

**State of Alaska
ALASKA RETIREMENT MANAGEMENT BOARD
MEETING**

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

**MINUTES OF
March 23-24, 2006**

Thursday, March 23, 2006

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

Trustees Harbo, Schubert, Semmens, Trivette and Williams were present at roll call to form a quorum. Commissioner Corbus and Commissioner Nordstrand joined the meeting at 9:07 a.m.

ARMB Board Members Present

Gail Schubert, *Chair*
Sam Trivette, *Vice Chair*
Gayle Harbo, *Secretary*
Commissioner Bill Corbus
Commissioner Scott Nordstrand
Larry Semmens
Mike Williams

ARMB Board Members Absent

Martin Pihl (excused)

Investment Advisory Council Members Present

Dr. William Jennings
Dr. Jerrold Mitchell

Consultants Present

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

Department of Revenue Staff Present

Tom Boutin, Deputy Commissioner
Gary M. Bader, Chief Investment Officer
Bob Mitchell, Manager of Fixed Income Investments
Susan Taylor, Comptroller
Zachary Hanna, Investment Officer
Steve Sikes, Investment Officer
Rich Wiggins, Investment Officer
Clay Cummins, Asst. Investment Officer
Judy Hall, Asst. Investment Officer

Department of Administration Staff Present

Kevin Brooks, Deputy Commissioner
Melanie Millhorn, Director, Division of Retirement and Benefits
Traci Carpenter, Division of Retirement and Benefits
Charlene Morrison, Chief Financial Officer
Christina Maiquis

Invited Participants and Others Present

Mike Barnhill, State of Alaska Attorney General's Office
Eldon Mulder, Seattle Northwest
Kevin Ritchie, Alaska Municipal League
Brian Andrews, Smith Barney
Sean Parnell
David Slishinsky, Chris Hulla, Michelle DeLange, Buck Consultants
Peter Anderson, Walter Price, Melody McDonald, RCM Capital Management
Brian Rogers, University of Alaska
Bob Shefchik
John Gaguine, contract attorney for Division of Retirement and Benefits
Scott Arnt, Kodiak
Various legislative staffers and others who did not sign in

PUBLIC MEETING NOTICE

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

APPROVAL OF AGENDA

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

Several items on the agenda were rescheduled: Under Reports, the CIO Report was moved from #3 to #9; the SB141 Update was moved from #5 on Thursday to #13 on Friday; Full Funding Strategies was moved from #13 to #3 at 9:45 a.m. on Thursday; and an Executive Session was added at 3:45 p.m. on Thursday to hear client privileged information from Mike Barnhill of the Attorney General's Office.

The amended agenda was approved without objection.

PUBLIC/MEMBER PARTICIPATION, COMMUNICATIONS AND APPEARANCES

No one present in Juneau or on teleconference wished to address the board.

APPROVAL OF MINUTES

MS. HARBO moved to approve the minutes of the February 16-17, 2006 meeting. MR. TRIVETTE seconded.

The motion passed without objection.

REPORTS

1. Chair Report

CHAIR SCHUBERT said the board received notice that Mr. Roses resigned from the board because he filed for public office. She said she also worked with Mr. Bader and Ms. Hall to prepare a response to Representative Paul Seaton regarding some investment options he had requested that the board consider.

She also worked with staff to craft a letter to the Governor asking that he approve the Attorney General's Office response to the 13 questions that the trustees sent to the AG's Office.

When queried by the chair, MR. BADER stated that he had been in contact with the Governor's Office and expected approval to be forthcoming but not in time for this meeting.

CHAIR SCHUBERT reported that she extended the board's invitation to the Alaska Permanent Fund Corporation board of trustees and executive director to attend the board's education conference in New York City in June.

2. Committee Reports

A. Real Estate Committee

Committee chair LARRY SEMMENS reported that the committee met on March 22 and approved a draft charter of the Real Estate Committee, which the board would take up later at this meeting. The committee also scheduled future meeting dates for the year.

3. Fund Financial Report

State Comptroller, SUSAN TAYLOR, stated that the retirement fund financial reports in the meeting packet for the Public Employees' Retirement System (PERS), the Teachers' Retirement System (TRS), and the Judicial and Military funds were as of February 28, 2006. The financial reports for the Supplemental Benefit System Plan and the Deferred Contribution Plan were only up to January 31, 2006 because the Division of Retirement and Benefits is still working with the recordkeeper on the way some employer contributions were posted.

MS. TAYLOR reported that pension fund invested assets totaled \$13.7 billion at February 28. Per Trustee Pihl's request at the last meeting, staff split contributions and withdrawals into two separate columns instead of reporting them net.

The detailed monthly and year-to-date investment activity for each retirement trust fund was included in the meeting packet. Also provided was a schedule of information about each investment manager and asset class for the month of February.

MS. TAYLOR stated that the Asset Accounting section of the Treasury Division, along with staff from the Permanent Fund, will be attending training locally on June 27-30 to better understand the financial markets behind the accounting transactions.

Responding to CHAIR SCHUBERT, MS. TAYLOR said trustees were welcome to attend all or any part of the training.

4. Full Funding Strategies

Chief Investment Officer GARY BADER and MR. SEMMENS made a presentation on possible strategies to fully fund the unfunded liabilities of the retirement systems. MR. BADER said the board had asked staff at the February meeting to explore full funding strategies in order to meet the legislature's expectation that the board would have a recommendation this legislative session.

MR. BADER stated that one question put to the actuary was how much additional appropriation would be needed given a range of assumptions. The actuary responded with information based on the FY2004 valuations. The actuary also noted that an

amortization period for the liabilities greater than 30 years would not meet GAAP (generally accepted accounting principles) qualifications.

MR. BADER said that staff also looked at the possibilities that have been introduced in the legislature. Those proposals were broken into two categories: pension obligation bonds, and natural resource assets - the royalty rights to natural gas leases that may be developed in the future. At a House Ways & Means Committee meeting last Monday, several questions arose that require further research about using a natural gas asset to address the unfunded liability. Other proposals before the legislature to at least give some relief to employers are a past service cost offset account for PERS, and establishing a retirement benefit liability account to pay the employer contributions for past service liabilities for PERS and TRS.

MR. BADER noted that people are putting forth different ideas, and how those bills get funded is of interest to the legislature. He did not believe the legislature was looking to the ARM Board to come up with funding sources. He said Mr. Semmens has been working on some ideas that he wished to share with the board.

MR. SEMMENS passed around a handout entitled, "Talking Points on Fixes to TRS." He said the simple question is how to put more money into the retirement systems. The solution should be relatively easily calculated, it has to be put into the state's budget, it needs to be sustainable over the next 25 years, and consideration should be given to extending the amortization period for paying off the liability. He described a solution for TRS that is patterned after the School Debt Reimbursement Program, which provides funding to school districts that have issued debt to build schools, and the state funds those debt reimbursements at various percentage amounts. The solution for TRS requires an annual allocation to an employer based upon its qualifying payroll two years earlier, the past service cost rate, and the amount appropriated by the state for the past service retirement benefit liability program. The reason for the two years is so it is a calculable amount.

MR. SEMMENS listed the benefits of the proposed solution: (1) the board would set the contribution rate at the actuarially required amount; (2) employers would be required to pay the full actuarially required rate, but they would have revenues coming from the state to help with that; (3) budgeting could be precise; (4) it is possible to prorate the payments if the state did not opt to fund the program fully at about \$100 million a year; and (5) all communities would benefit from this program.

MR. SEMMENS said that under this program the state would pay essentially 85% of the past service liability of school districts other than the State of Alaska. MR. BADER explained that the state picking up 85% was based on the assumption that many school districts have federal receipts, so this program would not provide a windfall to the school districts. An example is that the legislature has opted to fund the School Debt

Reimbursement Program at rates from 50% to 100% over the years. The proposed program does not bind the legislature to any percentage, and it does not have dedicated funds.

MS. HARBO thanked Mr. Semmens for his work and expressed her support for taking the proposal to the legislature. She said it seems fair to all employers and allows annual planning for school districts.

MR. SEMMENS noted that he did not address the PERS part, which is a very large unfunded liability, but he believed that this sort of strategy could work the same way for non-state employer members. Unlike the TRS system where all the school districts pay the same contribution rate, employers pay different rates in the Public Employees' Retirement System. The challenge would be to fairly allocate a state appropriation each year to the various employers.

MR. WILLIAMS added his thanks to Mr. Semmens for working on a proposal to give relief to TRS employers with an unfunded retirement liability.

COMMISSIONER NORDSTRAND asked about a plan for the state's part of the unfunded liability, given that its payroll is three times that of the political subdivisions. He said he was not comfortable with the board presenting a proposal to the House Ways & Means Committee that did not deal with the whole system.

MR. BADER said the one difference between the municipalities and the state is that the legislature is in a position every year to fund the state budget. He pointed out that the proposal could be changed simply by scratching out "other than the State of Alaska." The legislature could make that decision and increase the size of the annual appropriation to include the state.

MR. SEMMENS agreed with the Commissioner that the state is the lion's share of the unfunded retirement liability. He said there is interest in figuring out how to deal with it other than 32% PERS rates for the next 25 years.

COMMISSIONER NORDSTRAND said the FY2007 employer contribution rate for PERS and the political subdivisions would be 32% if set at the actuarial rate and would represent \$115 million for the state alone. He said he was not comfortable about presenting the debt reimbursement program idea by itself to the Ways & Means Committee tomorrow without taking a global look at other funding options. He noted that the board previously had informed the legislature that it wanted to hear a report from the actuary before making some recommendations for addressing the unfunded liabilities.

There was a brief exchange among trustees about pressure from the House Ways & Means Committee for the ARM Board to come up with funding ideas sooner rather than

later, and where to go from here. After consultation with legal counsel about public meeting notice requirements, the board decided to continue the discussion on full funding strategies during a working lunch to try to finalize what the board would present to the House Ways & Means Committee the next day.

The chair indicated that the board would take up the SB 141 update next, as originally scheduled on the agenda.

5. Update on SB 141 Implementation

MELANIE MILLHORN, Director of the Division of Retirement and Benefits (DR&B) in the Department of Administration, reviewed the written report of SB 141 implementation activities in the meeting packet. She mentioned that one area the ARMB Report to the Legislature Committee looked at was the possibility of indexing medical insurance deductibles. Buck Consultants will be addressing health plan indexing when they make a presentation to the board later in this meeting.

MS. MILLHORN reported that several employers have asked for financial information to help them make a decision on the employer conversion election, and DR&B is working with Buck Consultants to provide those reports.

MS. MILLHORN handed out some printed material that the Division of Retirement and Benefits will be presenting at the TRS job fair in April in Anchorage. She reported that on March 14 the Division issued a notice of intent to award a contract for recordkeeping and financial education. The contract will be awarded after the 10-day protest period has expired.

MS. MILLHORN stated that refunded indebtedness letters will be mailed on March 24 to approximately 78,000 people who have refunded out of PERS and TRS. Also, SB 141 employer training is scheduled for Anchorage, Juneau and Fairbanks beginning May 15. DR&B staff continue to work on the plan qualification process with Deloitte Consulting, the state's benefits consultant, and Ice Miller LLP, the legal tax advisors.

MS. MILLHORN reported that the Commissioner of Administration approved a transfer of \$50 million from the Retiree Health Trust Fund to the four contributing retirement systems. Deloitte Consulting indicated that the cash reserve was \$126 million as of June 30, 2005, and that represented a growth in the reserve of 51.9% over the financial statement from June 30, 2004. Deloitte also recommended that the reserve balance for a plan of this size be between 15% and 25%, while the actual reserve amount was between 42% and 44%. So Deloitte was comfortable with a transfer of \$50 million in excess reserves back to the retirement systems. That leaves a reserve balance of 26%.

MS. HARBO requested a one-page report showing the reserve amount as of December

31, 2005. MS. MILLHORN agreed to provide that.

MR. SEMMENS said he was still struggling with the Retiree Health Trust Fund being invested with a much lower expected return than the pension fund portfolio. He asked that staff explore ways to invest a portion of the Retiree Health Trust Fund at a higher rate of return.

MS. MILLHORN replied that the Commissioner of Revenue is responsible for setting the Retiree Health Trust Fund asset allocation annually.

MS. HARBO had an exchange with MS. MILLHORN about the options for employers to sign up for their employees to participate in the new defined contribution plan.

MR. SEMMENS asked if DR&B staff were aware of SB 247, a revenue sharing bill. TRACI CARPENTER said the premise for the current version of the bill is to make up the contribution shortfall between an employer's adjusted rate versus the actuarial rate.

The chair called a scheduled break from 10:04 a.m. to 10:25 a.m.

