consequence was that 2006 was the year where the typical small cap manager underperformed the Russell 2000 Index and may have outperformed or been close to the S&P 600 Index. During the March quarter that reversed and the typical active manager did better than the Russell 2000.

MR. O'LEARY stated that real estate had extraordinary returns in 2006, and the ARMB's weighting in real estate has been a big contributor to the pension fund's success.

Turning to asset allocation at 12/31/06, MR. O'LEARY said the fund is under the target in absolute return, other, private equity, and domestic fixed income. Much of that is a result of the strong equity markets, particularly in the fourth quarter, and subsequently there has been some rebalancing. Some of the underweight is systematic: the areas in which the fund is underweighted are the illiquid asset classes and the board cannot just turn the spigot to put money into those. Because the fund is underweighted in the less liquid asset categories, it has to be overweighted in the more liquid asset categories and those tend to be the domestic and international equities. Clearly that helped performance.

CHAIR SCHUBERT departed at 9:21 a.m., and MR. TRIVETTE assumed the duties of chairman.

Relative to the Callan public fund database, the ARMB is quite broadly diversified and has a high allocation to real estate, international equity, and alternative investments. MR. O'LEARY said he provided some Greenwich Associates research survey information on asset allocation trends because the board will soon be making a decision about asset allocation (slide 15). The board has also been thinking about how the ARMB performance compares with other public funds. (A problem with a survey like this is if a public fund has nothing in an asset category it pulls the average down.) *Pensions & Investments* annually does a survey of the largest public funds, and he provided the P&I data on the ten largest funds. Of note is that the lowest equity allocation among these mega funds was 61%, and the fixed income allocations show that the ARMB is toward the lower end of that spectrum.

MR. JENNINGS pointed out that the some of the mega funds might be constrained from getting into the less liquid asset classes. MR. O'LEARY agreed, saying it is a disadvantage that they have, particularly in hedge funds and private equity.

MR. O'LEARY showed another Greenwich Associates research survey graph depicting future asset allocation shifts for institutional investors, including corporate funds. International equity still shows strong. He showed two slides depicting the average asset allocation for endowment funds, which he pointed out tend to be comparatively small and do not have the same investment objectives as the ARMB of meeting long-term liabilities for plan participants. He said endowments and foundations have been on the cutting edge in terms of changing asset allocation policies, and they offer the board a perspective on the direction that others have moved in. He noted that the leading educational institutions have a big component allocated to the "other" category, but the definition of other can vary greatly from one fund to another. He said he believed that this "other" category is what IAC member Jerrold Mitchell has been talking to the board about for some time.

MS. HARBO commented that hedge funds have been in the news lately with regard to oversight. While a lot of public funds are not allowed to invest in hedge funds, endowments and foundations have big allocations to the asset class. MR. O'LEARY said that most jurisdictions are not prohibited from investing in hedge funds, but it may be self-imposed by boards. He added that many have begun to move into hedge funds, as the ARMB has.

MR. O'LEARY said total fund performance in the fourth quarter was terrific across the board — 6.11% for PERS versus the target return of 5.94%. Over the trailing 12 months the fund returned 15.15% compared to the target return of 14.91%. Five-year and seven-year returns are very close to or at the targets. The results over the last five years have not been just because of one good year: returns have been very close to target each year, and the target has been pretty competitive. Finally, the long-term return over 15-1/4 years has been 9.29% versus the target at 9.21%.

MR. O'LEARY stated that the fund's $4.62 billion domestic equity pool is managed by Capital Guardian, Lazard, McKinley, RCM, Relational, Tukman, and SSgA. Lazard is a global manager, but the U.S. portion of their portfolio is grouped with large cap domestic equities, and the international portion is grouped with the international pool. The underlying characteristics of the equity portfolio demonstrate a slight growth style bias but the capitalization size is not wildly different than the benchmark. He drew attention to a page of deeper analysis that included a table of style exposure by capitalization size using the Z-scores. Large cap value is 30% of the ARMB portfolio and 37.7% of the index, indicating an underweight there. The large cap overweight is in core and growth styles combined.

MR. BADER remarked that the pension fund does not have any micro cap equity. He wondered if large pension funds find it too hard to get invested in a meaningful way in micro cap or if the board should investigate that asset category further.

MR. O'LEARY replied that micro cap has been a source of good longer-term returns. By definition, it is super capacity constrained. Some managers make meaningful use of micro cap in their portfolios, but typically it is part of a small cap mandate. Funds like the ARMB could have micro cap as part of an equity structure.

MR. O'LEARY reviewed the performance of each asset class in the pension fund portfolio next. He noted that the two high yield bond managers have only 1-1/2 years of history for the ARMB as of 12/31/06, and both have gotten off to a great start. This type of bond investment has a equity component to it. When the board hired the high yield managers spreads looked very narrow, and the question was whether that was the right time to launch into high yield bonds. The board decided to go ahead in a limited way, with the expectation that if the high yield sector did not do well that would create an opportunity to ramp up the funding. The high yield sector has done exceedingly well. However, high yield can be an entirely uncomfortable area, and there will be a period when the high yield sector underperforms the investment-grade sector. Nevertheless, the ARMB's two high yield managers already have a nice head start.

MR. JOHNSON reminded trustees that yesterday they voted for funding to pursue litigation on the Le Nature investment made by ING, one of the high yield managers. He said the board would likely see a bit more of that type of situation when there is a lot of activity in high yield bonds. MR. O'LEARY suggested putting it in context by remembering that WorldCom and Enron were investment-grade rated when they started down the tube. He added that at least in the high yield bond area the investment opportunities are somewhat symmetrical.

MR. O'LEARY next reported on the fund's total international equity performance. The return for the trailing 12 months is better than the MSCI EAFE Index and a tad below the MSCI All Country World Index ex-US. The difference between the EAFE and ACWI ex-US indices is that ACWI includes emerging markets and Canada. The fund's international allocation performed exceedingly well relative to other public funds. There was a presentation slide on style exposure by international regions.

Mondrian is the ARMB's sole international bond manager, and their return was basically right at the index for the year ended 12/31/06. The longer-term record is also very good.

There are three absolute return funds: Cadogan, Mariner, and Crestline. The ARM Board invested in these funds largely as bond substitutes. In that context, they have really delivered. Crestline's performance has been particularly impressive, and over the last year Mariner has done well. Cadogan, which has potentially the most directional bias of the three managers, has a very attractive absolute return. Cadogan and Mariner are below their target benchmark on a short-term basis, but that is largely because short-term rates are so high.

MR. O'LEARY said the REIT portfolio return was helped by all the activity in that area. Equity Office was taken private with 6% of the index, and even as the deal closed pieces of it were sold. This portfolio has been in place for two years and has provided liquid index-like exposure.

MR. O'LEARY reported that the total domestic fixed income returns have been very good relative to the benchmark and very competitive compared to other public funds (which may have high yield grouped into their return numbers). The in-house managed fixed income portfolio is compared to other investment managers who manage in a core style group. The performance over all periods has been very competitive, and the consistency of performance is what is most attractive in this portfolio.

The small cap equity pool was modified in 2005, and subsequent performance has been relatively strong.

MR. O'LEARY next offered some comments on the Supplemental Benefit System (SBS) and Deferred Compensation Plan (DC) portfolios. He encouraged trustees to give him feedback on what they would like to see in these performance reports, because there is more intense focus on the individual account plans, which clearly are becoming much more important. The majority of investment options met or slightly exceeded appropriate targets for the trailing 12 months. Those that lagged were primarily in the active "silo" options. Among the most notable was Citizens, which had a miserable year, and that firm is on the board's manager watch list. T. Rowe Price Small Cap, which has been a very good performer, had a very poor year in 2006. To a lesser degree Capital's Global Balanced and Brandes International underperformed. All except for Citizens can point to longer periods of competitive returns.

MS. HARBO said she was concerned because Citizens, T. Rowe Price Small Cap and Brandes International are three of the funds that the Defined Contribution people have available to them. MR. O'LEARY replied that when there is an array of funds inevitably there are going to be some that are ahead and some that are behind. Shifting them around frequently can cause uncertainty and confusion, etc. There are some things that over time can be done so that the options can be the ARMB brand: the board can have underlying vehicles so that from the participants' perspective what they are investing in is clear. For example, there can be the ARMB Small Cap portfolio that happens to be comprised of T. Rowe Price and XYZ. That gives the ARMB greater flexibility in how it deals with out- or underperformance. He said Ms. Harbo's comment highlights why it is important for the board to look at the individual account plans each quarter.

MS. HARBO stated that most of the participants choose the Balanced Fund in SBS and Deferred Comp. In the new Defined Contribution Plan the Balanced Fund is not getting the same dollars.

MR. BADER said MS. HARBO's observation was correct. He said later in the agenda the board will be hearing a presentation from the Department of Administration that includes issues such as the default options.

[Commissioner Kreitzer joined the meeting at 9:55 a.m.]

