

State of Alaska
ALASKA RETIREMENT MANAGEMENT BOARD
MEETING

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

MINUTES OF
February 14-15, 2008

Thursday, February 14, 2008

CALL TO ORDER

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

ROLL CALL

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

ARMB Board Members Present

Gail Schubert, *Chair* (arrived at 10:35 a.m.)
Sam Trivette, *Vice Chair*
Gayle Harbo, *Secretary*
Commissioner Annette Kreitzer
Martin Pihl
Tom Richards
Larry Semmens
Mike Williams

ARMB Board Member Absent

Commissioner Patrick Galvin

Investment Advisory Council Members Present

Dr. William Jennings
George Wilson

Consultants Present

Robert Johnson, outside legal counsel
Mike Barnhill, AK Department of Law legal counsel
Michael O'Leary, Callan Associates, Inc.

Department of Revenue Staff Present

Brian Andrews, Deputy Commissioner
Gary M. Bader, Chief Investment Officer
Pamela Green, State Comptroller
Bob Mitchell, Senior Investment Officer
Zachary Hanna
Scott Jones
Steve Sikes
Casey Colton
Ryan Bigelow
Judy Hall
Bree Simpson
Victor Djajalie
Rob Kreiger
Philip Bartlett
Andy Wink
Barbara Siddle
Diane Anderson
Beth Larson
Rose Sanchez
Tracy Van Horn
Valerie Powell

Department of Administration Staff Present

Rachael Petro, Deputy Commissioner
Patrick Shier, Director, Division of Retirement and Benefits
Kevin Worley, Chief Financial Officer
Kathy Lea, Retirement and Benefits Manager

Invited Participants and Others Present

Jack Kreinheder, Office of Management and Budget
Jim Rohlinger, Great-West
Doug Bratton, Crestline Investors, Inc.
Paula Pretlow and David Polack, Capital Guardian Trust Co
Sophia Collier, Citizens Advisers
Stephen Greenhut, Sentinel Investments
Rob Gillam and Alex Slivka, McKinley Capital Management
Claudia Schloss, TCW Energy Fund, and Blair Thomas by telephone
John McGurk, Rothschild Realty Inc.
Tom Anathan and Jeffrey Maguire, UBS Realty Investors
Dr. Anthony Chan, JP Morgan Chase
Steve Borell, Alaska Miners Association

PUBLIC MEETING NOTICE

JUDY HALL confirmed that the meeting had been properly noticed.

APPROVAL OF AGENDA

COMMISSIONER KREITZER moved to approve the agenda. MS. HARBO seconded.

GARY BADER requested the addition of #19-D - Asset Allocation TRS Death and Disability.

VICE CHAIR TRIVETTE moved the Treasury Division Report from February 14 to the second day when Deputy Commissioner Andrews would be present.

Without objection, the agenda was approved as amended.

PUBLIC/MEMBER PARTICIPATION, COMMUNICATIONS AND APPEARANCES

There was no one present or on line who wished to speak to the Board.

APPROVAL OF MINUTES - November 28-29, 2007

MS. HARBO moved to approve the minutes of the November 28-29, 2007 meeting. MR. SEMMENS seconded.

The motion passed unanimously.

REPORTS

1. **Chair Report** - None.

2. **Committee Reports**

a. Defined Contribution Plan Committee

Committee chair SAM TRIVETTE indicated that two items the Defined Contribution Plan Committee had been working on for a long time were on the agenda later for the Board's consideration.

3. **Division of Retirement & Benefits Report**

3(a). Legislative Update

COMMISSIONER KREITZER reported on the status of Senate Bill 125, the cost share bill

for the Public Employees' Retirement System (PERS), which is currently in conference committee.

MR. SEMMENS engaged MR. SHIER, Retirement and Benefits Division Director, in a discussion about the accuracy of the projections for employer contributions: he felt the underlying salary base was difficult to project, and asked if the administration intended to true up the projection during the year and ask for a supplemental if an adjustment was necessary. MR. SHIER explained how the Division is assured that the actuary's projections are as close as they can possibly get going forward, absent some extraordinary growth in payroll that would warrant the ARM Board asking for further budgetary action. He added that the defined contribution plan is fully funded and does not require the contribution rate relief in the valuation that the defined benefit plan payroll requires.