Agenda Amendment

MR. WILLIAMS moved to amend the agenda to add a continuation of the full funding strategies discussion around the lunch hour.

MR. TRIVETTE seconded.

The motion passed without objection.

6. 4th Quarter 2005 Performance Measurement - Callan Associates

MICHAEL O'LEARY, Executive Vice President of Callan Associates, Inc., the ARM Board's general consultant, gave a presentation on the pension funds' performance for the periods ending December 31, 2005. *[The Callan written report and slide presentation are on file at the ARMB office.]* He consulted with the chair and received guidance that a shorter performance presentation was acceptable to give the board more time to continue the Full Funding Strategies discussion immediately afterward. CHAIR SCHUBERT asked Mr. O'Leary to also highlight any performance-related issues of which the board should be aware.

MR. O'LEARY informed the board that currently Callan waits for the real estate return numbers that are generated by Townsend Group to integrate them into the Callan quarterly performance report. Townsend, by contract, has until the end of the second

month after a quarter end to have those performance numbers available to Callan. Some of the newer real estate investments have stretched that reporting period even further. After discussing alternatives for Callan to provide timely performance reporting, ARMB staff agreed it would be best that Callan use preliminary return numbers provided by Townsend and label the quarterly reports accordingly. Once the Townsend figures are finalized, Callan would update the reports in Callan's system but not publish another full report except at the end of the fiscal year. He said the change in reporting methodology should not have any significant effect from one quarter to another.

MR. O'LEARY stated that 2005 was not a spectacular year for investment returns, but it was a good year for the Alaska Retirement Management Board, both absolutely and relatively. There were three major factors that contributed to that. One was having significant real estate exposure. The second positive was having meaningful international exposure. Third was having better than benchmark performance within domestic equity and fixed income components of the portfolio. The time-weighted return for PERS was 2.73% for the quarter and 8.24% for the year, versus the policy target one-year return of 6.89%. The TRS results were slightly higher.

The results for the fourth quarter and the year were in the top quartile of the Callan public fund database. Because it was a strong relative year, the pension fund returns now rank above median for the preceding two- and three-year periods. Pre-fee and after-fee returns for portfolios are included in the full Callan report. Callan will provide net-of-fee return numbers annually based on the expense figures that the Department of Revenue will furnish.

MR. O'LEARY drew attention to an annual return histogram for the S&P 500 Index going back to 1926. He said it was an interesting context for the 2000-2002 period of very poor equity returns because many of the periods of great market strength in the past happened after a period of weakness.

MR. O'LEARY stated that the stock market as measured by the S&P Super Composite 1500 was up 5.7% for the year, and the bond market was up only 2.4%. He also noted that international stocks had more than double the return of domestic stocks in 2005. That is support for the notion that having a meaningful international equity allocation was essential for success in the year. The EAFE Index was up 29% when measured in local currency terms compared to 13.5% in dollar terms. The strength of the dollar detracted significantly from international returns.

MR. O'LEARY said that recently small capitalization equity has not done as well as large cap equity. In the last six months, growth stocks have outperformed value stocks.

Turning to the ARMB asset allocation at the end of 2005 compared to Callan's public fund database, MR. O'LEARY pointed out that the pension fund is above median

allocation in the areas of real estate, international equity and alternative investments. That contributed positively to performance results in 2005. The ARMB was underallocated to domestic fixed income compared to other public funds, and since domestic fixed income had poorer returns last year, that also contributed to performance. PERS had an 8.24% return for 2005 and TRS earned 8.30% — top quartile performance. The biggest single contributor to outperformance was private equity.

MR. O'LEARY reviewed the performance of individual portfolios and made comments on the following:

- The board especially needs to understand what the internally managed fixed income portfolio is doing, and performance has been excellent for a long time. It returned 3.17% for the year compared to the custom index at 2.43%.
- BlackRock, which is on the watch list because of acquiring Merrill Lynch Asset Management Group, also had a good year — not as good on a pre-fee basis as the in-house portfolio but comfortably ahead of the benchmark.
- Mondrian, an international bond manager, had a poor year in absolute and relative terms as a result of the dollar's strength. This portfolio is managed against an unhedged index.
- Two new high yield bond managers have been in place for six months, so it is much too early to tell anything about the performance. Both managers added value relative to the investment grade bond market.
- Tukman large cap, which has been a problem, had a good December quarter. Their relatively strong performance has continued into the first quarter of 2006.
- In the small cap equity pool, TCW, which has been a problem, had a good quarter, benefiting from the market shift toward the growth style.
- There are several newer managers in the small cap pool (Jennison, Lord Abbett, and Luther King), and fortunately they are doing better than the benchmark. Turner has been an ARMB manager a bit longer, and they were up over 7% for the year. Callan is happy with the performance of all the current small cap equity managers, given the very recent improvement in TCW's performance.
- Brandes has been a big reason for the strong long-term performance in international equity, but last year was not part of that. They were up 11.25%, below the benchmark return of 13.54%. Brandes has a deep value orientation and tends to be fairly extreme in their performance differences from the benchmark, so Callan is not concerned by the performance pattern.
- Capital Guardian international had an excellent year, 19.44% versus the EAFE Index at 13.54%.
- The two new international managers added during 2005, McKinley and SSGA, both did fine over six months.
- The Lazard global portfolio had a decent fourth quarter, and that allowed their one-year return to be close to the benchmark.

- The Capital Guardian emerging markets portfolio had spectacular returns for the year (38.35%) after underperforming significantly for several years prior to that. The return on this mutual fund is net of fees.
- J.P. Morgan is the other emerging markets manager. At 33.53% for the year, they were a tad below the benchmark. For most of the other cumulative periods they are ahead of the benchmark return.
- The REIT portfolio is managed by investment staff in the Department of Revenue. Over the year the portfolio has been in existence, it has returned 8.07%, a very attractive absolute return but well below the NAREIT Equity Index. The portfolio had a value focus when it was established and was concentrated in only 25 securities. On staff's recommendation, the board approved a change to a more diversified approach. That change was implemented during the first quarter of 2006.
- There are three absolute return hedge fund of funds managers (Crestline, Mariner, and Cadogan), and so far the results are pretty attractive. Cadogan has the weakest relative performance, and that seems to be improving so far in calendar 2006.

MR. O'LEARY indicated that the results for the Supplemental Benefit System funds and the Deferred Compensation funds were included in the written report. The Brandes international mutual fund underperformed the benchmark for the year. Capital Guardian global balanced fund outperformed. Citizens' core growth fund continued to do really well. The T. Rowe Price small cap trust had excellent performance. All the target maturity funds were basically right on top of the target indices. The component funds that are used to build the diversified choices looked good for the year.

MR. O'LEARY mentioned that he had thought a lot about the discussion at the end of the February meeting regarding the board spending its time wisely to take care of business. He asked if the board would prefer an in-depth review of the portfolio performance once a year, and the remaining quarterly performance presentations would focus at the total fund level and on those managers that are doing poorly. He said he would always be prepared to get into detail on any manager in which the trustees were interested.

COMMISSIONER CORBUS requested that Mr. O'Leary spend a few minutes reviewing RCM, in light of RCM making a presentation later in the agenda.

MR. O'LEARY stated that RCM has been a terrific large cap equity manager for the State of Alaska. When RCM's chief investment officer retired a few years ago, his retirement coincided with a period of poor performance for growth style managers generally. RCM's performance over 10-1/2 years has been 11.61% annually — top quartile when compared with other growth managers. It was the most recent three-year

return that has caused concern. RCM made some investment staffing changes but appear to have maintained the same investment philosophy and approach. RCM participated very strongly when the market emphasis shifted toward growth, with a return up over 10% for calendar 2005. He said he was comfortable with RCM's transition from Bill Price, who was the CIO and the ARMB's portfolio manager.

COMMISSIONER CORBUS said that as the Alaska State Pension Investment Board was winding down there was some controversy about RCM. He sought and received confirmation from Mr. O'Leary that he was comfortable with RCM's portfolio management now.

CHAIR SCHUBERT requested that Mr. O'Leary's abbreviated quarterly performance reports also include a refresher on managers who are scheduled to appear before the board, whether their performance has been good or poor.

MR. TRIVETTE said he attended the Callan Conference earlier in the year and spent quite a bit of time with the RCM people. From what he learned, he felt RCM was on track with the pension fund's portfolio.

MR. SEMMENS asked Mr. O'Leary if there was anything on the horizon that could change the overall good performance picture. MR. O'LEARY said that most investors feel that most asset categories are fairly valued, if not overvalued, so there are no screaming sectors that look very attractive. The market has been in a period of lower nominal returns, as well as low volatility. In a period of low volatility there is a tendency to be willing to take on more risk. But periods of low volatility actually can be very dangerous because investors do not see the risk that they are taking on. Because investors have not observed the negative type of volatility for three years, it is easy to put it out of mind. He cautioned the board to not forget that volatility has been low and it will get higher, and the premium for taking on additional risk is small.

Continuation of Full Funding Strategies Discussion

Starting at 11:00 a.m. and for the next hour the board continued its earlier discussion on strategies to eliminate the retirement systems' unfunded liabilities. The earlier discussion had focused on one proposed solution for the Teachers' Retirement System.

MR. SEMMENS said that speaking from his position with the City of Kenai, the 32% of payroll employer contribution rates for the Public Employees' Retirement System would be extremely difficult for the City to absorb. Many of the municipalities believe the state should participate in funding the past service liability. One proposed solution is similar to the debt reimbursement program that was discussed earlier for TRS, except that each employer member has a different contribution rate. So if the state were to appropriate funds to help pay for the PERS past service liability, the question would be how to

allocate those funds. One method would be to use the prior two years' payroll information and the prior two years' average past service rate for employers.

MR. SEMMENS commented that it will take millions and millions of dollars to make any of the proposed solutions work. He said the board will be faced next year with setting the employer contribution rate, and he thought it would be very difficult not to set it at the actuarially recommended rate.

MR. BADER explained that in coming up with a strategy to deal with the different PERS employer contribution rates, the phrase "average past service rate" was taken from Representative Seaton's legislation. It would require adding up the rates of every employer member of the PERS that is in deficit, averaging them, and the state making an allocation based on that average. That does not give a large degree of support to those systems that are deepest in the hole. But it does have a leveling effect in terms of those employer members that did things in their systems that caused them greater indebtedness would not have it paid off by the state.

MR. BADER said the struggle is coming up with a systematic plan for addressing PERS without having an idea of the legislature's sentiments about spreading any annual state allocation across all employers.

KEVIN RITCHIE of the Alaska Municipal League was invited to address the board about municipal employers. MR. RITCHIE handed out a document entitled "PERS Concept for FY07," which is on file at the ARMB office. He said last year the state paid the 5% of salary increase for municipalities. This year Governor Murkowski recommended that the legislature appropriate \$38 million to pay the 10% of salary increase for FY07, but the funding was not put in the state's operating budget. An additional piece that basically stops the financial hemorrhaging was put into SB 247, which would require a large increase in PERS rates for municipalities in FY07. That bill pays the difference between the 10% of salary increase and the actuarial employer contribution rates and is estimated to cost \$29 million. If the board were to make a recommendation to stop the financial hemorrhaging to get into sync with the actuarial recommendation it would cost the state about \$66 million. However, if municipalities ramped up local government rates to 25% for FY07, that would reduce the amount needed from the state to about \$56 million. If nothing is done, local taxpayers in most communities are going to see an average 100% jump in PERS employer rates, which is an increase of about \$40 million, or cuts in local services across the state. The short-term solutions would be a placeholder and give the board time to work on longer-term solutions.

Trustees asked Mr. Ritchie various questions about the mechanics of the Alaska Municipal League's proposal for PERS in FY07 and the impact of different actions on municipalities. One question raised by COMMISSIONER NORDSTRAND was about the fair treatment of municipalities that have made PERS employer contributions above that

required of them, while other municipalities are severely underfunded.

MR. RITCHIE said that was one of the toughest questions for this board. His experience is that, to a large extent, the municipalities and the state had little reason to think there was a problem with the allocation process or the liabilities. It blew up from a mole hill into a mountain in the last few years. Except for a few cases, it is hard to point to decisions that any community made or did not make that negatively affected their pension system liability. Now every municipality knows there is a problem, and the state now had to provide the demanded customer service for municipalities that are asking about liability allocation and what-if scenarios. Until now, the state has not had that type of expertise available.

There was a discussion about employers that are overfunded but which now must pay the normal cost rate per SB 141, and employers that have withdrawn from PERS in the past but that have the surprise of large unfunded pension liabilities after making that decision.

COMMISSIONER NORDSTRAND estimated that the cost to pay the contribution rates for the PERS and TRS retirement systems for a year without going further in the hole would be about \$400 million, based on actuarial information available.