MR. O'LEARY pointed out that the investment management costs associated with the Balanced Funds and the Target Maturity Funds are very low. The expenses for the other investment options become more of a factor: the Brandes International Fund on a net-of-fee basis has not done as well as the Brandes international portfolio for the pension fund. The five-year returns for the Balanced Funds and the Target Maturity Funds are basically in line with expectations. The State Street S&P 500 Index Fund is right on top of the index. The BGI Tactical Asset Allocation Fund had a decent year, but the five-year number is below their target. The Brandes International Fund has very strong long-term performance. Capital Guardian Global Balanced Fund is right on top of the target or a few basis points below. Citizens Core Growth Fund is way behind. With the change of portfolio manager a couple of years ago Citizens had been moving in the right direction, but last year was a poor year. If there is good news, Citizens was a tad ahead in the March quarter, but the picture is still essentially the same.

MR. PIHL asked why the board is sticking with Citizens. MR. O'LEARY said Citizens is the socially responsible fund option for participants. Several years ago the Department of Administration did a survey of participants and found that they wanted a socially responsible option. ASPIB surveyed the socially responsible investing world and Citizens was the most competitive vehicle in a mutual fund format that could be used in this type of plan. It had an expense of 80 basis points a year, which is high but not high for a mutual fund. He said Mr. Pihl had raised a very appropriate question, but Citizens is the only vehicle of that type available to participants. With all the turmoil in Sudan, many governmental areas have attempted to impose some investment restrictions. His counsel was to let the dust settle a little before determining whether the board should proceed with a replacement of Citizens. That would also coincide with the upcoming

discussions on how the plans will operate.

MR. RICHARDS asked a question about legislative oversight of investments. MR. O'LEARY explained that Illinois and Colorado are examples of states that passed legislation that precludes public entities from investing in index funds.

MR. WILLIAMS commented that if a survey asked plan participants if they still wanted a socially responsible investment option even if it meant subprime returns he thought their responses might be different and less money would be directed to the Citizens Fund. MR. O'LEARY agreed that could well be the case.

MR. BADER stated that up until the implementation of Reality Investing people had to make an affirmative choice to select the Citizens Core Growth Fund. Now to make a change they have to make an affirmative choice not to select this fund. People read the material and go into this with their eyes wide open, and some people choose not to invest in tobacco, defense, etc. The reason the socially responsible option is in the plans is not because someone on the board said it would be great thing to do. It was the result of a survey where the participants themselves suggested this. It was the board's intent at the time to allow people a choice. For some people the moral principles they are standing behind are more important than the incremental investment returns.

MR. O'LEARY noted that there is $20 million of participants' money in the Citizens Fund, which is small relative to the total fund but it is still $20 million.

MR. O'LEARY continued his presentation on performance, looking at the T. Rowe Price Component Funds next. These are building blocks from which T. Rowe Price creates the Balanced Fund and the Target Maturity Funds. Each quarter Callan reports on the performance of these building blocks. The large cap building block has had good performance relative to the large cap index. Small cap had a miserable 2006. Despite that, over the five years small cap is reasonably close to the benchmark. The T. Rowe Price international equity building block has done quite well. And the three bond alternatives are right on top of their indices.

MR. O'LEARY noted a slide depicting the investment vehicles in the Deferred Compensation Plan and indicated they are the same funds as in SBS. He said that Callan is gathering data on the new retirement program and will be integrating that information into future performance reports.

12. Adopt Asset Allocation

[The details of this presentation can be found in a Callan slide report entitled "Proposed Revisions to Current Asset Allocation Targets," dated April 3, 2007. The staff reports backing up the proposed individual retirement plan asset allocation resolutions were included in the board packet. All this material is on file at the ARMB offices.]

MR. BADER stated that he and Mr. O'Leary and the Investment Advisory Council members met telephonically a couple of times to discuss asset allocation. In the past it wasn't such a lengthy process, but there are several funds to prepare asset allocations for now. The discussions resulted in

the recommendations to the board. Some of the asset classes in the pension fund are illiquid. For example, if the board were to make a decision today to exit real estate entirely, it would take quite a while to unwind those investments without taking a big bath. Similarly, it has been difficult to ramp up in some of the illiquid asset classes. The private equity portfolio is still not where the board would like it to be, although it is getting closer. Those types of considerations also went into the recommendations that he, Mr. O'Leary and the IAC members considered.

MR. O'LEARY provided a brief review of asset allocation information that the board heard at the February meeting. He said he, staff and the IAC advisors reviewed all the Callan assumptions presented at that meeting. All the projections for return, risk and correlation are Callan's standard assumptions, other than the "Other-Real" category, which is Callan's best guess on the smaller asset categories of farmland, timber and energy related investments, combined with Treasury inflation-protected securities (TIPS). The data for many of these asset segments has limited history, and the basis for the creation of the benchmarks is very questionable. When putting these things in an optimizer, little differences in correlation estimates, risk estimates or return estimates can cause the optimizer to want to discard something or to take a lot of it. If the optimizer were allowed to run wild with the "Other-Real" category, it would take a lot of real estate. Callan overcame that by telling the optimizer that it had to have 10% in real estate. Callan determined a general place, using the major asset categories, where there was a lot of comfort in the validity of the return, risk and correlation numbers, and then added the "Other-Real" segments in a very controlled way to develop a proposed policy.

MR. O'LEARY displayed a spreadsheet showing the current 2006-2007 target policies updated with Callan's 2007 five-year return and risk projections. Using those assumptions, PERS/TRS has an expected return of 8.06% and a risk number of 12.29%. The Judicial Retirement System has an expected return of 7.92%, where the newer programs, the Health Reimbursement Arrangement (HRA) Plan and the Death & Disability Funds, have an expected return of 7.99%. The differences are that neither of the new plans or Judicial have any private equity, and the new plans don't have high yield bonds or absolute return or other-real. The new plans are basically invested in index funds because the balances are still quite small, and their real estate exposure is all REITs. Judicial is more substantial, but it has not invested in private equity nor has it invested in other-real. Judicial does have TIPS and a slightly higher allocation to non-U.S. fixed income. Judicial also has a higher allocation to domestic and international equities than PERS/TRS because it cannot have the private equity.

MR. O'LEARY stated that Callan has an inflation projection of 2.75%. That is lower than the inflation assumption imbedded in the actuary's report. The actuary is actually looking at a longer-term horizon than Callan is looking at. If the board told Callan that long-term inflation was going to be 3.5% or something like that, Callan would have higher expected returns. An 8.06% expected return for PERS/TRS represents basically a 5.25% real return (subtracting out the 2.75% projected inflation). A return in excess of 5.0% is consistent with what the actuary is doing. If over 40 years inflation ends up at 2.75%, there will be an actuarial gain because the liabilities would not have grown in the manner the actuary expected. If inflation turns out to be 3.5%, then the odds are that the

nominal return for PERS/TRS will be greater than Callan is forecasting. The defined benefit plans are in the unique situation of being frozen, but the liability is still unknown for a lot of the people because they will be working for some time. So future inflation is very important to defining what that ultimate liability will be, and it will affect the contribution rates in the future. Unlike an open plan, the new employees are not entering the defined benefit plan. So the funding is really tied to the working life of those people who are on board and not to the new people who will be replacing them as they move on into retirement. A long way down the road the board will need to think about a shift in asset allocation to reduce the possibility of a shortfall. But right now the board is still investing for the very long term.

MR. O'LEARY presented a spreadsheet showing the current and proposed asset allocation policies, noting that there were no suggested changes for the new plans or the Militia. The changes for 2007 proposed for the Judicial, PERS and TRS plans just involve shifting 2% around. For Judicial, small/mid cap equity was increased by 1%, high yield was increased by 1%, non-dollar fixed income was reduced by 1%, and TIPS was reduced by 1%. For PERS and TRS, the changes were to increase the small/mid cap by 1%, reduce domestic fixed income by 2%, and increase high yield by 1%.

MR. O'LEARY said among the changes proposed for the Militia Plan later in the agenda is a reduction in the discount rate. The Militia Plan has historically had a very conservative asset allocation, presumably because it was a small plan with cash inflows and outflows that were large relative to the corpus of the plan. Therefore, the time horizon for a significant portion of the dollars in the corpus is comparatively short, and the consequences of short-term volatility are greater. Mr. Bader, the IAC members, and Mr. O'Leary discussed that factor and decided to bring it to the board as a separate agenda item.

MR. O'LEARY turned to a graph of the 2006 and proposed 2007 policies compared to one another on the efficient frontier. He said it was important for the board, when thinking about asset allocation, to understand where the portfolio is in riskiness. As discussed earlier, the portfolio is now at the low end of fixed income exposure. In the event of a financial market meltdown, there is a saying that all correlations go to 1 — there is no diversification benefit, except for super high-quality bonds. Back in 1987 government bonds did great when the market collapsed. After 9/11, markets were not open right away, but when they were government bonds did well and everything else did poorly.

MR. RICHARDS commented that the proposed asset allocation changes of 1% here and there seemed small, and he was surprised there was no change proposed to real estate.