MR. SEMMENS asked how making the supplemental contribution based on defined benefit salaries squared with the ARM Board setting the contribution rate on a level percentage of pay basis that was on both the defined benefit plan and defined contribution plan salaries. He said he thought it would short the fund by FY2009.

MR. SHIER said he would prefer to have Buck Consultants answer that question at the April board meeting. He added that once SB 125 passes and there is a true shared cost system there will no longer be an issue of which payroll is higher or lower: the actuarial process will ponder how much money the trust fund needs in its entirety each year to reach solvency over the period of time the ARMB has established. The calculation that was in SB 53 was based on what dollar amount the trust fund needs in order to stay on that schedule moving forward. Once SB 125 passes, there will be no need to account separately by employer.

COMMISSIONER KREITZER gave an update on the request for a state contribution of \$450 million into the Teachers' Retirement System (TRS), saying she has been hearing that there is not support for it among legislators. She explained that the PERS has other funding sources besides the general fund, so an infusion of money would provide less bang for the buck. A state contribution of \$450 million toward the unfunded liability would have a bigger fiscal impact in the TRS because that system is all general fund. The Legislature is currently exploring pension obligation bonds in HB 13.

MR. PIHL mentioned his concern about the two retirement funds getting out of whack if TRS receives a state contribution to reduce its unfunded liability and the PERS system does not.

MR. SEMMENS said that in years of budget surplus he did not want the ARM Board to reduce the employer contribution rate but to let it run through the normal actuarial cycle.

Indicating that he agreed with Mr. Semmens, MR. PIHL referred to the pension funds'

investment returns so far in FY2008 compared to the high returns of last fiscal year. He said he supported putting any surplus toward the unfunded liability to work the way out of the hole.

COMMISSIONER KREITZER said the pieces have to work together for the Legislature — the Governor's proposal of \$450 million to bring down the TRS unfunded liability, and pension obligation bonds being considered as an opportunity to reduce the PERS liability. The Legislature is also concerned about having cash flow for the needs of its constituencies, and the administration cannot expect every dime to go to the unfunded liability.

MR. PIHL moved that the Alaska Retirement Management Board, by resolution, support the administration's budget proposal to put an additional \$450 million into the Teachers' Retirement System to address the serious problem of the unfunded liability. MS. HARBO seconded.

Calling the foregoing a conceptual motion, VICE CHAIR TRIVETTE requested that legal counsel and staff work on a resolution for the Board to act on later in the meeting.

3(b). Membership Statistics

MR. SHIER reported that the Audit Section of the Division of Retirement and Benefits has worked on 18 audits: six are in draft and will be completed shortly, and 12 others are waiting for material from employers. The ten audits for this fiscal year are on the schedule but not started yet. The most common items found are misclassified workers, the definition of compensation (bonuses are not included), and counting service of teachers whose certificates were lapsed for a period. The Audit Section has been working with the Department of Education & Early Development (DEED) and the Department of Law on the last item. Individuals are being notified about the policy change that there is no longer a grace period for bringing lapsed certificates current, and some TRS people may not have all the service they think they have.

MR. PIHL asked if it was possible to estimate how much employer contribution was not going into the system due to misclassification of employees. He noted that misclassification seemed to be prevalent in every audit report.

MR. SHIER said he could not guess, but he could use the completed audits as a sample and calculate the contribution that would have come in. He added that the Division collects the employer contribution for people who have been improperly excluded and refunds contributions for people who have been improperly reported. He said his concern about funding the program is that some of the smaller employers can be late in their payments, and the Division currently does not have anything in statute or regulation that allows for collecting interest as an incentive for timely payment. [Under the Trustee Comments section at the end of the meeting, MR. SHIER corrected that last statement to say that

under statute the Division has the ability to charge interest of 1.5 times the last actuarial rate of return for both PERS and TRS. The struggle is that the Division has no collection tools to effectively coerce individuals to surrender that money, other than a strong letter, a phone call, or a suggestion. There are no judgments, liens, or levies. That is something the Division can work on, in terms of mirroring some other tax collection agencies with whom he has some experience.]

MR. PIHL suggested expanding the number of purely payroll audits and directing them at the misclassification problem. He thanked Mr. Shier for the progress that the Audit Section has made.