MR. SEMMENS added that that cost is every year for the next 25 years. He said he thought the ARM Board should do what it could to communicate the magnitude of the problem to the legislature at every opportunity.

The board next discussed what it would present at the House Ways & Means Committee meeting the next morning. One topic that was debated was whether or not to mention possible funding sources to address the unfunded pension liabilities, such as permanent fund earnings and the state's current budget surplus. One view was that the board's task was to identify strategies to eliminate the unfunded liabilities and the governor's and legislature's responsibility to identify funding sources.

After a break from 11:47 a.m. to 12:10 p.m., CHAIR SCHUBERT stated that the ARM Board's thoughts and ideas about eliminating the unfunded liabilities would be presented to the House Ways & Means Committee tomorrow with the understanding that the board had not reached consensus on any final recommendations to the legislature. Further, that the board would continue its work and expected to have recommendations to forward to the legislature soon.

There was no objection to that course of action.

LUNCH RECESS

The meeting recessed for lunch at 12:12 p.m. When the chair called the meeting back to order at 1:15 p.m., trustees Trivette, Semmens, Harbo, Williams and Schubert were present. Commissioner Corbus rejoined the meeting at 1:31 p.m. Commissioner Nordstrand had asked earlier in the day to be excused for the afternoon to attend to other state business.

REPORTS (Continued)

7. Actuarial Review - Buck Consultants

Actuarial Process

DAVID SLISHINSKY, the principal actuary, CHRISTOPHER HULLA, the health actuary, and MICHELLE DELANGE of Buck Consultants made a lengthy and detailed presentation of the actuarial valuation results for the Public Employees' Retirement System and the Teachers' Retirement System. *[A copy of Buck Consultants' slide presentation containing various charts, graphs and other data is on file at the ARMB office.]*

MR. SLISHINSKY provided a brief explanation of the actuarial process and the terminology. He said that Mercer Human Resource Consulting was the state's previous actuary, and this was the first year for Buck Consultants to perform the actuarial valuations of the State of Alaska retirement systems. Part of Buck's process when they first become an actuary for a plan or system is to conduct a complete review of the previous actuarial valuation, in this case, 2004.

MR. SLISHINSKY said actuarial valuations are done annually as of June 30 for PERS and TRS. The actuarial valuations for the Judicial Retirement System and the National Guard and Naval Militia Retirement System are performed biannually, with the next scheduled valuation being as of June 30, 2006.

MR. SLISHINSKY stated that actuarial assumptions are used to measure the amount and present value of expected future benefit payments. The assumptions are broken out into demographic (amount of future benefit payments), economic (value of future benefit payments), and healthcare (combination of demographic and economic). The actuarial assumptions represent the actuary's best guess of what is going to happen in the future, based on past history, future expectations, and a long time horizon. Inflation is part of the economic assumptions and should be consistently applied to all the economic portions of the assumptions: salary increases, COLAs, investment returns, and healthcare trend rates.

MR. SLISHINSKY said the assumptions are recommended by the actuary and

approved by the ARM Board. Buck's next project for the board is an experience analysis. Buck will look in detail at the last five years to determine to what extent the actual experience has deviated from the expected experience and make any recommendations for changes to the actuarial assumptions. The assumptions should be explicit and each one stand on its own merits. Setting the assumptions is a blend of art and science: actuarial mathematics used in the calculations is a science, but its application in the real world is an art. It is anybody's guess what the assets are going to earn, how long people are going to live, and to what degree there will be salary increases. The State of Alaska has large retirement plans, so Buck expects with such large numbers to do a good job year to year at determining the expected liabilities and benefit payments, although there will be deviations from year to year.

MR. SLISHINSKY reviewed the current economic assumptions for PERS and TRS:

Investment return per year	8.25%
Inflation per year	3.50%
Interest on contributions	4.50%
Salary increases (inflation 3.5%, productivity 0.5%).....	4.00%
Payroll growth (used for amortizing the unfunded liability)	4.25%
Cost of living adjustments:	
<ul style="list-style-type: none"> • Post retirement pension adjustments - 1.75% COLA annually at age 60 or after five years (8 years for TRS). At age 65 or upon disability the COLA is 2.625%. • 10% COLA for those living in Alaska. • Healthcare trend - increases in the expected cost of healthcare premiums. Medical starts at 9.5% a year and grades down over a 9-year period to a 5% cost increase per year. Prescription drug trend starts at 14% and grades down to 5% over nine years. 	

MR. SLISHINSKY explained that if the investments were to earn 8.25% each year, and the liabilities were to grow at 8.25% per year, then the assets would match the liabilities. In reality, there are deviations in the investment return over the short term. He also stated that there is a productivity element to salary increases — generally wages increase a little bit more than prices, and lifestyles can improve from generation to generation.

MR. HULLA suggested looking at the COLA on the medical side as starting at 9.5% and then 9.0% the next year and then 8.5%, etc. until it eventually gets down to 5%. That is Buck's best guess that nationwide there has to be some greater control exerted over the growth of medical cost for insured plans. Unfortunately, this is one area where Buck and other actuaries have not seen their assumptions met over the time frame shown here. Buck's medical cost trend model that starts at 9.5% and goes down to 5% probably will have to be revisited in a few years. However, it does not make sense that national health expenditures will continue to rise until they are 50%, 60%, or 75% of the

economy.

MR. TRIVETTE asked about the 4.25% payroll growth assumption, which spawned several follow-on questions from other trustees and Mr. O'Leary. MR. SLISHINSKY stated that these are Mercer assumptions for the 2005 valuation, and Buck would be reviewing them in the experience analysis.

Speaking to staff, CHAIR SCHUBERT said she recalled that in 2000 Mercer reported that they were throwing out the valuation system that was in place because of a number of factors, including healthcare costs, and were starting to use a new system. She asked how the healthcare cost trend rate assumption presented today compared to Mercer's assumption in 2000, how frequently that trend is evaluated and revised, who does it, and how it is done.

MR. BADER replied that SB 141 calls for that to be done yearly, but he was not sure how frequently it was done in prior years.

MS. MILLHORN said Mercer evaluated the healthcare cost trend rate annually from 2000 on (because of the revaluation), but she did not know about prior to 2000.

MR. HULLA stated that the demographic and economic assumptions in this valuation are the same as Mercer used, including the healthcare cost trend assumption that was used after 2000. It is considered the standard model and is a careful and thought-through approach. He said Buck would not recommend abandoning the model because of one year's deviation from the healthcare costs assumption.

MS. HARBO commented that the boards had no early warning from Mercer about why the Alaska retirement systems are in the shape they are in now, which was mainly due to healthcare costs. It took an actuarial audit in 2000 to show that Mercer had done a poor job in the medical assumptions. She asked how soon the ARM Board would get an early warning from Buck Consultants.

MR. SLISHINSKY said healthcare cost is a snowball rolling downhill. Looking at historical results, the healthcare plan is becoming a greater and greater part of the accrued liability of the Alaska retirement systems. He said an early warning system may be significantly increasing employer contribution rates in order to keep up. On the other side, there are still several billion dollars set aside to pay these benefits. With cash flow from contributions coming in on top of the assets that have been accumulated, it will still be a long time before there is no money to pay benefits. What Buck is trying to avoid is that point where there is no money to pay the benefits.

MS. HARBO remarked that since the Milliman plan audit in 2002 half the employer contribution rate is due to Mercer's error in the medical assumption. She said she hoped

Buck's assumptions were better than Mercer's assumptions.

Regarding the changes that were made in 2002, MR. SLISHINSKY explained that one of the things that Mercer was doing was setting the cost of medical premiums based upon some analysis back in the 1990s and then applying the healthcare cost trend rate to that and not re-examining it each year with regard to actual experience. As a result, over time the value of the medical premium that Mercer was valuing in the valuation was becoming outdated and did not reflect the true cost of medical. That came out in the Milliman audit in 2002, and the cost of healthcare benefits increased significantly because of that.

MR. SLISHINSKY also explained that the Milliman plan audit in 2002 was a limited scope audit, and Milliman did not try to replicate the numbers that Mercer generated. That is what Buck Consultants did this time.

MR. SLISHINSKY stated that there are about six actuarial cost methods that are approved under the GASB Statement #25 for purposes of disclosure. These methods all end up with the same result; there is the same amount of money accumulated to pay for a benefit when a person retires. But the actuarial cost methods differ in the way in which they allocate the pension cost from year to year, and the method used determines the pattern of funding. Put more money in up front and less in the future, or put less in now and more down the road, etc.

MR. SLISHINSKY said that Buck uses a projected unit credit cost method that basically calculates the amount of the accrued liability as of the valuation date. It also calculates a normal cost, which is the cost of benefits due to service during the year, beginning on the valuation date. It projects salaries, which is why the method is called the projected unit credit method, although it is not projecting service. It also does the same thing the year after the valuation date with an additional year of service, so that amount is greater. The difference between those two is the normal cost. The method calculates the unfunded accrued liability — the accrued liability minus the actuarial value of assets set aside to cover the liability. The actuarial contribution then becomes the sum of the normal cost of the benefits expected to accrue during the year plus an amortization payment of the unfunded liability. Currently, that unfunded liability is being amortized over 25 years as a level percentage of pay. Buck is using the payroll growth assumption of 4.25%.

MR. SLISHINSKY said that the projected unit credit cost method is very common in the private sector because the Financial Accounting Standards Board that requires companies to comply with this method. Over 70% of public retirement systems use the entry age cost method, while about 15% of public plans use the projected unit credit cost method. It is not as common in the public sector because if the membership has an increasing age the projected unit credit cost method will increase the normal cost rate.

MR. SLISHINSKY explained Buck's asset valuation method for determining the actuarial value of assets and why they do not use the straight market value. They use the same five-year smoothing of the market value of assets that Mercer used. *[The asset valuation method is explained in detail on page 11 of Buck Consultants' slide presentation.]*

MS. HARBO asked if Buck's asset valuation method was the best to reduce volatility. MR. SLISHINSKY said extending the smoothing period longer than five years would reduce volatility. For example, Arizona uses ten years, and California uses 15 years. The down side to extending the smoothing period is that there could be greater deviations between the market value of assets and the actuarial value of assets.

MR. O'LEARY asked if Buck was incorporating the expected contributions for the year when they develop the actuarial value of assets. MR. SLISHINSKY said they take the beginning of the year market value of assets, the actual contributions coming in, the actual benefit payments being paid out, and they determine what the investment return would be for the year if the fund had earned 8.25%. Then they compare that expected return to the actual investment return for the year, and that is net of expenses.

MR. BADER said he recalled that when Milliman did the plan audit in 2002 the plan assets were valued at market and that captured the bear market. There have now been three years where the stock market has exceeded its actuarial rate of return, but the asset valuation method is only recognizing 20% of the gains. He asked if that would tend to overstate the underfunding level.

MR. SLISHINSKY explained that Mercer changed the actuarial asset valuation method in 2002. All the prior gains and losses were immediately recognized, and the actuarial value of assets was set to market value on June 30, 2002. There are only three years of bases that are being recognized over a five-year period, so Buck is phasing into a five-year period.

MR. BADER observed that if 2003 had been an enormously positive year in the market, big enough to eliminate the Alaska retirement systems' underfunding, it still would not be recognized in this asset valuation method. MR. SLISHINSKY said that was correct. He added that some systems reinitialized and recognized all the losses in 2000 through 2002, then when the markets improved in 2003-2004 they smoothed those gains. But now their employer contribution rates are higher than they otherwise would have been, and their funding ratios are less than they would have been.

MR. BROOKS asked about the outcome for the unfunded liability if the Alaska

retirement systems were not using the five-year asset value smoothing method. MR. SLISHINSKY said the unfunded liability would be a little bit less: the ratio of the actuarial value of retirement system assets to the market value is a little more than 98%.

Review of Mercer's 2004 Actuarial Valuation

MR. SLISHINSKY stated that Buck reviewed the assumptions and methods for the PERS and TRS, and they ran a replication of the 2004 valuation results. Buck will conduct a review of Judicial and Military systems later this year.

MR. SLISHINSKY said the projected unit credit method is more likely to produce increasing normal cost rates over time, particularly when these plans become closed groups and all new members will be going into a defined contribution plan beginning July 1, 2006. The entry age method is expected to produce more stable normal cost rates.

Buck Consultants found that Mercer's investment return assumption of 8.25% was reasonable long term, given the board's current asset allocation policy. Buck considers a 70% equity-like investment allocation for an 8.25% return assumption, and ARMB is at about 72% equity-like investments. Most plans have an 8.0% expected rate of return because most are at 65% equity-like investments.