MR. O'LEARY explained that strategic policy targets should not be changed frequently or significantly, unless there is some external driver for the change. Callan is not making short-term forecasts. Also, changes in strategic targets tend to be very expensive to implement, and they also take some time to implement. For example, the Other category was established a couple of years ago, and only 1% of the 3% allocation to the category has actually been invested. He said that the board should take note when looking at the ARMB policy relative to other public funds that the pension fund has a significant portion of the portfolio allocated to illiquid asset categories. They are

real estate, private equity, other, and to a lesser degree the absolute return category.

In closing, MR. O'LEARY drew attention to two graphs showing the range of expected returns for one year and five years for the current and proposed asset allocation policies for each retirement fund.

MR. BADER made it clear that the reference to the Health Reimbursement Arrangement Plan also applies to the medical component of the Defined Contribution Plan; both asset allocations are the same. He suggested that the board could adopt all the asset allocation resolutions in one motion.

MR. PIHL moved that the Alaska Retirement Management Board adopt Resolutions 2007-09 through 2007-15, approving the asset allocations for the next fiscal year for each of the funds entrusted to the ARMB. MS. HARBO seconded.

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

The motion passed unanimously, 7-0. Chair Schubert and Commissioner Galvin were absent for this vote.

MR. PIHL said he would like staff to prepare a asset allocation recommendation for the Militia retirement system that comes closer to what the ARMB is doing with the other funds. MR. BADER said staff would be happy to do that, but he noted that the actuary's valuation report assumes an 8.25% earnings assumption for the Militia plan. Since most of the $18 million fund is subject to annual appropriation, there has been some desire to keep from having as much volatility as an 8.25% earnings assumption might generate. However, staff would come back with a recommendation for the board to consider.

COMMISSIONER KREITZER commented that she understood the Militia plan needs a fair amount of liquidity, which has driven the asset allocation. MR. O'LEARY said the consequences of a more volatile investment return pattern would be greater.

MR. WILLIAMS said the Militia plan is basically a pay-as-you-go plan, which constrains its investment options. In order to suggest a longer-term investment horizon, the board would have to hold discussions with the Department of Administration or someone else about whether they wanted to put more money into the Militia retirement plan now.

COMMISSIONER KREITZER indicated that she would look into the possibility of putting more money into the Militia plan and report back to the board.

VICE CHAIR TRIVETTE called a scheduled break at 10:39 a.m. CHAIR SCHUBERT rejoined the meeting during the break and called the meeting back to order at 10:47 a.m.

13. TIPS Allocation and Policy - Resolution 2007-16

MR. BADER introduced CASEY COLTON, a state investment officer who joined the Treasury Division in June 2005. He then reviewed a report contained in the board packet supporting staff's recommendation that the ARMB add Treasury inflation protected securities (TIPS) as part of the "Other" allocation, and further in the PERS and TRS funds. If approved, staff intends to manage the TIPS portfolio internally. Mr. Colton would have the primary role in implementing the TIPS strategy, under the supervision of Bob Mitchell, the senior investment officer.

MR. BADER referred to Resolution 2007-16, the draft policy of investment guidelines for the management of the TIPS portfolio. The benchmark would be the Lehman Brothers Global Inflation-Linked U.S. TIPS Index. The guidelines would allow the investment of no more than 10% of the portfolio's assets in foreign government and sovereign state securities. The guidelines would also provide for investing in investment-grade corporate debt up to 5% of the portfolio's assets. He acknowledged that this might not sound necessarily like a U.S. TIPS portfolio, but 80% of the assets would be in TIPS, and there are limitations on holdings. There simply might be times when the investment staff could find better inflation protection in foreign debt or the inflation-protected debt of other sovereign states and be able to add value there.

MR. BADER stated that Callan's asset allocation presentation indicated that TIPS had a modest projected return of 4.9% for the next five years, although if inflation soared the ARMB would be happy to be there. It is all part of a strategy to have another asset allocation group that is focused on real returns. He said the Treasury Division asset investment group has the skills internally and has demonstrated that with the investment-grade bond portfolio. They can implement the TIPS strategy without incurring external management fees.

MS. HARBO moved that the Alaska Retirement Management Board approve Resolution 2007-16 to adopt the investment guidelines for a Treasury inflation protected securities (TIPS) mandate. MR. TRIVETTE seconded.

MR. WILLIAMS inquired about the initial allocation for the TIPS program and where Mr. Bader saw it going over the next year. MR. BADER replied that the initial outlay would be about $50 million. He pointed out that the board approved other asset allocations that included TIPS investments. It was staff's intention to work with the Treasury Division's accounting section to create a TIPS pool and, with the board's approval at a later date, eventually migrate from the index funds at State Street to bring those investments in-house and save a modest amount of management fees. While there is not much money in the retirement plan TIPS funds right now, it probably could grow to $100 million before year end.

Responding to MR. TRIVETTE, MR. BADER said there is currently no policy for the index funds at State Street, but the State Street account would fall within the policy of Resolution 2007-16 because the policy is broader than what they invest in.

CHAIR SCHUBERT stated that she has been interested in TIPS for a long time and was glad to see a recommendation from staff. She said she was also pleased that Mr. Bader has expanded the breadth of the in-house staff, an example being the report on in-house private equity activities yesterday. As CIO, Mr. Bader is doing things to challenge the investment staff, keep them interested, and to broaden their knowledge.

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

The motion passed unanimously, 8-0.

14. Barclays Global Investors
MR. BADER stated that Barclays does a lot of work for the ARMB in the defined contribution plan, in the tactical asset allocation fund and other index products. Previous to being Barclays, the State of Alaska had an association with them as Wells Fargo Bank, going back to the late 1980s.

[For more details and the slides of this presentation, a copy of the Barclays booklet is on file at the ARMB offices.]
LEE WANIE, the client relationship officer, and CORIN FROST, the portfolio manager and senior strategist in the global index and markets group, addressed the board. MR. WANIE gave an overview of the Barclays Global Investors (BGI) organization, noting that about 80% of their $1,813.8 billion assets under management are indexed. He explained that the volume of activity that BGI has in a wide array of fund types provides an opportunity for the State of Alaska to cross with other investors that are moving in and out of the BGI funds. This avoids the significant transaction costs that can be incurred by trading on the open marketplace. The main focuses for BGI in 2007 have been to invest heavily in a new defined contribution initiative, to invest in some new initiatives in the global index and markets group, the active fixed income business is growing, they are launching more hedge funds and continuing to refine the existing ones, and hiring and retaining the best talent they can find to keep their competitive edge.

MR. WANIE briefly drew attention to BGI's array of active strategies and their track records before describing some of the new initiatives.

MR. WANIE referred to a slide of the four ARMB investments with BGI, totaling almost $232 million. The bulk of those assets are in the Equity Index Fund (S&P 500). Three of the four funds are designed to closely track their benchmarks. The U.S. Tactical Asset Allocation Fund aims to tactically allocate between equities, fixed income, and cash, depending on various market conditions. The underlying signals there are valuation, economic environment, and sentiment. Right now BGI sees no real strong underlying fundamentals for them to be overweight equities or underweight bonds, so currently they are positioned 60/40, or what they call a neutral position. They are slightly overweight equities as the equity markets have risen this year. The Government/Credit Bond Index Fund is performing according to expectations and is down four basis points since the

fund's inception in 1989. The Intermediate Government Bond Index Fund is tracking very close to the benchmark, down two basis points since inception.

MR. SEMMENS raised the question of management fees. MR. WANIE said the performance numbers for the Equity Index Fund and the U.S. Tactical Asset Allocation Fund are reported net of fees. The other two funds are reported gross of fees, which are in the six to eight basis point range.

MR. FROST spent a few minutes describing how BGI approaches index portfolio management and talking about what is new in indexing. Being global is important because BGI can cross global trade flows internally at zero costs to the funds doing the transactions. BGI's technology and infrastructure allows it to transact across time zones and marketplaces in the U.S. equity market funds in which the Alaska retirement plans are invested. With such a massive scale, BGI has very specialist functions within the indexing group. For example, their index research analysts are the first line of defense against any kind of error in trading the wrong security, particularly around a major rebalance. An example is the Russell reconstitution of the indices in June, which is the largest event in the U.S. trading calendar. BGI's analysts have researched exactly what is going to happen three or four months in advance of the event. It allows BGI to formulate trade strategies, analyze illiquid securities, and work out the direction and flow of the upcoming event. Portfolio management is very specialized: it is not simply a case of buying 500 names, putting their feet up, and coming back 12 months later. There are always index changes going on in the S&P 500 or any index portfolio. Portfolio managers do not execute any trades, so there is a separation of duties between portfolio manager and trader. This is a risk control measure, and BGI needs four individuals of appropriate trading authority to agree on a particular transaction before that trade is placed externally to a broker, an external crossing network, or just in the trading arena. The ARM Board is invested in the Equity Index Fund, where BGI has a total of $130 billion in assets. So one basis point is $13 million. They need to be tied into the detail of managing that S&P 500 strategy to ensure that every last 1/1000th of a basis point is accounted for. Indexing is about detail, about process, and about looking forward to upcoming events.