Responding to MS. HARBO, MR. SHIER said that the Division has found jurisdictions that have allowed a teacher to remain employed in the classroom with a lapsed certificate, in violation of law and statute, while other jurisdictions have moved a teacher out of a classroom and into another position and yet still reported them on the TRS program and paid the contributions. Other jurisdictions have actually sent people home until they brought their certificate current.

MS. HARBO said she hoped the situations would be looked at individually because it sounded like employers were sometimes taking advantage of people. She mentioned her concern about the impact on TRS employees who would be retiring soon.

MR. SHIER stated that the Division was working with the Department of Law, in concert with DEED, to make sure that the Division has not unfairly given individuals the impression that they were fine when they were not, and, if that appears to be true, what the Division's authority is in terms of forgiveness.

Board attorney ROB JOHNSON related that when the Teachers' Retirement System Board existed it would hear cases about teacher eligibility to retire based on information submitted. There were cases where the TRS board made rulings on the improper placement of teachers as to whether they should have been in PERS or TRS. This type of case would now go to the Office of Administrative Hearings and should provide an avenue for the affected employees to appeal a determination.

4. Treasury Division Report

This report was moved to February 15.

5. Chief Investment Officer Report

Chief Investment Officer GARY BADER introduced Rob Kreiger as the newest member of the portfolio management staff working with equity investments.

MR. BADER reported on the following items:

- Equity exposures for the cash overlay program at State Street Global Advisors were pared back to 50% for large cap and 50% for small cap. The primary intent is not to be leveraged in this program. Staff calculates that through December 31, 2007 the program was still a net \$4 million to the good over what the retirement funds might have earned by putting investment managers' cash holdings in a cash account. Paring back at a time when markets are extremely volatile is a good idea. Staff believes that they, and State Street, would need to have less hands-on with this program if \$14 million of large cap and \$11 million of small cap were established as the going-in equitization and it was not adjusted every day. Staff estimates the average equity exposure would be 30%. This strategy will save a lot of staff time and reduce the probability of being leveraged.
- News from Mariner Investment Group that one of their subsidiaries had three collateralized debt obligations (CDOs) that are being called. This has not affected the ARMB investment program.
- Correspondence from Flick Fornia related to a favorable article in the Pew Report about the Alaska retirement funds.
- Michael O'Leary of Callan Associates, Inc. has been nominated as consultant of the year by Money Management Letter. It speaks well of Mr. O'Leary's reputation in the industry.
- Staff rebalanced the portfolio by taking \$113 million from the Lazard Global fund and placing it in other asset classes.
- Notification of changes in Capital Guardian's U.S. large cap equity portfolio management team.
- Information about proposed changes to CalPERS asset allocation.
- Notification of terminating dividend reinvestment in UBS RESA/Trumbull Property Fund, BlackRock Diamond Property Fund, and JP Morgan Strategic Property Fund. As equity markets continue to decline, the relative percentage of real estate in the portfolio increases, and the real estate allocation is over the target. The real estate dividends will be placed in asset classes that might be under target or used to make pension payments or health payments.
- Staff recommendation to remove Cadogan Management, an absolute return manager, from the watch list, where they were placed after being purchased in 2006. After almost 18 months they have not lost any staff but have added staff, and they appear to be a stronger firm as a result of the acquisition.

MR. PIHL moved that the ARM Board remove Cadogan Management from the watch list.
MR. RICHARDS seconded.

On a roll call vote the motion passed unanimously, 7-0.

MR. BADER continued with the items in his CIO report:

- State Street informed staff in December that some members of the International Fund investment team were exiting the firm, and subsequently eight of the 25 team members left. Those team members were located in Boston and London, and there are other team members in Hong Kong, Tokyo, Paris and Sydney. Staff consulted with Mr. O'Leary on this, and the view was to stay the course with the ARMB investment and monitor it very closely. The recommendation is to place this fund on the watch list. Staff estimates the transition cost out of the international fund to be a million dollars. During January, the team now in place had lower than index returns but did better than the other ARMB international managers. So the change does not appear to have impaired State Street's international returns. Thus far in February, this team is exceeding the benchmark, so staff is confident that things are in place to continue and to bring the team up to speed. Staff also had conference calls with State Street's chief investment officer for equities and a face-to-face meeting with Rick Lekihay in Juneau about the investment program going forward. Staff believes that staying with the international fund is the right direction to take at this point.