MS. HARBO asked what most systems use for an inflation assumption. MR. SLISHINSKY said that for actuarial purposes most systems use an inflation assumption between 3% and 4%, so 3.5% is common on the actuarial side. Buck is also using 3.5% as an element of the salary increases, and fully recognizing the COLA benefits by using 3.5%. It is reasonable when looking at inflation historically.

MR. SLISHINSKY stated that, based upon the wage inflation assumption and the salary scale, Buck believes that the 4.25% payroll growth assumption is overstated. It appears that Mercer looked at the wage inflation that is used for PERS and TRS (4.0%) and also for Police and Fire (4.5%) and used a number halfway. But there is a lot more salary in the PERS and TRS systems than there is for the Police and Fire, so Buck believes it makes more sense long term to be consistent with the payroll growth assumptions for the larger base salary. Buck did not make any changes to this year's valuation, but they would recommend reducing it from 4.25% to 4.0% for the next valuation.

MR. SEMMENS inquired what impact changing the payroll growth assumption to 4.0% would have on the employer contribution rate. MR. SLISHINSKY said it would increase the employer rate, and over a 25-year amortization period he expected the amortization payment to go up about 2.5% with the change. For PERS that translates into a little less than 0.5% of payroll, and for TRS it is about 0.75% of payroll.

MR. SLISHINSKY stated that the demographic assumptions for the Mercer 2004

valuation were generally reasonable. He said Buck would be presenting the results of the gain/loss analysis they performed in a few minutes. Buck also intends to carefully review Mercer's retirement rate assumptions during the experience analysis to make a distinction between reduced and unreduced retirement rates.

MR. O'LEARY commented that the difference in expected inflation rates is always a source of question and confusion, given Callan's five-year inflation projection of 2.75% versus the actuary's 40-year inflation assumption of 3.5%. When Callan looks at investment programs they think in terms of about a 5.0% real return. The actuary's longer-term assumptions seem to have an imbedded expected real return of 4.75%. He asked, if one assumed that inflation was lower and the retirement system earned 4.75% real return, if the program would become fully funded (if all the other assumptions were met) or if the shrinking size of the active work force would be a problem.

MR. SLISHINSKY said there are a lot of moving pieces to that question and it would take some analysis and thought to determine the sources of gains and losses as the plans mature and find the answer.

MR. O'LEARY said he was not looking for an immediate answer but wanted to put that scenario on the table for people to think about.

MS. HARBO mentioned how early retirement incentive programs in the 1990s impacted the unfunded liability and asked what Buck would say about any future retirement incentive programs. MR. SLISHINSKY said it would depend on the structure of the early retirement programs, but Buck could provide a range of possible costs to the system based upon various factors, including healthcare. He said that typically if a system provides earlier eligibility for an unreduced pension it does two things: (1) it means that the pension is paid over a longer period of time so there is a greater cash flow expectation for that benefit; and (2) there is a shorter funding period - for example, 17 years of putting money into the pension fund instead of 20 years. Those two things generally increase the cost to a pension system.

Returning to his presentation of Buck's review of Mercer's 2004 valuation, MR. SLISHINSKY said that Buck matched the Mercer results pretty closely for the TRS. Some of the minor differences increased liabilities and some decreased liabilities so that in the end those differences were not material. Buck's measure of the pension accrued liability for PERS was actually less than Mercer's, but Buck's calculation of the accrued liability on the healthcare side was about 7.5% greater than Mercer's. Mercer was not assuming that someone was participating and getting a benefit between ages 50 and 60, and Mercer was using the wrong benefit amount for retirees due to a typo in the coding. There were some other minor differences in the valuation process on the pension side, but they were not material. Buck's total employer contribution rate for PERS was about 2% higher than Mercer's result.

Responding to MR. TRIVETTE's question about the definition of "material," MR. SLISHINSKY said that they like to see the calculation of the liabilities within 1%, and they view anything less than a 1% difference as not material. He added that there is no professional definition of what is material and what is not material.

2005 Actuarial Valuation Results

MR. SLISHINSKY stated that Buck Consultants was not making any changes to the actuarial assumptions, asset valuation method or funding method from the 2004 replication. Buck has made some corrections, especially on the valuation of the PERS healthcare benefits. Any changes to assumptions or methods will be recommended as part of the experience analysis that Buck is currently conducting.

MR. SLISHINSKY presented the PERS results first, starting with calculation of total system assets for police/fire and others combined pension and post employment healthcare (*see page 21 of Buck slides*). The actuarial value of assets is \$8.443 billion, plus \$148 million of gains that have yet to be recognized (future smoothing amount), for a total market value of \$8.591 billion at June 30, 2005.

Referring to a graph of the actuarial value and market value of PERS assets for the last ten years, MR. SEMMENS asked if there was some sort of smoothing methodology used from 1996 to 2002. MR. SLISHINSKY said there was some kind of method used for the actuarial value of assets that created a different value from the market value, but he had not looked at that method.

MR. SLISHINSKY reviewed a comparison chart of fiscal years 2004 and 2005 for PERS membership numbers, the annual compensation, assets, annual benefit payments, and accumulated members contributions. Noting that annual benefit payments are 6.6% of the market value of assets in 2005, he said benefit payments are generally between 3% and 7% from most systems. The 6.6% is close to the top of that range, and that is a reflection of the maturity of the PERS system, with 20,703 retirees and beneficiaries receiving benefits.

MR. SLISHINSKY presented data comparing the PERS employer contribution rates for 2004 and 2005. The unfunded liability of the system in fiscal year 2004 was \$3.414 billion, for a funding ratio of 70.2%. At July 1, 2005, the unfunded liability was \$4.402 billion, representing a funding ratio of 65.7%. The employer required contribution rate was 28.19% of pay for 2004 and 32.43% of pay for 2005.

COMMISSIONER CORBUS asked if Buck Consultants checked with Mercer on the understated valuation for PERS healthcare benefits that came to light in Buck's 2004 replication. MS. DELANGE explained that Buck called Mercer and walked through specific samples to find out what the differences were between the two calculations.

MR. SLISHINSKY also reviewed the actuarial contribution broken out between pension and post employment healthcare. He noted that the funding ratio on the pension side is almost 85%, but on the healthcare side it is only 42%. He presented a graph of the historical development of the actuarial accrued liability since 1996, split between pension and healthcare. The pension accrued liability part had a relatively level increasing value. However, in 2002 there was a large increase in the healthcare accrued liability due to some changes that Mercer made, and the healthcare portion is becoming a greater part of the total accrued liability for PERS. As of 2005, the healthcare represents about 45% of the PERS total accrued liability.

COMMISSIONER CORBUS asked what Buck Consultants would have come up with for the 2004 valuation, knowing what they know about the retiree healthcare system for those retirees between ages 50 and 60. MR. SLISHINSKY said the 2004 results would have been a lower funding level, a higher accrued liability, and a higher employer contribution rate.

CHAIR SCHUBERT asked how the PERS actuarial accrued liability history chart comported with her earlier question about the healthcare cost rate trending downward over time. MR. SLISHINSKY replied that because the healthcare cost trend rates are higher than the inflation assumptions on the pension side, healthcare costs are expected to go up faster. So the accrued liability will shift from pension more toward healthcare, but probably not to the degree that happened because of the Milliman audit in 2002 and some of the changes that Buck made in 2005.

MR. SLISHINSKY presented a graph of the PERS longer-term funding ratio history (assets divided by the accrued liability). He pointing out that the system was 68% funded in 1979 and 66% funded in 2005, but there were years in between that were over 100% funded.

MR. SEMMENS made the observation that PERS was overfunded in some years because the assumptions and calculations were wrong, so he was not all that comforted by this type of exhibit. MR. SLISHINSKY agreed that the graph did not show changes in benefit levels, assumptions, or differences in the actuarial gains and losses, etc. that occurred since 1979.

Starting on page 29, MS. DELANGE presented the same type of information for the Teachers' Retirement System that Mr. Slishinsky had talked about for the PERS. As of June 30, 2005, the actuarial value of assets is \$3.959 billion, plus \$68 million of gains that have yet to be recognized (future smoothing amount), for a total market value of \$4.027 billion. The ratio of the actuarial value to the market value is about 98%, similar to PERS.

MS. DELANGE also reviewed TRS member data, noting that the annual benefit payments are 8.9% of the market value of the system, which is a little bit high. It is an indicator that the TRS system is underfunded. The unfunded actuarial accrued liability is \$2.54 billion as of July 1, 2005. The funded ratio of TRS is 60.9%. Because the contributions are not all the way at the actuarial value of assets, the funded ratio is expected to decline. There was a small asset gain but not enough to make up the shortfall. The total annual actuarial contribution (normal cost plus amortization of the unfunded) is \$285 million, almost 51% of pay. Members are expected to contribute \$49 million, and the employer required contribution is \$236 million, or 42.14% of pay.

MS. DELANGE also presented the TRS actuarial contribution broken out between pension and post employment healthcare. The funded ratio for the pension part is 73.5% compared the healthcare funded ratio of 35.8%. She reviewed a graph showing the pension liability versus the healthcare liability where the pattern was similar to PERS — the pension liability increases slightly each year, as expected, but the healthcare side had a large jump in 2002 and a smaller jump in 2005. She drew attention to a TRS funding ratio history, where the system was over 100% funded in the 1990s but dropped to 68% in 2002 and is now at 61%. Overall, TRS is slightly more underfunded than PERS.

MR. SLISHINSKY summarized the results of the 2005 actuarial valuation for PERS and TRS:

- There were modest asset gains on the market value during the fiscal year. Buck calculated a dollar-weighted return of about 8.55%, or 0.3% greater than the 8.25% return assumption. [Mr. O'Leary said the PERS portfolio had an 8.68% time-weighted net-of-fees return for FY2005 and the TRS time-weighted return was 8.73%.]
- Delayed gains from prior years, along with the investment gain from the previous year, resulted in an actuarial value return of 9.1%, or 0.85% more than the 8.25% assumed. So there was another gain base established, and 20% of that is being recognized each year.
- There was loss on liabilities due to decremental experience, healthcare claims and trend, and changes from the prior actuary.
- In 2005 the unfunded liability in PERS has grown to \$4.402 billion. The unfunded liability in TRS has increased to \$2.54 billion.

MR. SEMMENS asked Mr. Slishinsky for an explanation of decremental losses, and he complied, describing how there are gain or loss differences between the actuary's assumptions and actual experience in a year for things like life expectancy, probability of death, retirement patterns, withdrawal patterns, salary increases, healthcare factors, etc. In addition to the decremental losses, there were also changes from Mercer, primarily in PERS on the healthcare side. MR. SLISHINSKY said that of the \$726 million

in decremental and other losses in PERS, \$399 million was due to the difference in which Buck valued the healthcare benefits versus the way that Mercer valued them. There was a \$300 million loss difference from multiple components on the healthcare side and a \$27 million loss on pension. The biggest decremental loss piece was the total number of covered medical members versus the expected number for the prior year.

COMMISSIONER CORBUS said he recalled a medical cost rate trend assumption from Mercer of 12% for a couple of years that dropped to 11% then tapered off to 10%. He asked why the Buck medical trend rate started at only 9.5% and goes down from there over time. MS. MILLHORN explained that there was a medical trend line that looked at 12% for about three years, then 11%, then 10.5% and graduated down. But last year, as part of the tier redesign study, Mercer looked at the medical costs and proposed a new methodology that broke out the medical costs from the prescription drug costs. That is why the current medical trend assumption starts at 9.5% and the prescription drug trend starts at 14%.

MR. SEMMENS asked for a clear answer on whether Mercer's calculation for healthcare was wrong. MR. SLISHINSKY replied that Mercer clearly made a typo on valuing the retiree health premium. However, the board would have to ask Mercer why they were not valuing benefits between ages 50 and 60 on PERS, when clearly Tier I people are eligible for that benefit and do not have to pay anything for it. The difference between Buck and Mercer on the TRS side for valuing healthcare benefits was \$29 million. There was an \$111 million loss on healthcare demographics and a pension gain of \$23 million.

MR. HULLA stated that about 75%-80% of the difference between Buck's and Mercer's calculations is science, but there are differences in methodology and approach as well — the "art" portion.

MR. SLISHINSKY continued with the presentation summary. He highlighted the increased employer contribution rates for PERS and TRS and the decline in funded ratios from FY2004.

MR. HULLA next discussed some issues on the healthcare side looking ahead. One of the aspects of the valuation is Medicare Part D that covers prescription drugs, creating an offset to the cost that was there prior. For the state's retiree healthcare plan long term, Buck believes the systems and retirees will be better off by adopting either a wrap-around or prescription drug plan that would be funded essentially by Medicare. There are accounting effects to the federal retiree drug subsidy that have to be worked through.