MR. O'LEARY said he was under the impression that many index managers research what changes will happen at the Russell reconstitution of the indices in June. They observe which stocks are going to be dropped from an index and which stocks will be added to an index. Many of them actually implement the changes before the official date of the event. Oftentimes in the past that has resulted in allowing a manager to do a little bit better than the index. Last year, with respect to the Russell 2000 Index, that was not the case, and managers, such as BGI, actually lagged the index because of that. He asked Mr. Frost to comment on that.

MR. FROST explained that historically there is a myth that the purchasing activities of index managers pushes security prices up and then they subsequently decline after the index change occurs. Regarding the Russell 2000 Index reconstitution event last year, there are many other players besides the index managers, including active managers, proprietary trading desks and trading companies, and hedge funds. All these players are trying to predict what is going to happen to adds, deletes, value/growth shifts, and moves between indices. BGI spends an inordinate amount of time

analyzing that event. The risk of that event has increased dramatically from four or five years ago. BGI also crosses its trade activity between, say, a Russell 1000 Index name that is being deleted and going across to the Russell 2000 Index where it is being purchased. The earlier a manager trades away from the index event date, the more exposure to volatility or risk. So to avoid the potential for excess volatility, BGI decided to trade very close to the event in June 2006 and avoided the hit to performance that Mr. O'Leary mentioned. In the last 20 minutes of that trading day last year the spread between additions and deletions increased by 6% to 8%. That is a huge move in 20 minutes. So investors who may have thought they were sitting on big paper profits saw them wiped out in 20 minutes or so. Because BGI as able to cross internally, and because they have a very risk-controlled trading strategy, they avoided that massive volatility in the last minutes of the trading day. BGI underperformed last year but not from that Russell reconstitution event. Whether people learned from the 2006 event is a question for the 2007 indices reconstitution. These events are the bread and butter of a high quality index manager.

MR. FROST talked for a few minutes on what is new about indexing. He said few people know that BGI is the largest manager of REITs in the U.S. They have recently extended the U.S. focus on real estate to a global ex-US real estate strategy, implemented through listed real estate securities. Similarly, BGI is probably the largest emerging markets manager in the U.S. So BGI is using their country allocation strategies in emerging markets and taking advantage of the super risk premiums that exist. These innovations in indexing, the more niche-based strategies, are really driven by clients. BGI can work with a client on a problem to use the BGI's building blocks of index products to come up with an efficient, low-cost index solution. Customization is the way that indexing is going to respond to individual client demands.

MR. ANDREWS mentioned that there are over 400 ETFs (exchange traded funds) in the market now and all types of specialized indices. He asked if the market was getting to the saturation point.

MR. FROST stated that the I-shares, the Barclays suite of ETFs, have very much an institutional look and feel for the benchmarks they address. BGI does not have the very, very niche specialist ETFs. They focus on ETFs aimed at the institutional or long-term investor segment and have stayed away from the esoteric funds. The reality is that ETFs are here to stay because they are far more tax efficient than mutual funds. The growth of the ETF industry will continue dramatically over the next four to ten years.

MR. JENNINGS noted that on the active side BGI advocates the fundamental law of active management, with lots of bets to spread things out. The ARMB has one active-type account with Barclays (the US Tactical Asset Allocation Fund), and that is "shall we be in stocks or bonds." He asked how that fund was consistent with BGI's overall view of active management.

MR. WANIE said that when Barclays launched the Tactical Asset Allocation Fund in the late 1970s they did not know what the fundamental law of active management was. So the Tactical Asset Allocation Fund has evolved into a completely different asset class than the low breadth seen in the past and that is seen now. It is a very low breadth position, and it is hard to get it right consistently.

So now BGI sees the Tactical Asset Allocation Fund going much broader in scope: equity market selection, bond market selection, commodity market selection, currencies, and within country TAA industries. So tactical asset allocation as a concept as related to the fundamental law of active management has blossomed into what is called global tactical asset allocation. BGI has seen the bulk of previous adopters of tactical asset allocation move into more global tactical asset allocation strategies. He confirmed for Mr. Jennings that the U.S. tactical asset allocation strategy has not changed.

MR. JENNINGS said that about the time the ARMB got involved with the US Tactical Asset Allocation Fund there was a published article about "The Greatest Return Story Ever Told," saying that this was a wonderful fund that had done quite well, and then it promptly fell out of bed. He asked how that return experience relates to where the fund is now, which appears to be tracking closer to the target.

MR. WANIE agreed it was probably the hubris of having an article published. They realized that there is an important difference between skill and luck when managing funds. While BGI likes to think they are very skillful, and there are statistics to prove that skill over the broader-breadth strategies, luck is a bigger part of a low-breadth strategy like the Tactical Asset Allocation Fund. BGI has developed more strategies that are more skilled based — how to bring insight to bear in less efficient markets — and it is hard to do that in a lower-breadth strategy.

In closing, MR. WANIE said they appreciated the board's continued confidence in BGI, and they looked forward to discussing new initiatives in the future.

15. Lowe Enterprises Investors

MR. BADER introduced the representatives from Lowe: BLEECKER SEAMAN and BRAD HOWE, who run the investment management group, and AFSHIN KATEB, a portfolio manager on Lowe's hotel fund. *[Lowe had slides containing numerous graphs, charts and statistics on the ARMB real estate investments with the firm. For these details please refer to the Lowe presentation booklet, dated April 27, 2007, on file at the ARMB offices.]*

MR. HOWE gave a short overview of Lowe enterprises and its track record. He noted that, in addition to managing separate accounts, Lowe has raised five commingled funds to date with almost $900 million in equity commitments. Lowe is an experienced hospitality investor in upscale hotels and resorts.

MR. BLEECKER stated that Lowe's relationship with the ARMB began as a separate account manager in 1997. During the tenure as a separate account manager Lowe acquired six assets, three office buildings and three industrial properties representing about $135 million in value. That account generated a gross return of 12.26% over a seven-year period. Then, with the board's $50 million commitment to Lowe Hospitality Investment Partners in 2003 (a hotel fund), the relationship migrated from a separate account to a fund manager.

MR. BLEECKER next talked about the lodging market fundamentals. He said when Lowe began raising its hotel fund in 2003 they saw the beginning of recovery in the marketplace. The hotel market had suffered after the events of 9/11 and the economic slowdown. The industry benchmark for measuring performance in the hotel market is RevPAR (revenue per available room), and it represents both occupancy and the average hotel room rental rate for one night. The years 2004 to 2006 saw strong growth in RevPAR. It started with recovery in the occupancy side and more recently has moved to more growth in room rates. The ability to move up the room rate has a higher profit growth potential. The RevPAR is beginning to moderate in 2007, but strong room rate growth continues. These trends are for the overall market, but Lowe's investment activity typically focuses in full-service luxury and upscale hotels, a segment that is outperforming the broader market. Lowe is projecting growth rates on a RevPAR basis of roughly 8% in 2007 and seeing that growth continuing into 2008.

MR. BLEECKER mentioned that the supply of new hotels continues to be relatively muted and below the historical trend line. Most of the pickup in the supply line is in the lower quality segments — mid-scale and economy hotels. The cost of building new upscale hotels keeps the development of competitive product down. Lowe sees positive fundamentals in the forecast. Both corporate and leisure demand remains strong. On the investment side, the market is moving from a period when momentum players were purely playing the market. Lowe has taken advantage of that momentum too, but as a firm that has been in the business since 1972 they continue to see opportunities to create value at the asset level through their operating and management team. That is Lowe's competitive advantage with the hotel fund and other programs going forward.

MR. BLEECKER reviewed the impact of the baby boomers on the hotel business, which is a secular change overlaid on top of a cyclical market. There is increased wealth at the upper end of the market, and the age cohorts of 45-54 and 55-64 have the highest propensity to travel. Lowe's focus in the upscale luxury segment of the hotel market is very attuned to the growth in that age cohort, and they continue to see advantages there over the near term.

MR. BLEECKER presented investment information on the Lowe Hospitality Investment Partners fund (LHIP). The investment period of the fund ended in March 2007 with 93% of the capital called, and the portfolio holds ten high quality hotels. Lowe has another capital program that will increase the equity commitments to 97%, and they see opportunities to add value to some of the assets and create increased returns.

CHAIR SCHUBERT asked what made Lowe decide to invest in hotels. MR. BLEECKER said that for diversification Lowe has focused on market demand. In hotels they look at three primary segments: corporate demand from businesses, leisure demand from the individual traveler, and then group demand. The hotels in the LHIP are diversified among those three demand segments, and in the process Lowe also achieved some reasonable geographic diversification. There are concentrations in the New York metro area, which continues to show strong demand growth, and in the Los Angeles area. The Texas acquisitions are a market play because that tends to be a cyclical market, and Lowe got in early in the cycle.

MR. O'LEARY asked for a comment on the use of leverage in the fund type of investment. MR. BLEECKER stated that the marketing documents for the first LHIP had indicated 60% leverage allowed at the portfolio level and up to 65% on an individual asset. Lowe believes that is an appropriate level of financing for an active strategy in that hotel space. The market has certainly been robust as it relates to lenders financing hotels. Even at a 75% loan to value, one can achieve pricing that is only modestly higher than at 60-65%. Lowe chose 60-65% leverage because it provided the right level of risk-adjusted returns to its investors and also gave the most attractive terms on pricing.