MR. SEMMENS moved that the ARM Board place State Street International Equity Fund on the watch list for the reason of personnel changes. MS. HARBO seconded.

The motion passed 7-0 on a roll call vote.

- Notification of \$30 million commitments each made to Rothschild Realty, Tischman Realty, and ING. This is less than amounts committed to these real estate advisors in the past, but funds committed previously are still being invested and still being returned. The \$30 million commitments are in line with the projections that Mr. Sikes made and that the Real Estate Committee approved in the annual real estate plan.
- The next investment education conference is tentatively scheduled for September 8-9, 2008 in New York City. Ms. Hall will contact Board members about the dates and report back at the April meeting.
- Mellon Bank has indicated that the average return for public plans during the quarter ending December 31, 2007 was -0.78%. The unofficial ARMB return is estimated to be -0.46% for the quarter. The estimated fiscal year-to-date return at the end of December was 2.7%, but there have been difficult markets since then.
- At least two participants have communicated that they want a mutual fund window in the investment options offered in the Supplemental Benefit Annuity Plan (SBS), Deferred Compensation Plan, and the Defined Contribution Plan. Staff is working on this, and the Defined Contribution Plan Committee will be meeting on it at some point.

6. Fund Financial Presentation

State Comptroller PAM GREEN reported that the asset accounting team is now fully staffed. Beth Larson is the most recent hire as the senior investment compliance officer,

and she will be giving a briefing on the expanded compliance program to the Audit Committee at its next meeting. MS. GREEN said the asset accounting section staff have been creating desk manuals, both for succession planning and cross-training. A monthly education program has been instituted, and staff members are attending a portion of this board meeting as part of the education effort.

MS. GREEN reviewed the financial report for December 31, 2007 included in the meeting packet. The invested assets for all the retirement plans totaled \$19.5 billion, an increase of 4% for the first half of the fiscal year. She noted that the defined contribution plans are getting most of the contributions in on a net basis, and the defined benefit plans as a whole have mostly withdrawals. In the past, the investment income has been offsetting that, but fund earnings were slightly negative in December.

Department of Administration's Chief Finance Officer KEVIN WORLEY distributed several spreadsheets and spent a few minutes walking through how the PERS retirement fund withdrawals and contributions flow into the financial statements.

MS. GREEN informed the Board that the January statements would be on the web site by tomorrow. She next reviewed charts of the invested assets, investment income, and asset allocations for the PERS, TRS, Judicial, and Military retirement trust funds. She also presented spreadsheets of the retirement funds by asset class and by manager for the defined benefit plans and the participant directed plans. *[These documents are on file at the ARMB offices.]*

7. Market Environment Update - by Crestline Investors

MR. BADER introduced DOUG BRATTON, President and CIO of Crestline Investors, Inc., noting that Crestline manages \$270 million for the ARMB in absolute return strategies. Crestline also manages money for the Alaska Permanent Fund Corporation, and Mr. Bratton made a presentation to that board in December on his views about the current market environment, including the effects of subprime issues.

[A copy of Mr. Bratton's slides of charts and graphs to illustrate his talk are on file at the ARMB offices.] This 40-minute presentation was educational in nature, with frequent questions from trustees, advisors, and the general consultant.

MR. BRATTON briefly reviewed the Crestline organization and its investments for the ARMB.

MR. BRATTON stated that subprime has two parts. Residential mortgages were issued with lax underwriting standards and became subprime mortgages. Part one was when Wall Street put those mortgage securities into a pooled structure, it was sliced or "trunched," and there were different buyers for the different slices of the risk of that pool. The majority

of it was rated AAA (the least risky) and the remainder graded downward to AA, A, and BBB, with the bottom being the equity buyers who got the highest returns and had the highest risk of loss. The AAA securities were not really AAA, and the lowest tranche was not even equity. So generally in the pools that were issued in 2006-2007 the lowest rated portions are now valued in the teens on the dollar, and the AAAs are in the 80s and as low as 70s depending on what vintage they are. The AAA securities did lose and will have principal impairment in most of the pools that are out there. Subprime part two was when Wall Street repackaged the actual AA, A and BBB securities into another structure that was rated again. These things were theoretically not correlated, and they were relying on historical relationships to get the ratings. These pools all are now experiencing significant downgrades. The top end of the capital structure was a big piece called super senior that was considered so safe it was retained by a lot of the investment banking firms and commercial banks. The super senior risk is one of the types of risk that is being written down today.