MR. TRIVETTE asked if a wrap-around retiree prescription drug plan would be different

than what the State of Alaska retirees have now. MR. HULLA said that if the state were to become a PDP (prescription drug plan) the benefits would have some different features but the total net value to retirees would be a greater dollar benefit. The state could be a PDP and qualify for federal government funding, and then fill in a lot of the "donut hole" — deductible and copayments — and actually end up providing better health benefits. It would be difficult if not impossible for the state to be a PDP and have exactly the plan benefits that the state has to today.

Responding to COMMISSIONER CORBUS's question about if GASB proposed rule No. 2006-a goes into effect, MR. HULLA said the part of the good situation the ARMB believes it is in for funding the medical benefits would not be as good as it looks for accounting purposes. For funding purposes it would still likely make sense to comply with the rules for a promised rebate. So there would be a potential disconnect both if the proposed new regulation stays in place and for the fiscal period starting after December 15, 2006. It is a prospective issue and something that Buck is also working on with other government employers.

MR. BADER asked, if the new accounting rule were adopted, if Buck saw any risk to the plan being tax qualified. MR. HULLA stated that in terms of the healthcare benefits he anticipated that they were part of the actuarially qualified plan structure. So that was separate. It is just that the accounting picture could diverge from the funding picture, which is one factor to consider in whether to adopt a prescription drug plan as opposed to the current prescription drug benefit. He added that because the State of Alaska faces some restrictions in modifying the prescription drug benefit as it currently exists, for some tiers it might prove impossible to become a PDP. That would have to be worked through.

MR. HULLA provided a few comments on Medicare Part A related to state government and agencies where employees did not participate in Social Security, hired prior to April 1, 1986. Unless those employees had employment prior to, or subsequent to, their state or agency career, they likely do not have 40 quarters of FICA-covered wages. Therefore, these employees likely do not qualify for Medicare Part A free of charge. Where state government and agency employers have a large population of retirees who never paid into Social Security, the state or agency system medical plans pay those hospital bills that Medicare Part A would pay otherwise. Currently, the valuation comes up with an average claim cost rate and spreads it across the retirees by age. But the retirees who had employment post April 1, 1986 will likely have Medicare Part A, and their liability will actually be significantly less. In the experience study, Buck Consultants will look at splitting that out. But that highlights a couple of areas that the ARMB might want to consider, prospectively, in terms of addressing Part A coverage. One consideration is that it might be cheaper for the state to pay Medicare Part A premiums on behalf of retirees who do not qualify otherwise and lower the net cost to the system

(because Medicare would pay the hospital bills). Another way to address the cost of "no-Part A" hospital claims is for the state to incent retirees to investigate and report on other potential sources of Medicare Part A coverage — for example, if a state retiree's spouse had FICA-covered employment where Part A would cover the state retiree's hospital claims. The caution is that Medicare is likely to pay less to hospitals than the state currently pays. So there could be hospital backlash if a large portion of state retirees were to suddenly switch from the "no-Part A" status to the state paying their Medicare Part A premium and hospitals getting paid the Medicare rate.

MR. SEMMENS asked if Buck Consultants could draw on their experience with retirement plans in other states and offer any suggestions for how the ARM Board should address the retirement systems' unfunded liabilities.

MR. SLISHINSKY listed the following areas for the board to explore:

- *Funding* - The easiest solution is to increase contributions. The other is looking at paying the obligation over a longer time period than the current 25-year amortization and reducing the amount of the annual contributions. GASB allows going out to 30 years. The cheapest way of eliminating an unfunded liability is to pay it off now. Another approach is looking at changes in funding policy — changing assumptions if they are reasonable, the payroll growth assumption, for instance.
- *Benefits* - Reduce the benefit obligation through a new tier. Make any other reductions that are allowable and legal within the framework of the benefit structure.
- *Investments* - Adjust asset allocation to get additional returns. Some states have looked into pension obligation bonds. It is an arbitrage — people borrow money and pay off the loan cheaper than investing, and long term it is better for the fund.

DR. MITCHELL asked Buck if it was a realistic goal for the state retirement systems to become 100% funded or if it was okay to be 75% or 80% funded. MR. SLISHINSKY replied that the systems do not need to be 100% funded. The extent to which the Alaska systems have an unfunded liability, it increases the costs to service that unfunded liability. DR. MITCHELL said if the ARMB was looking for balance between payer cost A and payer cost B, there might be a number less than 100% that would still be equitable. MR. SLISHINSKY agreed. He said one approach is "pay as you go," and that is zero percent funding as long as the system can pay the benefits. But it is the most expensive approach. He said a pension system could be maintained at 60% funded by contributing and paying for the accruing benefit and servicing that unfunded liability in perpetuity and never run out of money. DR. MITCHELL asked how many state retirement systems are 100% funded today. MR. SLISHINSKY guessed that maybe 10%-15% are 100% funded, there are more at 75% funded than there used to be, and there are some systems that are under 50% funded (Illinois Teachers and Oklahoma Teachers). Some

systems have huge unfunded liabilities but are still setting money aside and still making payments.

MR. BROOKS commented that the statistics have to be qualified with a statement about whether the systems are pension only or include health benefits. There may be zero systems nationally that are 100% funded with health benefits.

MR. SLISHINSKY agreed that over the last five years it is the health benefits portion that is really contributing to Alaska's increasing unfunded liability. He added that it is a good thing that Alaska is prefunding the healthcare benefit.

MR. SEMMENS stated that the ARM Board requested answers to several questions, and Buck has provided a partial list of answers using 2004 data. He asked when the board could expect complete answers from Buck using 2005 data. MR. SLISHINSKY replied that maybe late next week for the questions based on the 2005 results and probably a bit longer for some projection work.

The chair called a scheduled break at 4:00 p.m. When the meeting reconvened at 4:10 p.m., CHAIR SCHUBERT indicated that the Asset Allocation Adoption agenda item would be moved to Friday.

EXECUTIVE SESSION

MS. HARBO moved that the Alaska Retirement Management Board meet in executive session to consider matters which as a matter of law would be confidential, in this case, attorney/client privileged communications with the Attorney General's Office.

MR. TRIVETTE seconded.

The motion passed unanimously. Members of the public and other individuals participating in the meeting were excused, and the ARM Board met with Assistant Attorney General Mike Barnhill in executive session starting at 4:12 p.m.

The executive session ended at 4:34 p.m. While in executive session, the Board considered only the matters mentioned in the executive session motion and took no action.

REPORTS (Continued)

8. New Plan Investment Managers

MR. BADER reported that SB 141 created a defined contribution plan for the PERS and TRS, but there are some elements of the plan that are defined benefit in nature: the retiree major medical health insurance funds, the health reimbursement arrangement

plans, and the death and disability funds. Staff are in the process of crafting a letter to Rob Johnson and Mike Barnhill requesting guidance on the state's ability to access the pools that are currently providing service to the current defined benefit plan. Without the authority to access the existing fund pools, there will be zero assets in the new defined benefit funds, and the assets will grow very slowly initially. This limits the number of investment managers that might be interested in managing assets for the new defined benefit funds. Staff has contacted the current investment managers, and some of them have agreed to make their commingled funds available to the ARMB for accounts even smaller than \$1 million because of the retirement systems' size and the existing relationship with the ARM Board that they value.

MR. BADER stated that some of the asset classes that staff will be recommending to the board as part of the asset allocation are ones that staff is capable of managing internally. However, when the plan size is small, there is not enough diversification to avoid getting large tracking error. That could erode people's confidence in staff's investment ability if the tracking error happened to be on the down side. It may be possible to use index vehicles of some type, at least in the initial stage. So staff recommends that the ARM Board permit staff to set up accounts with some of the current investment managers across multiple asset classes.

MR. SEMMENS moved that the Alaska Retirement Management Board direct staff to set up accounts with some of the ARMB's existing investment managers for the major medical health insurance fund, the health reimbursement arrangement plan, and the death and disability fund that will be created as a result of passage of SB 141. MS. HARBO seconded.

On a roll call vote, the motion passed unanimously, 6-0, with Trustees Corbus, Harbo, Semmens, Trivette, Williams, Schubert present.

COMMISSIONER CORBUS asked if the retiree health insurance fund was part of the pension fund or completely separate. MS. MILLHORN replied that the retiree health trust was established as a separate account under the Internal Revenue Code 401(h), and it draws a premium from the retirement systems that is placed in the retiree health trust fund. So the trust fund has to be accounted for separately.

MR. O'LEARY stated that there are certain types of tax-exempt monies that can be commingled for investment purposes and others that cannot be commingled. At one point, tax exempt money under the 401(h) section of the tax code could not be commingled for investment purposes. However, some institutional investors use certain forms of investment commingled funds that only permit types of tax-qualified plans to participate. There are occasional changes to the tax code, and that is a potential issue for the ARM Board.

MR. SEMMENS asked if the portfolio management staff in the Treasury Division managed the retiree health trust fund. MR. BADER said yes, that staff sets an asset allocation annually that the commissioner of revenue approves. He added that the asset allocation is so conservative because of advice from the Department of Administration several years ago when the retiree health trust fund was simply a conduit for payment of medical expenses and did not contemplate the large amount that the fund has grown to. He said it is possible that through examination of the objectives of the retiree health trust fund and the balances held in it that the commissioner of revenue could set a more aggressive asset allocation. But up until this point, the Department of Revenue has been operating under a letter that goes back to previous administrations that indicates a desire for a very conservative asset allocation.

MR. SEMMENS expressed hope that the board would support an analysis of the retiree health trust fund to see if it is appropriate to change the asset allocation. He remarked that in February the board heard an extensive presentation from State Street Global Advisors on the securitization of cash that indicated the pension fund could earn \$6 million a year on residual cash in equity manager portfolios. Yet the board is sitting on a substantial amount of money in the retiree health trust fund that is being invested in a relatively low and conservative rate. Maybe an analysis would show that the fund could be invested more aggressively.

MR. BADER noted that the retiree health trust fund not only holds money for retiree health payments but also has funds related to retiree dental, vision and audio. So setting an asset allocation that is serving two different constituencies may require working with the Department of Administration to set up a separate account.

MS. HARBO stated that the dental/vision/audio and long-term care components are funded by the retirees and not by the employers.

MR. BADER said the long-term care funds are invested differently with a far more aggressive asset allocation.

MR. SEMMENS stated that the ARM Board is responsible for managing the retiree health trust fund, and if, because of more aggressive investment, the trust fund fell below the 15% minimum that Deloitte recommended, the money would come from the pension fund. He said he believed the retiree health trust fund should be invested more aggressively.

MR. BROOKS offered to assign Department of Administration staff to do a cash flow analysis of the retiree health trust fund and then work with the Department of Revenue to prepare a proposal for the board.

CHAIR SCHUBERT said that sounded like a good plan.

9. Chief Investment Officer Report

MR. BADER reported on the following items, most of which were included in the meeting packet:

- Correspondence with Alaska Permanent Fund Corporation. Chair Schubert covered this in her report earlier.
- Questions from trustees to Mike Barnhill. Also addressed in the Chair Report.
- Letter directing Mondrian to liquidate \$200 million. The Mondrian international bond portfolio has grown to greater than the target investment. The selling of assets will happen over time so there is an orderly approach to the target allocation.
- Letter placing BlackRock on the watch list. The board directed this action at the last meeting.
- Letter placing Cornerstone on the watch list. The board directed this action at the last meeting because of a management change.
- Communication from Buck Consultants. Buck provided tables for the PERS and TRS showing the amounts of supplemental cash infusions into the systems that would be required to address the unfunded liabilities over different amortization periods. For example, in PERS, if amortized over 30 years with the employer contribution rate capped at 21% (based on the 2004 valuation numbers), Buck indicates that the state would have to put another \$82 million a year into the system. MR. BADER said these numbers will be useful to the board when it makes its specific recommendations to address the unfunded liability. The problem with the analysis is that it assumes that all employers will contribute at 21% of pay, but some employers actually have a credit. But it does give the board an indication of what is possible.
- Review watch list. Updated to reflect recent changes. No recommended changes at this meeting.
- Investment Advisory Council vacancy. The three seats on the IAC are generally three-year appointments. The term for the seat currently held by Tim O'Brien ends June 30, 2006. Mr. O'Brien is in his third contract. Staff's recommendation is that the board advertise the position to see who else is in the market. This is no reflection on Mr. O'Brien's contributions, but it is useful to check and validate Mr. O'Brien's selection by having a vetting process again. Mr. Bader asked that the chair appoint a screening committee to review the applicants who respond to the advertisement.

MS. HARBO moved that the ARMB direct staff to advertise the investment advisory council seat currently held by Mr. O'Brien.