MR. BLEECKER reviewed the performance summary of the LHIP as of December 31, 2006. He noted that it is still early in the hotel fund, and return comparisons are harder to make on a time-weighted basis because typically they are acquiring an asset with a low income yield. Also, fund expenses are incurred early on against a very low to zero asset base. So on a time-weighted basis there can even be negative returns in the first couple of quarters — what is called the J-curve effect. One-year time-weighted returns were in the 20% range. The NCREIF benchmark was 23% for 2006. Lowe has targeted two assets for sale this year. They are confident that the fund will meet the targeted internal rate of return range of 15%-18%.

Responding to MR. PIHL, MR. BLEECKER said the internal rate of return since inception, based on the asset appreciation through 12/31/06, is 11.7%. Lowe expects continued attractive value appreciation over the next several years.

MR. KATEB reviewed the portfolio operating results as of March 31, 2007. He said the portfolio is on target to meet the operating budget for the balance of 2007. He spent a few minutes discussing the financial details and outlook for three sample properties in the hotel fund.

MR. HOWE gave a brief overview of the Lowe Hospitality Investment Partners II (LHIP II) fund. He said they believe they will need to be more active as a property operator in fund II — simply being a financial buyer and letting the market recover cannot be the only investment strategy. The market cycle has advanced, and they will be looking at new positioning strategies, renovation plays, and that type of thing. This fund will also have a small allocation to non-U.S. markets — Canada, Mexico, and the Caribbean — because these have the same demand drivers as in the domestic U.S. markets.

MR. RICHARDS asked how Lowe finds properties to acquire for its funds. MR. BLEECKER replied that it is a small business, but they have established relationships in the hospitality industry. They use brokers in the marketplace, and some of the properties they have acquired were off-market deals. The Lowe management company has three or four people in Denver who cover all the markets in the U.S. looking for acquisition opportunities.

LUNCH RECESS

CHAIR SCHUBERT recessed the meeting for lunch at 12:00 p.m. and called everyone back to order at 1:14 p.m. Commissioner Galvin was not present for the afternoon session.

REPORTS (Continued)

16. Sentinel Realty Advisors Corp.

MR. BADER said that Sentinel has been a real estate manager for the State of Alaska retirement system since before the ASPIB board was formed. Sentinel portfolio managers DAVID WEINER and DAVID STENGER introduced themselves. *[Sentinel provided a written report of text, charts and photos that is on file at the ARMB offices.]*

MR. WEINER briefly reviewed Sentinel's corporate background. He stated that about 90% of the $5 billion in real estate assets under management are residential and the other 10% are office buildings, some industrial, and a small amount of retail assets. Sentinel manages commingled funds and separate accounts, and the ARMB has invested in both formats. The senior staff has been with the company for a lengthy period, with an average tenure of 20 years. The firm has a large staff because they are actively involved in managing every single property that they acquire, which gives them tight control over what happens at each property.

MR. O'LEARY asked about the Pacific Northwest. MR. WEINER said that Seattle and Portland have been particularly volatile markets. Sentinel has been in and out of those markets, and they are not completely comfortable with where they are today because of pricing and the historical volatility underlying the economies. But they do follow that market.

MR. WEINER reviewed the State of Alaska's account history with Sentinel (see booklet for details). He described one of four properties purchased for the ARMB separate account in 2000 that developed a mold condition and subsequently gathered a lot of public notice. Sentinel decided to buy the property back from the ARMB portfolio at full price so that the retirement system was made whole. Another property was sold after a short hold time when the real estate market was very hot, and the ARMB made a significant profit. So there are two properties left in the separate account portfolio. These assets are located in very strong markets and are performing well.

MR. WEINER said Sentinel's mandate is to invest in the core sector, that is, looking for fully completed buildings with high rent levels located in markets that have strong economic underpinnings and barriers to entry for new competing construction. It is a market sector that many other investors are focusing on, and the acquisition opportunities have become scarce and bidding has been fierce. For product that would reasonably meet the ARMB standards, the returns are below the return requirements for a separate account. Sentinel continues to search for properties that would fit the profile and fill out the additional $50 million of capacity in the portfolio.

MR. STENGER discussed the particulars of the two properties in the separate account portfolio: apartments in Tampa, Florida constructed in 2000, and apartments located in Las Vegas, Nevada that were built in 1997.

MS. HARBO asked if the big increase in property insurance in Florida was a concern for Sentinel. MR. WEINER said it was definitely a concern. Because of the size of the overall Sentinel portfolio, they have been able to negotiate fairly advantageous insurance rates. However, rates are still up 30%-40%, and that cost cannot be passed through in residential the way it can be in commercial. So they have had to absorb that cost. But where the markets have been tight and strong, the rents have been raised to try and compensate for higher insurance costs. A more subtle part of that issue is that when individuals buy the property they do not have the benefit of Sentinel's large-scale purchase of insurance, so it has affected the buying market to a larger extent than it has operations. That has been largely offset by the amount of capital flowing into these investment opportunities. This available money is overwhelming all the issues that normally would be troubling to buyers (not so much the institutions but private buyers).

CHAIR SCHUBERT asked if converting the properties in Florida and Las Vegas to condominiums or co-ops and selling them was an option. MR. WEINER replied that the conversion is not an option because it would create net income subject to tax. What is often considered is to sell a property at an intermediate price if the market is hot, and the buyer does the conversions. Sentinel actually sold a number of properties that were taken over by converters, but it was basically weak properties in markets where the conversion prices were paying much more than they thought the properties were worth. Sentinel believes that the Tampa and Las Vegas apartment properties will maintain their earning power over years. If they were sold, the board could not replace these properties in its core portfolio at anything like the returns it is getting now. But obviously they will be sold at some point. Right now both Tampa and Las Vegas are soft condo markets.

MR. WEINER next reviewed the historical returns of the Sentinel portfolio. The gross return for one year ended 12/31/06 was $21.14% compared to the NCREIF index return of 14.63%. For five years the portfolio return was 17.5%, and the index was 13.2%. Since inception the return has been 15.77% versus the index return of 12.75%.

Regarding market conditions in general, MR. WEINER stated that there is an enormous amount of capital pouring into the real estate sector, probably disproportionately into the multi-family component. To some extent, it is the most predictable property type of the four major types (office, industrial, retail and apartments). The driving factor for success in the multi-family field is literally how many people are there to rent apartments relative to the supply. Demographers indicate that over 60% of the age cohort of 20-34 years are renters, so this is the target market for the principal business that Sentinel is in. That growth rate is expected to accelerate over the next ten years, averaging about 500,000 people coming into that age group each year. So there is almost a predictable level of demand for the product (apartments). Overseas investors have discovered the opportunity who previously would not have considered multi-family investments in the U.S. This year the domestic institutional money supply for real estate is expected to decline somewhat from 2006. But it may be more than matched by funds from other sources. The period of low returns will continue relative to historical real estate returns, although maybe not relative to other investment options. Sentinel last year predicted that returns would hike up a little bit with slightly higher yields

and that interest rates would go up, but that has not been the case. It is still a very competitive environment in all property types, but particularly in the multi-family sector. Sentinel does not see anything that is going to change that dramatically.

Referring to the investment performance page in Sentinel's report, MR. BADER said he was pleased to see that the income return is as high as it is. A high income return from real estate was one of the board's original objectives. The portfolio is also exceeding the benchmark in appreciation return. He asked if the NCREIF Index return was the total NCREIF or the NCREIF Residential.

MR. WEINER said it was the apartment part of the index.

MR. O'LEARY requested a comment on the use of leverage by people investing in apartments today. As the expected returns have declined, he asked if the people competing for properties are increasingly levering so they can achieve higher returns.

MR. WEINER replied that for basic core and core-plus type investments today leverage is essentially break even or negative. That is, the financing costs are equal to or even slightly higher than the distributions of income from the investment from year one or year two. Two things are happening with leverage. If buyers bought a 5.5% yield going in, they might today expect that to return 7.5% overall in a 10-year hold. If that investment were leveraged, there would be little or no distributable income in the first year, but because of the growth over the fixed debt they would probably come out with something closer to 8.5% or even 9.0%. So there are strategies that don't look at the first year; they want the property in a certain market, and they are willing to ride it out for the longer term and hope that at the end of the day they receive some positive leverage. That is probably still the primary basis for people bidding on properties. The second leverage factor is for most of the private groups that are aggregating money. Because they don't want to raise a lot of cash, they will use the leverage to compete with institutional buyers for larger properties. The competition out there is created by the fact that there are people using debt today, which makes a lot more people eligible to buy because the equity amount is small.

MR. WEINER said that as far as a strategy that would assist a core buyer today, they would have to acknowledge that they would be giving up a significant amount of return in the first couple of years — and assume they made the right choice and would realize that return over time. Most of Sentinel's investments are in that mode. They are committing modest leverage in the 50%-60%, so there is cash flow, but they are not getting a positive rate on the leverage itself.