MR. BRATTON explained that banks over the years have become distribution houses. So instead of originating bank loans and holding them on the balance sheets, they basically have offloaded these securities to other participants in the market and received a syndication fee. One of the buyers of certain types of securities are entities called ABCPs or asset-backed commercial conduits. So a bank or other liquidity provider would lend to an entity (a lot of European entities but also some in the U.S.), and that entity would then buy securities and make a spread between the difference. And the bank was always providing the back-stop securities. Some of the banks are taking these back on their balance sheets today. The ACBP market is valued at \$1.2 trillion. Another type of entity called a structured investment vehicle (SIV) is a separate stand-alone entity that issued securities themselves, and they may or may not have any back-stop from a bank. The SIV market is \$370 billion. Over the past year a significant number of these have gone away or are in the process of being restructured or substantially unwound. This has an effect on the buyer of this type of asset in the market.

MR. BRATTON said the seeds of the current crisis were planted in 2006 when there was very low equity volatility and people were able to borrow very cheaply. The high credit security issuance was used to get a lot of financing done, and there was a very strong increase in merger and acquisition activity. Part of that was leveraged buyout firms that were using the cheap financing to buy corporate cash flows. But there were indicators to cause worry in January through June 2007:

- Housing - building inventories and falling home prices.
- Mergers and acquisitions activity increased to the point where banks were granting leveraged buyout firms fully financed transactions so that the LBO firms did not have any execution risk.
- Structured credit - huge issuance in the collateralized loan obligation (CLO) market that was driving the M&A activity. Some investment banks began to retain the super senior pieces in order to accelerate the issuance of securities and get the fees on

the structures.

- ABX index (subprime index) experienced significant declines.
- Equity markets experienced increased volatility, especially in February.
- Hedge funds - stress at long credit funds, Bear Stearns hedge funds suspended redemptions in May, and Merrill Lynch seized their collateral in June.
- The markets began to hear about subprime.

MR. BRATTON reviewed what was happening in July and August 2007:

- Rating agencies tried to adjust to a different world, and S&P and Moody's started downgrading the residential securities.
- Some hedge funds experienced significant losses.
- Financial sector balance sheets experienced stress. The banks had built up about \$300 billion in committed financing bridge loans to leveraged buyout firms on their balance sheets, and they were starting to wonder if they went too far.
- Marks came into question. In an environment where people did not know where the next seller was coming from they started to lower their bids. That affected the financing given to hedge funds and other leveraged market participants.
- Certain asset classes, like bank loans, experienced unprecedented volatility. Correlations increased, and strategies that should not have lost money — for example, quantitative equity market neutral strategies — all went wrong at the same time.
- Derivative indices drove the prices of the underlying securities.
- SIVs experienced problems for the first time rolling their financing. The Canadian commercial paper market basically dislocated and had to be restructured.
- Disintermediation spread the risk all around the globe - who would have thought a German insurance company and a Japanese asset manager were involved with subprime at all.
- Equity markets experienced significant volatility.
- Funding issues - the actual ability of banks to fund themselves started to come into question.
- Historical spread relationships started to break down.
- Central banks in the U.S., Europe and Japan started to recognize the serious issues and took dramatic actions with lower discount rates. The markets seemed relieved and rallied at that point.

MR. BRATTON stated that things seemed to get better in October and September 2007:

- Dislocation funds moved into the market to take advantage of the opportunities. Crestline identified about 40 funds.
- First Data was the first debt sale of a bank balance sheet commitment. It threw open the market, and in two to three months banks had the opportunity to unload about \$100 billion out of the \$300 billion of loans on their balance sheets at really small discounts.
- The Fed lowered the Fed funds rate by 50 basis points.

- Most of the M&A deals that were in question closed. The private equity firms now owned the companies, but the banks still owned the debt.
- Equity markets rallied, and the S&P reached a one-year high.

But under the surface other things were happening...

- UBS, Citicorp and Merrill Lynch announced losses on write-downs.
- The stock prices of Monoline and mortgage insurers started declining.
- Rating agencies started downgrading additional things and focused more on the structured products.
- Downgrades in ABS collateral caused automatic downgrades in CDO structures.
- CEO resignations started.
- The Fed lowered the Fed funds rate another 25 basis points.