MR. SEMMENS seconded.

Responding to MS. HARBO's inquiry, MR. BADER said he expected to have a short list of candidates to appear before the board at the June meeting.

The motion passed without objection, 6-0.

- Extend legal services contract. Rob Johnson serves as the ARM Board's outside legal counsel and is under contract with the Department of Law. The Department of Law values the board's opinion and wishes to know if the board is comfortable with proceeding to extend the contract with Mr. Johnson's firm.

MR. SEMMENS moved that the Alaska Retirement Management Board recommend that the Department of Law extend the contract for legal services with Rob Johnson's firm. MS. HARBO seconded.

On a roll call vote, the motion passed 6-0, with trustees Williams, Trivette, Semmens, Harbo, Corbus and Schubert voting.

- Notification from Capital Guardian regarding commission recapture. Capital Guardian has written that they have negotiated new brokerage rates with brokers that will make it harder to meet the ARMB securities lending program objectives. If Cap Guardian is getting the lowest possible trading rates without soft dollars and commission recapture, that is what the pension fund needs. But until all the brokers are at the absolute bottom rate, the goal is to try harder. The ARMB commission recapture program has captured millions of dollars for the pension fund over the years.
- Relational Investors news item. There was a news item today that Relational gained a board seat on Sovereign Bank, and the bank has agreed to a second independent director on the board whom Relational will recommend. The agreement will stop Relational's litigation, and they will not try to prohibit any mergers that were in the works. One brokerage firm thought this might be a bit of a short-term negative but a good move for the investment long term. When Relational was hired by ASPIB, they said their intent was not to get into tussles with corporations, but in order to have credibility sometimes they have to stand their ground.

RECESS

CHAIR SCHUBERT recessed the meeting for the day at 5:00 p.m.

Friday, March 24, 2006

ACTUARY PRESENTATION TO HOUSE WAYS & MEANS COMMITTEE

At 9:00 a.m., the board, staff and the general consultant attended a presentation by Buck Consultants, the state's actuary, to the House Ways & Means Committee at the Capitol.

RECONVENE

The regular meeting reconvened at 10:30 a.m. on Friday, March 24, 2006. Trustees Schubert, Corbus, Trivette, Semmens, Harbo and Williams were present. Commissioner Nordstrand was attending another state meeting and rejoined the ARM Board meeting following the lunch break.

REPORTS (Continued)

Continuation of #7. Buck Consultants Actuarial Review (from previous day)

MR. HULLA referred to a handout entitled "DC Tier Health Plan Indexing" and spent about 15 minutes reviewing this proposal to reduce retiree healthcare costs in the defined contribution plan starting July 1, 2006. The proposal is to incorporate into plan documentation, future administrative procedures, and communication to new tier members the concept that the deductible and other out-of-pocket limits in the retiree healthcare plan will be indexed in future years to increasing costs for healthcare. Ideally, the plan is to increase out-of-pocket medical and prescription costs in proportion to total plan cost increases. The proposal would also mitigate premium increases over time and benefit all health plan participants in the new tier because once the retiree becomes Medicare-eligible at age 65 they have to pay a share of the premium based on their career life.

MR. HULLA said that the proposal is conceptually very easy but will be difficult to execute. The issues include defining the index; what to do for deductibles if the CPI does not increase or goes down; how to apply ratcheting increases on deductibles, out-of-pocket limits, retail prescription minimum/maximum, mail order copays, lifetime maximum, etc.; and getting the plan documents in place by June 30, 2006. The state would not physically operate this plan until new tier employees retired.

MR. HULLA stated that trying to put future deductible increases, for example, into a plan document as of July 1, 2006 is driven by the Alaska Supreme Court decision that even healthcare plan features are considered part of an employment contract. He said he was unaware of any other state offices that Buck works with where the medical plan

features are included in the employment contract. In Alaska, any future increases have to be put into the new tier documentation up front as much as possible.

MR. BADER said this proposal was a very positive development. The ARM Board, in its report to the legislature, included a recommendation about indexing the beneficiary health deductible in the new defined contribution plan commensurate with increases in the cost of living. He noted that the implications of what index is used will affect the board's asset allocation later on, because the current asset allocation is based on normal CPI.

10. Global Technology Strategy - RCM Capital Management

PETER ANDERSON, chief investment officer, WALTER PRICE, JR., senior analyst and portfolio manager, and MELODY McDONALD, relationship manager for RCM, talked to the board about RCM's global technology equity product. *[A copy of RCM's presentation booklet, containing charts, graphs and other detailed data, is on file at the ARMB office.]*

MR. ANDERSON said RCM currently runs \$3 billion of assets in the global technology format — \$1.3 billion of mutual fund money and the remainder in 25 separate accounts. The product has been operating for two decades with the same people managing the portfolio — Walter Price and Huachen Chen. There are two additional associate portfolio managers and five senior analysts who support them in San Francisco. They also draw from RCM's global platform of 55 analysts around the world. The global technology composite has returned 18.58% annualized since 1996. The one-year return through January 31, 2006 was 29.22%. The global technology fund is the number one fund in its category, measured by either Lipper or by Morningstar.

MR. ANDERSON reviewed the performance and risk statistics of the RCM global technology fund in the competitive universes. He stated that RCM captured significantly more of the up side when markets were rising, and they outperformed very modestly in down markets. He stressed that this is not a low volatility fund. But the total aggregate rates of return over any time frame, other than the disastrous environment of 2000-2002, have been outstanding.

MR. PRICE said that he and Mr. Chen both have engineering backgrounds and stayed in the technology sector of the market because technology and its subsegments constantly create new subsegments and new industries, which create tremendous wealth for investors. They look for subsegments of technology that they believe will endure for four or five years at a minimum, then they look for the great companies within those subsegments. Technology is an emerging, evolving sector, therefore, his team has to be willing to put the time in studying this new sector. RCM looks at a lot of areas and has consistently been there ahead of competitors. Technology is a highly risky area, and one of the ways RCM reduces the risk is by diversifying across multiple

subsectors of technology. Another risk reducer is buying the good companies that are building a barrier to entry within a subsector. RCM has found that a handful of companies in a subsector generate most of the return from that subsector, and so RCM always pays up for the leader in an area.

MR. PRICE described the "checks and balances" among the four members of the RCM global technology portfolio management team. He also reviewed how the technology analysts cover the world and stated that the non-U.S. part of the technology portfolio typically has been anywhere from 5% to 35% of the portfolio. When they find an attractive subsector, they want to own the best company in the world in that subsector — best being best positioned and good value.

MR. PRICE mentioned the GrassrootsSM Research department that RCM created in the mid-1980s. This market research is very important in technology because the researchers talk to the customers and distributors of the new products and help sort through the overstatements and avoid the accident factor.

MR. PRICE explained the two types of companies the global technology portfolio management team looks to invest in: (1) where there is a management change or business change, and the company is going to dramatically increase its profitability because of either a new product cycle or a new leader with a new focus for the company; and (2) secular growth, such as companies that facilitate use of the internet (games, messaging, etc.), software companies, wireless and wireline networking focused on data, innovative consumer products, digital audio and video use around the internet, digital animation, cheaper component companies in Asia, and sophisticated software that ties production, design and marketing together globally. RCM looks for about a 50% return from a stock over a year or two-year period.

MR. PRICE drew attention to a list of holdings in the portfolio. The largest position is a little over 4%. His view is that there are a lot more interesting technology companies and it is a much better environment for technology in 2006 than it was in 2005. There are a broad group of companies that are doing well, so as a result, RCM has broadened the technology portfolio and made more 3% positions and fewer 5%, 6%, 7% positions.

MR. BADER asked for an explanation of the use of calls in the global technology portfolio. MR. PRICE replied that RCM has always put some calls to protect the portfolio. If a stock ran up, they traditionally would sell calls against their position. So one of the ways to get a 50% return on Hewlett Packard is rather than owning the stock and getting a 30% return, they can own a blend of the stock and the longer-term options and get a 50% or 100% return from RCM's insight about the company. Calls would never be more than 5% of the portfolio.

MR. ANDERSON stated that RCM strongly believes that the use of calls is an attractive part of the financial market. Volatility right now is really underpriced, and that makes options very attractive. RCM recently hired a full-time options strategist whose purpose is to work with portfolio managers to find the most effective option strategies so RCM can capture that return.

MR. TRIVETTE mentioned that there has been a lot of press coverage about consumers encountering a language barrier where companies have outsourced their customer service to India. He asked if that was an issue for the portfolio managers of the technology fund. MR. PRICE said RCM is not that enthusiastic about the companies that have outsourced the maintenance service and help desk services. He likes the companies that work in programming languages. By developing half way around the world in India, companies in California have 24-hour development between the two operations.

MR. PRICE said that being located in the Bay area of California means RCM is in the midst of venture capitalists, entrepreneurs, and bankers and investors, that feed off each other and develop new industries. There is survival of the fittest of the ideas in the venture capital community, and then when they go into the public market, very often they are great investments for the next five years as well. He said he did not see that exciting process ending.

MR. SEMMENS moved that the Alaska Retirement Management Board direct staff to work with Callan Associates and whatever other consultants are needed to bring a recommendation back to the board on the suitability of a global technology equity investment vehicle. MS. HARBO seconded.

On a roll call vote, the motion passed unanimously, 6-0, with Trustees Corbus, Harbo, Semmens, Trivette, Williams and Schubert voting.

MR. BADER indicated that he would have a report at the June board meeting.

11. Strategic Mortgage Strategy Analysis

MR. O'LEARY stated that Callan Associates had prepared an analysis of the TCW Strategic Mortgage strategy that Trust Company of the West (TCW) Asset Management Company presented at the February board meeting *[included in the meeting packet]*.

Referring to the staff recommendation also included in the meeting packet, MR. BADER explained that staff tries to ferret out the best-performing funds they can find and bring them to the board for consideration. The TCW Strategic MBS fund has had an outstanding record over a long period of time, however, the performance for the last three years has not been particularly exciting. That by itself is not of great concern

because the strategy has a lot of volatility. But the primary inspiration for the TCW Strategy MBS fund, Jeff Gundlach, has become chief investment officer of TCW, and although TCW may say that his new duties will not impact his ability to run the fund, ARMB staff does not see it that way. It is hard to believe that someone can become the CIO of a company as large as TCW and not be dealing with administrative issues and supervision of other product managers, etc. So that change coupled with the three-year underperformance and the fact that this fund has a very high management fee lead staff to believe that, although the ARM Board may be missing a great opportunity, they can also look for other funds that might have better returns. The TCW Strategic MBS fund is a great fund, and it would not be wrong if the board wanted to proceed with it, but staff's recommendation is to take a pass on this one.

CHAIR SCHUBERT queried the trustees to see if anyone wished to hear Mr. O'Leary's full presentation on TCW's mortgage strategy. There was no interest in exploring the topic further at this time.

MR. BADER stated that at the February meeting the board also heard a presentation by SPARX Securities on a proactive governance style of equity investing in Japan. Staff was unable to prepare a report in the short time between the February and March board meetings but anticipated making a presentation at the June meeting.

12. Asset Allocation Adoption

MR. O'LEARY had a short slide presentation of asset allocation policy alternatives, noting that staff would formulate a specific recommendation to the board for each of the pension systems.

He started with the Militia and Judicial retirement systems. There was no proposed change to the fiscal year 2007 asset mix from the FY06 policy for the Militia retirement fund. This plan is essentially a "pay as you go" plan, and the fund balance is very small. Callan's suggestion is that the Militia fund be invested very conservatively, which it has been. Callan sees no reason to change that.

MR. O'LEARY said the Judicial retirement fund has an allocation that is more similar to the PERS and TRS funds. In discussions with the staff and Dr. Jerrold Mitchell and Dr. William Jennings of the Investment Advisory Council, they all agreed about trying to modestly increase the expected return for each of the policies — but the emphasis was on a "little" bit more aggressive. So the proposed change for the Judicial retirement fund to get a slight increase in expected return is explicitly incorporating an allocation to emerging markets equity. The systems have been investing in emerging markets, but the change is building in an explicit target for emerging markets. That may understate the actual exposure to emerging markets because there is exposure now both through the Capital Guardian and J.P. Morgan dedicated emerging markets funds, and the

developed international market managers that have the authority to invest in emerging markets. The other change to the Judicial retirement fund is introduction of TIPS (Treasury Inflation Protected Securities). Part of the reasoning for including a dedicated allocation to TIPS in the Judicial plan is that the plan does not invest in the "Other" category, which is part of PERS and TRS. "Other" includes the energy fund investment with TCW and the farmland investments. In both cases, the driver behind the prior board's decision to pursue those alternatives was to get an equity-like real return but also to have some longer-term inflation protection. Dr. Jennings advocates TIPS at every opportunity. The dedicated allocation to TIPS will come from the traditional domestic fixed income category so, arguably, the move is improving the credit quality, but it is changing the dynamics of the fixed income portfolio.