MR. PIHL engaged in a brief discussion with MR. WEINER about the cost of building new apartments, the scarcity of land for multi-family development, community resistance to a lot of multi-family in the marketplace, and how condominium developers have bid up prices to exorbitant levels. MR. WEINER noted that the ARMB's apartment property in Las Vegas is ten minutes from the Strip, where most of the growth is occurring, and there is not a single piece of developable land within miles. So the property's land value would be significant, even if it was vacant land.

17. Resolution 2007-17, Relating to HB 13 - Pension Obligation Bonds

Deputy Commissioner BRIAN ANDREWS introduced JIE SHAO, Special Assistant to the Commissioner. MR. ANDREWS made a presentation on the use of pension obligation bonds (POBs) because House Bill 13 has been introduced that would provide public employers the ability to use POBs in their strategy to reduce the cost of meeting unfunded pension liabilities. *[The slides for this presentation are on file at the ARMB offices.]*

MR. ANDREWS said the objective of issuing POBs is to earn a positive arbitrage between the issuance cost of the debt and the investment earnings from the proceeds of the bond issuance, the purpose of which is to lower the cost of the pension plans. It is comparable to paying off one's credit card debt with a line of credit on one's home that carries a much lower interest rate cost. In the last ten years there have been 340 POBs issued by various state and local government entities. The total dollar amount is around $40 billion. POBs are not new to the State of Alaska, in fact, in the mid-1980s the City of Anchorage issued a POB.

MR. ANDREWS listed three reasons to consider issuing POBs:

- Interest rate savings. There is a very favorable interest rate environment today, with rates the lowest they have been in the last 40 years. It is an opportune time to be looking at POBs.
- Potential for a positive earnings arbitrage. The average return on the PERS retirement plan for the last 15 years has been about 9.1%, with a standard deviation of 7.25%. The ARMB's long-term target asset allocation has an expected return of about 8% over the next five years (using Callan's capital market projections).
- Typically a POB issuance would not cause the State's credit rating to decrease, if it were undertaken in a prudent and conservative way. The rating agencies are still pretty much favorable toward POBs. Rating agencies like to discuss the concept of "par versus soft dollar." But arguably the State's liability is a hard liability because the Constitution of the State guarantees the benefits to the plan participants.

MR. ANDREWS stressed that POBs are not a golden bullet. They are a financial tool that can be used to resolve the pension system's unfunded actuarial accrued liability, which is basically a bill that the Alaska pension system owes to the state and local governments. After the 2006 experience study that bill is $8.6 billion: $5.5 billion for PERS and $3.1 billion for TRS. The State can pay off that bill with cash, or the pension plan can loan the State the money over 25 years at a cost of 8.25%. That amounts to a payment of about $820 million a year over that period.

MR. ANDREWS reviewed the risks that have to be considered:

- Investment risk - POB financing is successful if the return on the investment of bond proceeds is higher than the 5.75% cost of the POB program. If the return on investments is lower than 5.75%, then POBs do not have a desirable outcome. Also, if the pension fund assets earn less than the 8.25% target return, the liabilities of the pension plan would actually grow in the future. So the liability does not necessarily stop increasing with the issuance of POBs.
- Political risk - Between 1992 and 2003, the unfunded actuarial accrued liability was not

created because of the bear stock market of 2000 but largely because of the ever-increasing costs of benefits promised to the participants in the retirement systems. If the unfunded liability was eliminated altogether it could result in political pressure to increase pension benefits, which would make the future pension liability greater. A funded ratio of 70%-80% is an industry standard.

- Market risk - Prudent investment of POB proceeds in the early years is important because the bond proceeds mean a large infusion of cash into the pension system all at once. This responsibility will fall to the ARM Board.

MR. ANDREWS presented the three types of bonds that local governments have issued: general obligation bonds (which carry the full faith and credit of the state or local government); obligations imposed by law; and annual appropriation bonds. Of note is that HB 13 recognizes that the POBs do not constitute a general obligation of the State. This is another reason the POBs would not affect the credit rating of the State.

MR. ANDREWS next showed the potential savings from pension obligation bond issuance by explaining case studies for PERS and TRS. There would be an immediate reduction in the unfunded actuarial accrued liability, an increase in the funded ratio, and a reduction to the employer past service contribution rate.

MR. PIHL observed that in the case study for TRS a large part of the savings is due to the $500 million proposed cash infusion in the first year.

Both MR. PIHL and MR. SEMMENS indicated they were pleased to see a statement in the presentation material that between 1992 and 2003 the increased liabilities caused the most damage to the PERS/TRS system, not poor investment performance.

MR. O'LEARY presented to the board a simulation requested by Mr. Andrews, and indicated it had been presented to the House Finance Committee a week ago. He reviewed the assumptions given to Callan for the simulation: $2 billion in POBs issued at a cost of 5.7% with a built-in flat annual repayment schedule. Several asset mixes were used to calculate expected returns and risk, but he said he was going to focus on the 65% equities/35% bonds mix because it was similar to the overall asset allocation of PERS and TRS. Callan was also asked to stress test the simulation by assuming there was a loss in the initial years to give the board a sense of what the implications could be.

MR. O'LEARY explained that the probability of the 65/35 asset allocation mix earning more than 5.7% improves with the passage of time. The probability of the first year return being worse than -10% is 4%. The probability the first year return between -5% and -10% is 7%. So there is a 40% probability of a one-year return being less than 5.7%. The probability of recovering from the first year loss, and the probability of reaching the breakeven point on the POB program (if the first year has a -10% return) is about 50%. That exercise demonstrates that it is very important to not lose a lot of money early on in the POB program. It might be unrealistic to presume a -10% return but is part of the probability distribution and cannot be ignored.

MR. O'LEARY reviewed Callan's conclusions from the analysis. Without any question, issuing POBs and investing the proceeds in higher-yielding securities is a leveraged investment strategy. It does not guarantee that there will be savings. And whether there will be savings or not will not be known until the debt is fully repaid. Over the long run, if a POB program is prudently implemented, it has a high probability of success. The biggest single factor is the cost of the debt. If the cost of debt turned out to be 6.5%, for example, then the option would be a lot less attractive. Right now, without the issuance of a POB, there is a requirement for normal cost funding plus the amortization of the unfunded liability. Once some of that unfunded liability is converted to a bond, the unfunded liability decreases because the proceeds of the bond are coming into the fund. But the sponsor (the issuer of the bond) still has the obligation to repay the bond. So from an economic perspective the issuers have to think of their obligation as the sum of the bond repayment and the interest payment, PLUS amortization of any residual unfunded liability, PLUS the normal cost. The savings are because the sponsors and entities are paying a lower interest rate on a portion of the unfunded liability. The savings is a lot of money, but it is not a panacea.

MR. O'LEARY said there needs to be a commitment to pay what otherwise needs to be paid — the normal cost and the amortization of any continuing unfunded liability. Importantly, the unfunded liability would grow again if investment returns were less than 8.25%. It is easy to applaud the possible issuance of POBs because it does clearly improve the funding status of the retirement systems.

COMMISSIONER KREITZER related what has been happening in the legislature with regard to HB 13.

MR. SEMMENS said the ARMB is on record as recommending that the Legislature put additional money into the retirement systems.

CHAIR SCHUBERT asked if there was an understanding that if POBs are issued that the ARMB would have the responsibility and authority to invest the proceeds. MR. ANDREWS said yes, that HB 13 states that the proceeds of the bonds have to go into the retirement systems.

MR. PIHL said he hoped that the idea of POBs was not being pursued with the notion of cutting the $505 million cash infusion.

COMMISSIONER KREITZER indicated that was not what she had testified to, and she thought most legislators believed as Mr. Pihl did. She added that the market may not be right for POBs this year, but a cash infusion is a good idea, and she would continue to lobby the Legislature.

MR. SEMMENS moved that the Alaska Retirement Management Board approve Resolution 2007-17 relating to pension obligation bonds. MS. HARBO seconded.

MR. SEMMENS referred to #5 in the resolution dealing with the possible need for an asset

allocation specific to the proceeds of particular POBs. He said that is a decision for down the road, and there will be lots of discussion about it when the time comes.

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

The motion passed unanimously, 8-0.

18. Update: Reconstruction Review - Executive Session
MR. WILLIAMS moved that the ARMB meet in executive session for the purpose of receiving an update from the actuary. MR. RICHARDS seconded.

There was no objection, and it was so ordered.

DAVID SLISHINSKY of Buck Consultants joined the meeting by telephone to give the board an update.

The board met in executive session from 2:35 p.m. until 3:02 p.m.

19. Assumption Changes for PERS/TRS/NGNMS/JRS - Resolution 2007-18
MR. SLISHINSKY stated that Buck Consultants performed an experience analysis last year based on the four-year period of data through June 30, 2005. The board adopted the set of assumptions for PERS and TRS last September that included a change in the actuarial cost method. Buck does not have any recommended changes for 2006, other than to adopt those assumptions and methods, and the board has already done that.

Regarding the 2006 valuations, MR. SLISHINSKY said this is the first year that the Governmental Accounting Standards Board (GASB) Statement Number 43 is required for health care benefits disclosure. There is an issue with regards to treatment of the Medicare Part D (prescription drug) subsidy for valuation purposes on disclosure. He said Buck has been taking a present value calculation of future expected subsidy reimbursements for Medicare Part D and reducing the liability for that for valuation purposes. The GASB came out with a technical bulletin that requires for disclosure purposes that the drug subsidy reimbursement be treated as a contribution and not reduce the liability for expected future subsidy reimbursements. For funding purposes, Buck recommends continuing to value the reimbursement and reduce the liability for it. That results in a much more level contribution requirement as a percentage of pay.

MR. SLISHINSKY indicated that Buck has discussed the discount rate for GASB 43 with the board. He said the board should approve how Buck is doing the calculations, although it does not affect the calculations they are using for funding purposes. It is just a recognition that there is a difference for disclosure purposes.

MR. SEMMENS moved that the Alaska Retirement Management Board adopt 2007-18. MR. WILLIAMS seconded.

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

The motion passed unanimously, 8-0.

CHAIR SCHUBERT called a brief break from 3:10 until 3:15 p.m.

20. Report on CS Senate Bill 125

MILES BAKER, finance aide for Senator Stedman, and DAVID TEAL, fiscal analyst for the Legislative Finance Division, had asked to address the board regarding Senate Bill 125. SB 125 is the initiative the Legislature is looking into for implementing the PERS Defined Benefit Plan, and SB 123 is a similar bill for funding the TRS system. *[A copy of the slides for this presentation were handed out at the meeting. The slides contain detailed budget spreadsheets, graphs and text, and are on file at the ARMB offices.]* The board spent an hour and 15 minutes on this agenda item, and there was a workshop style discussion back and forth between board trustees and Mr. Teal and Mr. Baker.

MR. TEAL said the goal was to find a permanent fix that makes retirement costs affordable to both the State and its political subdivisions. He first reviewed TRS transactions under various budget scenarios. He then explained a spreadsheet for PERS employers that resulted in a 39.85% contribution rate for FY08 under a shared cost plan. He talked about the State paying part of the employers' rate and how that would differ for TRS and PERS. The State budget currently allows for a PERS employer contribution rate of 32.51%, not the 39.85% the ARM Board approved.

MR. TEAL spent some time reviewing a spreadsheet of Buck Consultants' actuarial report on the retirement systems and talking about the effect of the level percentage of pay amortization method for calculating the contribution rate.

MR. BAKER said they presented the two Buck schedules because the second higher schedule was based on the assumption that the PERS is a closed system. That is the rate the board adopted and the rate the Legislature assumes it will have to fund, but it is $125 million more than it would be funding if the original level percent of pay valuation was used.

MR. TEAL said the amortization methods used by the actuary produce rates that are too low in the distant future, implying that the rates in the early years are too high. So the $125 million cash infusion is more than the system needs.

MR. BAKER stated that the Administration, the municipalities, and the Legislature agreed that PERS has to be moved to a cost share system. That bill has already passed. Once in the cost share system, the question becomes how to share the costs. Because now that there are pooled liabilities

and pooled assets, how do we figure out who pays what going forward? The next thing everyone agreed upon was that the State has some responsibility to pay a portion of that — one, because the municipalities cannot afford it, and two, because the State ran the system and there is some responsibility to step in and help. There were many ideas floating around that only contemplated splitting the unfunded liabilities, and that every year after the valuation came out the split would be computed and municipalities would be in a situation where their rates fluctuated every year depending on how the unfunded liability went. The concept was to set a flat rate for the municipalities and the State would pick up the risk and reward of what happens going forward. But because of the additional risk on the State's part, the employer rate (22%) was set much higher than the municipalities wanted it set. But the additional $125 million is perhaps unnecessary considering that PERS is not a closed system anymore for funding purposes.

MR. TEAL said that the revised revenue forecast essentially eliminates the FY08 surplus that had been projected earlier, and a deficit is projected for FY09 and beyond. This raises questions about the wisdom of paying as much as possible as soon as possible. He said they are looking for a way to get a lower contribution rate in the near term to help bridge the revenue gap until the gas pipeline revenue is realized. They are looking at resetting the FY08 rate. Ideally, they would like a smooth glide path from the current rate to a normal rate in 25 years.

MR. TEAL said they met with the Department of Administration and asked Buck to run some scenarios for both PERS and TRS. The results were not what they hoped for: the runs did not provide a smooth glide path. It is clear that more thought and effort are required. He said they were not asking for any ARM Board action on actuarial methods because they are still working with Buck. A special meeting to discuss the actuarial methods may help the board, but it is not essential. Senator Stedman said he hopes to address FY08 rates at this point and then have a year to try to straighten out the actuarial methods and implement something in FY09. He said a meeting to discuss the FY08 rates is essential for the ARM Board and the Legislature to be on the same page.

MR. TEAL reviewed the options:

- The ARM Board does nothing about the 39.76% employer rate already set. The Legislature then has a choice to appropriate that $125 million to get to the PERS rate the board set instead of the 32.51% rate that is now in the budget. The question is what would happen if the Legislature did not appropriate enough to pay the amount due.
- The ARM Board could reconsider the FY08 employer contribution rate and adopt the level percentage rates of 32.51% for PERS and 42.26% for TRS. Then PERS would be fully funded, and TRS would be overfunded by $59 million. Those rates have already been before the Board, which was advised at the time that higher rates were appropriate given that the system was closed. However, based on the board's resolution, and with the passage of SB 123, both systems are open for actuarial purposes and the level percentage of pay method is appropriate. Reducing the TRS rate is something that the Legislature may or may not respond to. The lower rate simply means that the $59 million that is appropriated to pay the 54% rate could become a cash infusion to the TRS system.

MR. TEAL said the Legislature is hoping the ARMB will reconsider its action and set the rate based on the level percentage of pay, which is clearly sufficient to pay the unfunded liability off in 25 years.

MR. BADER mentioned that the TRS system in 1989 was faced with a spike in employer contribution rates. The TRS board thought the spike was going to decline over time and set a contribution rate at 12%, with the full understanding that it might not be equivalent to the first year requirement but that over time it would level out. That was shown to get the system fully funded in less time than what was projected because projected investment earnings were higher. So this strategy is not unprecedented for making it affordable for employers and meeting the obligations to the system.

MR. BAKER said there is a rush on this because the Legislature is scheduled to adjourn on May 16, and there is a question of $125 million on the table. He said that from Senator Stedman's perspective the intent always was to give the ARM Board as much power as the Legislature could possibly give it — the responsibility for managing the assets, for keeping the system solvent, and to monitor the liabilities. The Senator doesn't want to do anything that would show that the Legislature was not doing what the board wants it to do.

COMMISSIONER KREITZER informed Mr. Baker that the board has scheduled a meeting for May 2 to discuss the issue.

MR. SEMMENS recalled that last September the board had the 2005 valuation which set the 2008 rates. That valuation was done based on assumptions and so on that were in place at 2005 and 2004, and it was based on an open system. The rate for PERS that fell out of that valuation was 32.51%, which was the rate that the actuary recommended on what can be considered the system's open status today. The board has the ability to fund the system on a level percentage of pay basis because the board has the actuarial "blessing" of a 32.51% rate. The Administration at the time said it would pay the difference between the rate that everyone is paying in 2007 and the rate that it recommended that the board set. That was the recommendation also of the second actuary that told the board it had to set the rate based on a closed system — and the board did that at 39.76%. He said that although he would like to see the $125 million added to the PERS system, and the State arguably has the resources this year to do that, looking forward the State is very concerned about its financial status two and three years from now. So he favored using the 32.51% contribution rate and then working diligently on coming up with a rate that pays off the unfunded liability in 25 years and that has a smooth glide path that will make the contribution payment affordable over that time — as long as there aren't any more shocks like happened in 2002. Sticking with the 39.76% rate will put the board at odds with the Legislature. The Legislature apparently has the power to simply set the rate, and the ARMB would be left out of the loop.

MR. PIHL indicated he agreed with Mr. Semmens's comments, but a lower contribution rate was just delaying payment of the $6.6 billion shortfall that the PERS employers have to pay over time. He was also concerned about the cash flows going forward because benefit outflows greatly exceed

contributions today.

MR. TEAL said there is a boost in making the PERS an open system and charging the same contribution rate for both the defined benefit plan and the defined contribution plan. He said the board did not make a mistake in setting the 39.76% in September 2006, given that the system was closed at the time. But the system is no longer closed so the board no longer needs to use the calculation method that produced a higher employer contribution rate.

MR. PIHL stated that 78% of the liability is the State's liability for its own employees, the university, etc., and if they ran the numbers again based on that they would come up with a lower number than 22%.

MR. TRIVETTE said he felt that the board was at a big disadvantage because he did not know what was in SB 125.

MR. BAKER noted that in the bill the State, at the beginning of the fiscal year, will be paying the remainder of the contribution rate above 22% for PERS and 12.56% for TRS. So the State's payment will be working immediately in the system instead of being paid in each month, which is a huge advantage. He went on to explain the other key points of the legislation for Mr. Trivette.