CHAIR SCHUBERT said she was glad to see TIPS appear in the asset allocation because she recalled advocating for this inflation-protected investment seven or eight years ago.

DR. JENNINGS stated that a board can do liability-relative investing without an actuary. The liability is linked to inflation, so any asset that is more of an inflation-linked asset is going to be a good thing. If TIPS are plugged into an optimization program, most of the academic studies show that TIPS displace half or more of the nominal fixed income. That is because nominal bonds will get hit hard if there is unexpected inflation. The dedicated TIPS allocation in the board's asset allocation policy is a start in the ARM Board being more liability aware than the investment program was previously. He put in a plug for the long-duration TIPS because the ARMB has a long-duration inflation-linked liability. So the board could look further into the 20-year TIPS as the program develops. There are states that have an explicit deviation from the normal TIPS benchmark to say that they only want to look at the very longest term ones because the plans have a long-term liability.

MR. BADER explained the column labeled "New Plan," saying there are three accounts of money set up for each of PERS and TRS. One is the health reimbursement arrangement plan, which is the amount that will be invested on behalf of all participants. In the future, the board will be asked to establish a crediting rate for those participants that likely will be based upon the returns of the account. Second is the portion of the new defined contribution plan that will be required to fund the plan's portion of the retiree health insurance. Third is the death and disability portion that is also being accounted for separately. Staff is recommending the same asset allocation for all three accounts because the same earnings assumptions were used for them.

MR. O'LEARY stated that the new defined contribution plan will be starting up with zero assets, so one of the hurdles was to find a way to gain various investment exposures, cost effectively. He said that Mr. Bader referred earlier in the meeting to the possibility of using index vehicles of some type, at least in the initial stage. So were the board to

adopt this asset allocation policy, it is important to recognize that it is not the new plan participating in the existing real estate pool: it would be using a REIT portfolio until reasonable assets have been accumulated, and the initial thinking is that it would be an index REIT portfolio.

MR. O'LEARY said the TIPS allocation in the New Plan is 10%, and there is no allocation to either high yield or absolute return. That is also for the start-up reasons. Callan recognized that the observed volatility would be greater through investment in a REIT portfolio than in a real estate portfolio of direct properties. That contributed to his enthusiasm for having a significant TIPS allocation because presumably that would help partially offset that observed volatility in real estate.

MR. O'LEARY reviewed the asset mix alternatives in Callan's optimization set 2006 that started with a 6.0% expected return in mix 1 and went up to an 8.5% return expectation in mix 5. Given the input assumptions that were discussed at the February meeting, the six mixes would be the most efficient possible — the lowest risk for a particular targeted level of return. Without question, the proposed mix for the new plan is an aggressive mix and produces an expected return of 7.93%. Although not as high as the expected return for PERS and TRS in FY07, Callan believes the new plan expected return is toward the upper end of what is reasonable given the longer-term capital market assumptions.

MR. O'LEARY reviewed a graph and chart of expected return ranges in a one-year period for the Militia fund, Judicial fund, New Plan, and five efficient asset mixes. The median expected return for the New Plan is 7.93%, but in any year there is a 5% chance that it would have a negative return of 10.33% or worse, and there is a 5% chance that it would have a positive return of 29.90% or better.

MR. O'LEARY also presented a similar graph and chart of expected return ranges for a five-year period. The range of returns was compressed, but there was still the possibility of a negative return over five years. He showed an efficient frontier graph of the various plans and asset mixes.

MR. O'LEARY discussed the current and proposed asset allocation policies for PERS and TRS. He said Callan constrained the optimizer to 5% of absolute return and 0% in TIPS. The ARMB's current policy would generate an expected return of 7.89% with a standard deviation (risk level) of 11.69%. Callan, ARMB staff and Dr. Mitchell and Dr. Jennings of the Investment Advisory Council considered a broad number of alternative policies and agreed that the mix labeled "Proposed 07" would be a reasonable alternative. It would have an expected return of 8.05%. The asset allocation would have no change in large cap or small cap domestic equity. International equity would drop from 15% to 14%, but emerging markets equity would be added at 2%, so arguably the international equity target would increase to 16%. Private equity would be increased

from 6% to 7%, domestic fixed income reduced from 24% to 20%, high yield left at 2%, and non-dollar fixed income would remain at 2%. The absolute return would be increased from 3% to 4%, real estate would go up from 9% to 10%, and the "other" category would stay at 3%. (Energy and farmland are in the "other" category and have higher rates of return and higher volatility.)

Responding to MR. SEMMENS about TIPS, MR. O'LEARY said that the board has never precluded investment in TIPS, and TIPS could be used in the domestic fixed income portfolio. However, TIPS are not in the fixed income index, so the in-house manager of fixed income investments, Bob Mitchell, would have to be enthusiastic about the outlook of TIPS for him to use them.

BOB MITCHELL stated that he has used TIPS from time to time.

MR. O'LEARY called attention to the expected return increasing from 7.89% for the current policy to 8.05% for the proposed asset allocation policy for 2007. That is an additional 16 basis points of expected return, but it picks up a lot more annual volatility. Whenever a policy moves from the more conservative policies on the left of the graph to the more aggressive policies on the right, you pick up a little bit of gain in expected return, but you pick up more volatility. The ARM Board is getting far enough out on the right to pick up a not insignificant amount of volatility for the incremental expected return. The ARMB current policy is almost on top of mix 4, while the proposed policy is between mix 4 and mix 5.

MR. O'LEARY related that when the prior board contracted for a fiduciary audit, one of the audit recommendations was that whenever the board was considering asset allocation policy that they explicitly look at the ranges of returns and also at the probability that the adopted policy would meet the actuarial earnings assumption. He presented a graph showing the 8.25% actuarial return assumption, Callan's expected inflation rate of 2.75%, and the range of projected returns for all the mixes. The proposed 2007 policy would have a 49% probability of meeting or exceeding the 8.25% actuarial earnings assumption for a one-year period. A similar exhibit showed the probability of various mixes meeting the actuarial earnings assumption over a five-year period.

MR. O'LEARY stated that there are an infinite number of permutations and combinations between each of the numbered efficient frontier mixes. Callan had four telephone conversations with members of the IAC and explored a lot of the intermediate combinations. From the board's perspective, the key drivers are whether the board is comfortable with the notion of moving a bit to the right to a slightly more aggressive asset mix, and whether any of the specific asset allocation changes from 2006 to 2007 cause discomfort.

Asset Allocation Resolutions for Board Action

MR. BADER drew attention to a series of asset allocation resolutions in the meeting packet for the board to consider. He said the resolutions reflected discussions with Callan Associates and Dr. Jerrold Mitchell and Dr. William Jennings of the Investment Advisory Council, and the presentation material that Mr. O'Leary just reviewed. He read the staff recommendation for each resolution aloud before the board took action.

1. Resolution 2006-11 PERS/TRS

MR. SEMMENS moved that the Alaska Retirement Management Board approve Resolution 2006-11 related to the strategic asset allocation for the Public Employees' Retirement System and the Teachers' Retirement System. MR. WILLIAMS seconded.

MR. TRIVETTE said he was comfortable with approving the asset allocation based upon Dr. Mitchell's e-mail that he wrote following his formal comments at the end of the February board meeting.

The roll was called, and the motion passed unanimously, 6-0, with Trustees Trivette, Williams, Semmens, Harbo, Corbus and Schubert present.

2. Resolution 2006-12 Military

MS. HARBO moved that the Alaska Retirement Management Board approve Resolution 2006-12 related to the strategic asset allocation for the Alaska National Guard & Naval Militia Retirement Systems. MR. TRIVETTE seconded.

The roll was called, and the motion passed unanimously, 6-0, with Trustees Trivette, Williams, Semmens, Harbo, Corbus and Schubert present.

3. Resolution 2006-13 Judicial

MS. HARBO moved that the Alaska Retirement Management Board approve Resolution 2006-13 related to the strategic asset allocation for the Judicial Retirement System. MR. SEMMENS seconded.

The roll was called, and the motion passed unanimously, 6-0, with Trustees Trivette, Williams, Semmens, Harbo, Corbus and Schubert present.

4. Resolution 2006-14 PERS Tier IV Death and Disability

MR. SEMMENS moved that the Alaska Retirement Management Board approve Resolution 2006-14 related to the strategic asset allocation for the Defined Contribution Plan Death & Disability Funds. MR. WILLIAMS seconded.

The roll was called, and the motion passed unanimously, 6-0, with Trustees Trivette, Williams, Semmens, Harbo, Corbus and Schubert present.

5. Resolution 2006-15 Health Reimbursement Arrangement

MR. WILLIAMS moved that the Alaska Retirement Management Board approve Resolution 2006-15 related to the strategic asset allocation for the Defined Contribution Plan Health Reimbursement Arrangement Plans. MR. TRIVETTE seconded.

The roll was called, and the motion passed unanimously, 6-0, with Trustees Trivette, Williams, Semmens, Harbo, Corbus and Schubert present.

6. Resolution 2006-16 Defined Contribution Health Plan

MR. WILLIAMS moved that the Alaska Retirement Management Board approve Resolution 2006-16 related to the strategic asset allocation for the Defined Contribution Plan Retiree Major Medical Health Insurance. MR. SEMMENS seconded.

The roll was called, and the motion passed unanimously, 6-0, with Trustees Trivette, Williams, Semmens, Harbo, Corbus and Schubert present.

[Commissioner Corbus left the meeting at 12:01 p.m.]

7. Resolution 2006-17 PERS/TRS Cash Transition Funds - DC Plan

MR. SEMMENS moved that the Alaska Retirement Management Board approve Resolution 2006-17 related to the strategic asset allocation for the Public Employees' Retirement System and Teachers' Retirement System Defined Contribution Plan Cash Transition Funds. MS. HARBO seconded.

The roll was called, and the motion passed unanimously, 5-0, with Trustees Trivette, Williams, Semmens, Harbo and Schubert present.

LUNCH RECESS

The meeting recessed for lunch at 12:02 p.m. When the chair called the meeting back to order at 1:25 p.m., Trustees Schubert, Trivette, Harbo, Semmens, Nordstrand and Williams were present. Trustee Corbus rejoined the meeting in progress at 1:25 p.m.

13. Future Assets to Future Liabilities - A Balance Sheet Approach to Creating a Solution to the TRS/PERS Funding Problem

MR. BADER stated that the following proposal was discussed at a legislative committee meeting and is now in House Bill 492. He introduced BRIAN ROGERS, a member of the

University of Alaska Board of Regents, and BOB SHEFCHIK, chief of staff at Fairbanks North Star Borough. These gentlemen spent the next 55 minutes talking to the board about a concept that the university has worked on to try to solve one of its biggest future problems and one that has been a challenge for all local governments, school districts and the State of Alaska — dealing with the unfunded liabilities of their retirement systems. *[There were some slides that contained charts of data that are on file at the ARMB office.]*

MR. ROGERS said the university's outstanding liability in the PERS and TRS now exceeds \$377 million, and annual costs into the future for 25 years is about \$400 million to pay off the liability. If that \$400 million were not being paid into the liability it could be used to address other public concerns.

MR. ROGERS reviewed the different approaches that have been put forth so far: do nothing, raise contribution rates, make cash payments into the systems, financing, buy out the employees, and transfer assets. The university looked closely into the asset-based approach because the University of Alaska received a transfer of land assets and interests in land from the state as part of resolving some long-standing issues. As the university sells, leases or otherwise generates income from the land, the money will accrue to the university without further appropriation by the state. The second reason for exploring the asset-based approach was that the gas pipeline started moving into the nearer term, with the state negotiating a stranded gas contract. The natural gas reserves are on the state's balance sheet at a zero carrying value right now, but there is real value there.

MR. ROGERS said the university believes the state should consider transferring an asset to the retirement systems that has real value, that will produce income in the future, and that could assist in matching the timing of the revenue received to the timing of the obligations that the retirement systems have to pay out benefits. The asset would be the gas portion of the North Slope leases, net of the Permanent Fund deposits and other constitutional obligations. The approach would alleviate the year-to-year hit of the contribution rates on employers.

MR. SHEFCHIK reviewed the results of the retirement systems (ARM Board) receiving a transfer of future revenue-producing assets at a level to offset the unfunded liabilities. He said it would have to be a transfer of real assets and not a paper shuffle in order to create a sound foundation for the retirement systems into the future. The cost to the state would be giving up the 12.5% state royalty on known natural gas reserves, as well as property taxes and other revenues from that asset.