MR. TEAL clarified that he and Mr. Baker only intended to inform the ARM Board of things the trustees should be aware of and did not expect a motion today to adjust the contribution rate to 32.51%.

CHAIR SCHUBERT asked for the assumptions behind the sharp drop in rates in the last couple of years of paying off the unfunded liability. MR. TEAL said he wished he could, but it is a method the actuary used that is somewhat like getting a mortgage and refinancing along the way without extending the maturity of the loan. He said most open systems use a rolling 25-year amortization. What they have to explore is breaking the one massive loan into smaller chunks and amortizing some of the loan over 15 years, some of it over 20 years, some of it over 25 years, and some of it over 30 years, to see if it produces a smoother curve.

MR. TEAL had a brief discussion with MR. RICHARDS about whether future retirees impacted the unfunded liability.

In closing, MR. TEAL and MR. BAKER thanked the board for allowing them to appear on short notice.

21. Reality Investing/Default Options

MR. BADER stated that at the last meeting the board discussed the default investment option that is being used for the new Defined Contribution Plan program. *[The key points of that discussion were summarized in a staff memorandum included in the board packet.]* He said the board ultimately elected to table the discussion to the April meeting. Department of Revenue staff and Department of

Administration staff met to consider what would be in the best interest of the participants. Both departments agreed that the board should revisit the whole idea of the default option rather than take some precipitous action that might be reversed later on. The idea is to stay with the current methodology and for a board committee to look at the pluses and minuses of various default options. The board already has a Defined Contribution Plan Committee that consists of Mr. Trivette and Mr. Williams (Mr. Roses was formerly on that committee).

MR. SEMMENS moved that the Alaska Retirement Management Board direct the Defined Contribution Plan Committee to work with staff, consultants, and advisors and bring forth default option recommendations to the board no later than November 28, 2007, and asked for unanimous consent. MS. HARBO seconded.

Without objection, it was so ordered.

MR. WILLIAMS moved that the ARMB refer Resolution 2007-02, moved at the February 8-9, 2007 meeting, to the Defined Contribution Plan Committee for action. MS. HARBO seconded.

The motion passed unanimously.

22. Division of Retirement and Benefits Director's Update

Director PAT SHIER referred to a staff memorandum in the packet dealing with the great lag time between when the valuations occur and the time the ARMB adopts the contribution rates, and the intervening circumstances. The Division of Retirement and Benefits staff have reviewed that process and believe they are not ready to specify one specific practice over another. Staff recommends that the board allow staff to continue developing valuations as it is currently done as they continue to examine possibilities. The Division staff has spoken with the Department of Revenue staff, who are willing to join in that quest. They may have a report to the board at the next meeting.

MR. TRIVETTE said this is a key issue because lack of action puts the municipalities in a tough situation trying to do their budgets. He thought the board had reached a solution but now it is April and there is no decision.

COMMISSIONER KREITZER stated that it is also a key item for the Legislature.

23. Legislative Update / Cost Allocation Plan Update

MR. ANDREWS noted that a written legislative update was included in the packet for the board's information.

State Comptroller SUSAN TAYLOR said the history behind the Treasury Division's review of the cost allocation plan and its impact on the funds the ARM Board manages was covered in staff's memorandum in the packet. She handed out two additional pages of information. She referred to the summary of actual expenditures through March and projected expenditures through the fiscal year end at June 30. She said the Treasury Division did not plan to change the cost allocation method for

investment management fees. Under the cost allocation plan, the ARMB will be charged a modest amount more, the client agencies will be charged less, and funds under the commissioner of Revenue would be charged less. The detail was on the second page of the handout.

MS. TAYLOR said that staff plans to submit the cost allocation plan to the federal government for review and expects approval of the plan by mid-summer. At the beginning of FY08, the Treasury Division will analyze the FY07 actual costs to see what changes the cost allocation plan will have on each fund. It also may require a budget amendment for FY08 to realign funding sources according to the approved allocation plan.

MS. TAYLOR mentioned that there will be an upcoming discussion with the ARM Board on a possible change that would make it easier to implement the cost allocation plan. Treasury Division staff is looking at budgeting pension funds similar to how the DOA Division of Retirement and Benefits budgets their pension costs.

MR. TRIVETTE said he was surprised at the numbers because he initially brought up the cost allocation methodology after reading a consultant's report that indicated the ARMB should be charged less.

MS. TAYLOR attempted to explain that estimated investment management fees were included in the current method and could skew the numbers, and some funds over which the ARMB was fiduciary would be charged less and other funds more. She said she did not think it was that big of a deal, and she was confident that her successor, Julie Pierce, would be able to figure it out and report to the board in the fall.

MR. ANDREWS noted that even though the estimated ARMB expenditures for FY07 under the current method are $5.7 million, and the cost allocation plan allows spending up to $6.0 million, it does not necessarily mean that the Treasury Division has to go up to $6.0 million.

Custodian Contract with State Street Bank

MR. ANDREWS reported that State Street's custodian contract expires in June 30, 2008. Today State Street negotiated a fee reduction of $196,000 for FY08 if the contract was extended one more year, and the custodial fees would be reduced another 10% in FY09. He recommended that the ARMB extend the contract for one more year and accept the total fee reduction of $330,000 for custodial services. He listed some staff changes occurring in the Treasury Division and the fact that the investment section has requested some services from State Street that they would like to see completed. A request for proposal process for custodian services will begin in the fall of 2008.

MS. HARBO moved that the ARMB extend the contract with State Street Bank for custodian services for one year until June 30, 2009, with the fee reductions reported by staff. MR. PIHL seconded.

Roll call vote

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

The motion passed unanimously, 8-0.

UNFINISHED BUSINESS

MS. HALL reported on the following items:

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

2. **Meeting Schedule**
The August 3, 2007 date for a Real Estate Committee meeting will have to be re-evaluated, and she would contact the committee members.

MR. BADER recommended that the board set October 29-30, 2007 as the date for the Education Conference in Seattle. The statutes require that the board improve its investment knowledge and understanding through education.

MS. HARBO moved that the ARMB hold its Education Conference on October 29-30, 2007 in Seattle. MR. SEMMENS seconded.

The motion carried unanimously.

MS. HALL had handed out the proposed 2008 meeting schedule for trustees to review and act on at the next meeting.

5. **Legal Report**
MR. JOHNSON said he had nothing to report.

MR. BARNHILL gave an update on the legal budget appropriation requests.

OLD BUSINESS

Emerging Markets Manager Search
MR. BADER said that yesterday the board took action regarding an emerging markets manager and gave staff the authority to terminate JP Morgan. Staff does not believe they should actually consummate that termination until they are in a position to recommend another emerging markets manager to the board. It is costly to move in and out of emerging equity markets. He asked the board for authority to engage Callan Associates in a search for an emerging markets manager and to also engage Callan in a search for a timber manager.

MR. RICHARDS moved that the Alaska Retirement Management Board authorize staff to engage

Callan Associates, Inc. to conduct a search for an emerging markets equity manager, and to also engage Callan Associates, Inc. to conduct a search for timber manager candidates. MS. HARBO seconded.

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

The motion passed unanimously, 8-0.

NEW BUSINESS - None.

OTHER MATTERS TO PROPERLY COME BEFORE THE BOARD - None.

PUBLIC/MEMBER COMMENTS - None.

INVESTMENT ADVISORY COUNCIL COMMENTS

MR. JENNINGS mentioned that he has been on the IAC for 43 months and had not seen a presentation from Barclays Global Investors until today. He said he admires the firm but heard a less-than-ringing endorsement for their Tactical Asset Allocation Fund in the presentation. He suggested that the board should take a look at this fund again because it is an investment option for participants in both the SBS Plan and Deferred Compensation Plan.

TRUSTEE COMMENTS

There was a brief exchange about what should be on the agenda for the May 2 special meeting and the timing for taking certain board actions.

MS. HARBO thanked Mr. Bader for his report on legislation. She also welcomed Mr. Richards to his first meeting as a trustee.

MR. RICHARDS thanked Mr. Bader, his staff, and fellow board members for the warm welcome and their tolerance for his questions.

CHAIR SCHUBERT indicated she was not sure about the timeline for hiring another attorney and whether this was Mr. Johnson's last meeting as the board's counsel.

MR. JOHNSON said he expected to be with the board through June 30.

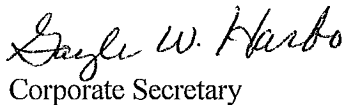
FUTURE AGENDA ITEMS - None.

ADJOURNMENT

THERE BEING NO OBJECTION AND NO FURTHER BUSINESS TO COME BEFORE THE BOARD, MR. SEMMENS MOVED AND MS. HARBO SECONDED TO ADJOURN THE MEETING AT 5:07 P.M. ON APRIL 27, 2007.

Chair of the Board of Trustees
Alaska Retirement Management Board

ATTEST:



Corporate Secretary

Note: The summary minutes are extracted from tape recordings of the meeting and are prepared by outside contractors. For in-depth discussion and 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