MR. SHEFCHIK stated that there are complexities to what seems on the surface to be a simple solution for getting \$5-\$6 billion transferred from the state into the ARM Board portfolio. He reviewed a list of actions to implement the solution, starting with passing a

bill to transfer the assets, and moving on through identifying and valuing the gas interests, reducing the actuarially determined normal cost rates, and finally being able to adjust the state budget downward. The ARM Board would hold the asset in its portfolio like any other asset and adjust its value up and down each year as the deal on the gas pipeline progressed. This solution provides a substantial potential source of revenue that the ARM Board should think about.

MR. ROGERS reviewed questions that have to be addressed under the categories of (1) defining the assets to be transferred, (2) constitutional issues, and (3) creating a resolution to offset future potential retirement system liabilities with future potential income-producing gas assets and reduce demands on PERS and TRS employer budgets.

MR. SEMMENS said he appreciated hearing about an idea that is outside the normal solutions, but a future potential income-producing gas asset would be an illiquid asset that the ARM Board could never sell. He said that if Mr. Bader were to present such an investment proposal to the board he would be met with some skepticism. He said he wished the idea was coming ten years down the road when it was certain the asset would be producing gas revenues in the next two years because the pipeline was under construction, etc. It would take some of the risk out of the proposal.

MR. ROGERS agreed that one of the biggest challenges to the ARM Board in evaluating this asset is that it is illiquid for at least the first ten years. On the other hand, Mr. O'Leary helped the university move into some private partnerships that it cannot draw money out of for six to eight years, yet those have been some of the portfolio's best performers. He suggested that there might be ways to hedge some of the risk out of such a large illiquid asset in the pension fund portfolio and stay within the prudent investor rule.

COMMISSIONER NORDSTRAND observed that by the employers not having to pay the \$414 million past service cost every year to pay off the PERS and TRS liability, it puts that money into the Alaska economy now rather than ten years from now when the royalty stream from the gas line, for example, starts producing that income for the state. So it is making a value judgment that it is better to have the \$414 million a year in the economy now than it is ten years from now.

MR. ROGERS agreed with that analysis, and said it would be dealing with only a portion of that new gas revenue. At the same time that the state starts receiving royalty revenue it will be receiving property tax revenue and petroleum production tax (PPT) and/or severance tax revenue. It will be a substantial jump in state revenue, and one can understand why the governor has made this the top priority of this administration. It is the legislature's and the governor's decision to pass a law to transfer interest in known natural gas reserves and the ARM Board's decision as to whether it makes sense to

receive the asset.

There was discussion that HB 492 currently excludes all municipalities, but that provision could be put back in. Even if the municipalities were not included, the proposal could solve \$5 billion of a \$6 billion unfunded liability problem and is reasonable public policy for that reason. Also discussed was how long the asset would produce income against the 30-year payout of the unfunded liability, and what the ARM Board would do if there were excess returns.

CHAIR SCHUBERT said she was having a hard time garnering support for the idea of the board receiving a potential revenue-producing asset to offset unfunded retirement system liabilities. She said the Governor's Office and several of the commissioners worked very hard to negotiate a deal with producers that was sent to the legislature. The legislature then started to tinker with the agreement, and the producers responded with ads that indicated that the changes were not acceptable and might cause them to walk away from the deal. When Senator Ted Stevens addressed the legislature recently he essentially said that if the gas line does not get built now it will never get built because of other liquefied natural gas (LNG) operations that are set to come on line. She said the risk of not being able to garner any benefit from the gas interests is so great that she could not find a reason to support it.

MR. ROGERS said this type of asset transfer does have to be regarded in the context of other activities going on in the legislature. It is not over until it is over. It is likely that absent a stranded gas contract, this proposed solution would not be worth doing. But the general expectation is that this legislature will see a stranded gas contract, recognizing that there are several steps and special sessions to get there. Once a contract is in place and there is fiscal certainty, that might be when this asset-based approach passes the legislature.

MR. SHEFCHIK remarked that the best solution to the unfunded liability would be cash, the next best would be oil, and after that would be gas.

COMMISSIONER NORDSTRAND stated that if the unfunded liability was paid by increased employer contribution rates over the next 30 years, however onerous, it would be general funds for most of the rate but also other fund sources over the course of time (grants, federal money, municipalities, etc.). But the transfer of future gas interests to the pension fund would be paying the whole thing with a state asset that would eventually be general funds. He said it is important to understand that there are opportunity costs lost from other fund sources by pulling everything from general funds.

MR. ROGERS said it is a policy tradeoff, and there is no way to fix one entity's liability without fixing another's. He posed the question: is it worth it to see the contribution rates go to 30%, 40% or 50%?

Trustees and the presenters briefly discussed substituting an oil asset for a potential gas asset in the proposed solution, and what other state pension plans might be doing in this regard.

MR. O'LEARY commented that the proposal is that the state transfer some asset to the pension system that has some value but it could be difficult to discern. From the trust perspective, the pension system position would be improved because it would have an asset it did not have previously. The risk is that the pension system is foregoing some portion of contributions for some period until it determines that the asset is not worth as much as it is perceived to be, at which point the system would start seeking increased contributions.

MR. ROGERS said he believed the transfer of future gas interests to the pension system would be worth more than the short-term \$124 million a year annual increases in contribution rates.

CHAIR SCHUBERT called a scheduled break from 2:10 to 2:38 p.m. She noted that the meeting was ahead of schedule so the board would take up other agenda items while waiting for Mr. Gaguine to arrive to present the report on proposed regulations.

UNFINISHED BUSINESS

MR. BADER reported that Representative Seaton wanted him to inform the board that at the House Ways & Means Committee meeting today he is anticipating an amendment to HB 488, the petroleum production tax (PPT) bill. Rep. Seaton's amendment relates to tax credits that might be available under the bill for companies that do exploration in Alaska. The amendment would make it possible for the ARM Board to be able to purchase those credits for less than 100% on the dollar (possibly at 91.7% of face value) if nobody else purchased them. So the board could be earning 8% a month on those credits.

MS. HALL reported on the following:

- 1. Disclosure Reports** - The list of disclosures for individual financial transactions by trustees and staff was included in the meeting packet.
- 2. Meeting Schedule** - An updated calendar was included in the meeting packet.
- 3. Legal Report** - Mr. Johnson indicated there was no legal report.

Charter of the Real Estate Committee

Real Estate Committee chair LARRY SEMMENS referred to a handout of the charter the committee developed and approved to forward to the board for adoption.

MR. SEMMENS moved that the ARM Board adopt the charter of the Real Estate Committee, as recommended by the committee. (no second needed).

The roll was called, and the motion passed unanimously, 7-0.

NEW BUSINESS

CHAIR SCHUBERT solicited volunteers for the IAC Search Review Committee. Trustees Harbo, Semmens and Trivette volunteered. The chair said she would also participate on that committee.

OTHER MATTERS TO PROPERLY COME BEFORE THE BOARD

Prompted by an inquiry from MR. TRIVETTE, CHAIR SCHUBERT said she would work with staff to schedule another meeting of the Report to the Legislature Committee.

REPORTS (Continued)

14. Proposed Regulations

JOHN GAGUINE, a contract attorney for the DOA Division of Retirement and Benefits, reported that the Division is repealing and revising a lot of regulations that pertain to the old PERS and TRS boards. He said he would be conferring with the board's attorney, Rob Johnson, on the regulations within the purview of the ARMB. There will not be a lot of new regulations because the new statute that created the ARM Board covers a lot of practices and procedures.

MR. GAGUINE said there is a set of regulations that is pretty well ready to go, and there is another set that is awaiting instruction on the exact procedures on rollovers, contributions, etc.

MR. GAGUINE stated that, at the advice of the Department of Law, the Commissioner of Administration will be readopting all the old regulations that will not change, in order to reflect the adoption authority shifting from the board to the commissioner.

[A March 10, 2006 memorandum from Mr. Gagaine to the Division of Retirement and Benefits and a synopsis of the regulations project to date were included in the meeting packet and are on file at the ARMB office.]

PUBLIC/MEMBER COMMENTS - None.

INVESTMENT ADVISORY COUNCIL COMMENTS

DR. JENNINGS said one of the explicit charges to the IAC is to advise on the selection of performance consultants. With that in mind, he wished to comment on the transition from Eileen Byrne to Jeannine Balsamo as the board's primary real estate consultant at Townsend Group, the growing depth of the staff's expertise, the increasing allocation to real estate, in-sourcing some of the REIT portfolio, and the fact that there is a new set of constituents on the committee. Taken together, and given the specific charge to the IAC, he encouraged the Real Estate Committee to re-evaluate the real estate consulting relationships. This task is not timeline critical, but enough things have changed that it would be prudent to look at that.

DR. JENNINGS said he saw the board at this meeting accept the Mercer actuarial assumptions, although Buck Consultants mentioned the potential of changing the assumptions at some future date. The 8.25% earnings assumption is driven by a real return assumption involving an equity risk premium and some inflation assumptions. He said he did not think the market expected inflation assumption was anywhere close to 3.5%, even over the very long term. Secondly, Buck was assuming a larger equity risk premium than he felt could be supported, and it was higher than Callan's numbers. If there is ever a move to a lower return assumption, now is a better time to do it than a few years from now. Do not solve the \$6.9 billion problem and then find the ARMB's peer group lowering their return assumptions and think that is the time to bring down the board's return assumption. If there were a lower investment return, it obviously would create a bigger deficit number. Buck indicated that the pension fund was within the "best estimate" range, but Buck would probably agree that the expected return on investments is at the higher end of that range. Taken altogether, the board has adopted the actuarial assumptions that were at least part of the underfunding situation. If he were in the board's place, he would be very conscious of making an active decision with respect to that. It could be a slippery slope where Buck came in with very similar assumptions, and it could be a year or two before the board gets to the point of officially accepting lower assumptions.

MR. BADER stated that staff met with the Division of Retirement and Benefits, at least as it relates to the actuarial assumptions. Buck Consultants will be doing an experience analysis for the retirement systems and will be presenting any recommendations to the board at a future meeting.

MS. MILLHORN said that Buck Consultants believes September will be a realistic time for them to have the experience analysis completed, so there would be time for the second actuary to review Buck's work.

MR. BADER stated that Dr. Jennings' comments are timely, and some of that work is

underway. The board will be hearing a report on the experience analysis and any new actuarial assumptions at the September meeting.

MR. O'LEARY said that he has stated at every meeting of this board that at some point the changed nature of the PERS and TRS defined benefit programs has to be taken into account. The biggest manifestation of that is a change in the cash flow picture. He encouraged the board, as each funding proposal is put forth, to think about what it means in terms of cash flow. The actuaries reported yesterday that the magnitude of the TRS benefit payments as a percent of the assets of the trust

is now above the normal 3% to 7% range. So when a proposal is put on the table to potentially reduce the amount of cash that is coming in, it makes the amount of cash that is going out that much more important because the only source of that cash going out is the marketable securities in the portfolio. That ultimately has implications on an appropriate asset allocation policy with respect to those assets.

MR. O'LEARY noted that today the board approved an asset allocation target that has 10% in real estate, 7% in private equity, 4% in absolute return, and 3% in the "other" category, which is farmland and energy. Absolute return is comparatively liquid, but there is 20% of the corpus of the retirement trust that is in illiquid investments. So if there is a large increase over the near term in the net cash flow to the fund, the board might have to rethink those numbers. Given the underfunded position, the operating presumption at the moment is that there will be a lot of cash coming in, and so that point of concern as it would affect investment policy is somewhere out in the future. So he wanted the board not to forget about that aspect as it considers a range of alternatives. If the board changes its policy, it clearly has implications for the expected investment return. And to the extent that the board has to put greater emphasis on the liquid markets, it probably means a lower investment return assumption.

TRUSTEE COMMENTS - None.

FUTURE AGENDA ITEMS

Items were mentioned throughout the meeting.

ADJOURNMENT

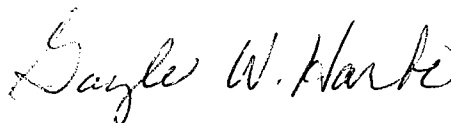
THERE BEING NO OBJECTION AND NO FURTHER BUSINESS TO COME BEFORE THE BOARD, THE MEETING WAS ADJOURNED AT 2:58 P.M. ON MARCH 24, 2006, ON A MOTION MADE BY MS. HARBO AND SECONDED BY MR. SEMMENS.



Chair of the Board of Trustees
Alaska Retirement Management Board

ATTEST:

Corporate Secretary



Note: The summary minutes are extracted from a tape recording of the meeting and are prepared by an outside contractor. 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