Things were unsettled going into November, and it became evident there were continuing problems:

- Financial company stress continued, with multi-billion dollar write-offs at Citigroup, Merrill Lynch and UBS. That was the first step of the super senior and other similar securities being written down.
- The SIV entities were in disarray. Moody's downgraded \$33 billion of SIV credit ratings. HSBC took \$45 billion of this SIV risk back on their balance sheets. Citigroup was adamant that they would not do the same, but they did.
- The subprime "land mines" continued. Bank of America propped up money market funds due to credit exposure. The super senior risk on bank balance sheets began to be quantified. The subprime contagion spread from Monolines to Alt-A and finally the prime mortgage markets. The GSEs (Freddie Mac and Fannie Mae) suffered huge equity declines.
- Leveraged M&A activity basically stopped. Private equity sponsors paid the breakup fees and walked away from deals rather than buy the companies at the price negotiated.
- Equity markets experienced a 10% correction.
- Credit spreads widened across the board.
- Central banks injected liquidity again.
- Bailouts began: Citibank, Countrywide, etc.

MR. BRATTON next reviewed what the markets were saying in December 2007:

- Funding issues remain. The difference between safe Treasury Bills and AA LIBOR credits was at levels that had never been seen before, showing distress on the bank balance sheets. As the Fed added liquidity, the pressure was released.
- The yield curve steepened, which is probably good for the system if it stays there.
- Markets were projecting interest rate cuts in December, and the Fed Funds rate went to 3.0%.
- High yield credit spreads were widening back to above historical averages and have continued to widen to the 750-800 basis point range.

- The safest structured products experienced significant spread widening and that continues.
- Dislocations spreading to commercial real estate.
- Volatility increased in the equity markets.
- Housing prices year over year continue to decline.
- A huge number of subprime mortgages will be reset through 2011.
- Jumbo mortgages are much more expensive to buy, which is not good for housing markets in California, New York, Washington, D.C., etc.
- The dollar continues to weaken.
- Anomalies are surfacing in the markets produced by some serious funding issues. One example is that you can buy municipal bonds for roughly the same yield as Treasury bonds.
- Most disturbing, liquidity is dropping in the entire system, unlike anything seen before. In 2002 a decline in liquidity was one of the reasons for a recession. The thinking is coming around to there quite likely is a recession, but the question now is about the severity.

MR. BRATTON said that when he prepared the presentation in December he thought there was possibly a negative case outcome or a positive case outcome, based on what was happening in the markets. He presented the negative case first, providing some quotes that people made in the December time period. He said that in December he expected certain things to happen for a negative case outcome, he made a list, and quite a few of them have come true:

- Credit - The current situation will morph into a liquidity driven credit crisis. Corporate defaults will increase for lack of rescue financing, and credit rollover options will go away. Banks will be forced to unload their remaining bridge loan commitments. The precipitous drop in available corporate credit ripples through the economy. *[Yes, that has happened and is continuing to happen, and the question is the severity.]*
- Structured Finance - Continued problems shut off new issuance and depress secondary prices. Subprime defaults will get worse. No AAA financing. Disintermediation land mines will continue. SIVs will continue to liquidate and further depress secondary prices. *[Yes, that has happened since December.]*
- Financial write-downs will continue. Total subprime losses were estimated to be about \$400 billion, but in December only \$66 billion had shown up. *[Yes, the rest are coming.]*
- Funding costs could stay elevated, causing increased financing costs for creditworthy customers. *[Yes, that is still happening.]*
- Commercial real estate financing stays expensive, increasing cap rates. *[Yes, that is still happening.]*
- M&A activity dries up as corporations become risk averse and financing is less available. *[Yes, definitely happening.]*
- Equity market volatility increases. *[Yes.]*

MR. BRATTON said that in December he had thought that certain signs would indicate a positive case outcome. Surveys suggested that CEOs expected their sales, capital spending and employment levels to go up in 2008. Second, U.S. Treasury Secretary Henry Paulson had indicated that there was a big role for the government. MR. BRATTON said that some of the positive things he thought would have to take place for there to be a positive outcome have happened since December, and others have not:

- The underlying economy remains strong. Corporate defaults are low. *[No, there is economic weakness at this point. Whether it will skirt the edge of recession or go into it is unknown.]*
- Banks and other financials will be significantly more profitable because of the steep yield curve and wide spreads. *[Maybe. The Fed appears to be steepening the yield curve to allow the banks to fund themselves cheaply and lend long and make a very nice spread at good risk-adjusted returns. That takes time.]*
- Projected losses, even at the high end, are low when compared to the overall financial sector capital in the system. *[Yes. Even though the losses are higher, they are still low compared to all the financial assets out there today.]*
- It is mainly a U.S. problem. Most world markets continue to function normally. *[Not the case, because some of this is spreading to the U.K. and other housing markets.]*
- Companies with good franchises will be recapitalized. *[Maybe. Sovereign wealth funds will invest in franchises that are really good but they probably won't care about a U.S. manufacturing company that is in trouble.]*
- Money from sovereign wealth funds will flow to recapitalize good franchises and capture opportunistic returns. *[Yes. The capital is about two to four times private equity and hedge funds, so there is a lot of money out there.]*
- If the markets are right, the Fed will continue to lower rates and add liquidity as needed. *[Definite yes.]*
- Regulatory forces will continue to address the problems - SIV superfund, and mortgage "freeze" consortium. *[No. Too much self interest and every-man-for-himself type mentality to really get major changes done.]*
- It is mainly a structured product issue at this point. *[No. It has spread into the corporate markets now.]*
- AAA structured product buyers will come back as conservative ratings and higher equity ratios increase the risk-adjusted returns of that particular asset. *[No. One of the problems in the market is that there is no logical buyer of the highly rated products.]*
- High risk spreads and volatility are good for hedge funds and other liquidity providers and should create profit opportunities. *[Definite yes.]*

MR. BRATTON said his tally of the negative case outcomes and positive case outcomes led him to feel a little negative based on the things that have gone on in the market so far. The question at this point is how severe any down turn is likely to be.

MR. BADER noted that Crestline buys into distressed debt limited partnerships on the ARMB's behalf, and he wondered if Crestline was adding to the distressed debt allocation. MR. BRATTON said he was very encouraged because obviously there will be some mark downs as securities adjust in price. But Crestline has not seen the expected increase in default rates; right now, the trailing default rates are in the 1% to 3% range. In the fourth quarter of 2007 there were less than ten total defaults in the corporate system. No one thinks that is going to continue, and Crestline believes there are significant defaults coming - if for no other reason than because there is no financing to be able to roll the debt when it comes due, and companies will get into some kind of trouble. That will create opportunities for distressed debt buyers. Some of Crestline's managers are saying that this is the best they have seen on a multi-ten-year period as far as an opportunity set.

MR. O'LEARY clarified that the absence of defaults has been in corporates and commercial mortgage-backed real estate. There have been plenty of defaults on the residential mortgage side.

MR. BRATTON said people track the spreads in high yield bonds to look for potential default material, and that has gone up substantially in the last three months. There is a strange anomaly going on in the loan market because bank loans are traded, so leveraged bank loans are an asset class. That market has gone from about 100 or par generically to about 89 to 91, a drop of 10%. There really has not been an appreciable pick-up in bank loan defaults at this point, so the market is actually pricing in a lot of bad things to happen in that particular market. A lot of distressed managers have the leeway to start to buy what could be a healthy loan at a technically depressed price when they do the analysis.

MR. O'LEARY commented that the picture that Mr. Bratton outlined is one where an absence of willingness to lend is a catalyst to potential further problems. He asked what is being talked about that would unlock the liquidity, other than the Treasury Secretary asking people to mark down their balance sheets and begin lending.

MR. BRATTON stated that even though people are given the tools they are not taking risks right now because of the uncertainty in the economy and with their own balance sheets, etc. One of the biggest questions is what will jump-start the lending process. Crestline has come to believe that as write-downs continue people will get comfortable with what the worst case is, and shareholders and others will encourage people to take more risk over time. Some Wall Street analyst reports are starting to ask questions about the super senior numbers or how many bridge loans are on the balance sheets so they can make their own assumptions. Once that type of analysis is looking at the worst case and how much capital is needed to be a viable entity, and management does that same type of analysis, then people will be comfortable taking risk again because the markets will provide the opportunity — at least for financial institutions — to make spreads and returns which they haven't seen in quite a long time.

MR. O'LEARY noted that Crestline manages an absolute return fund of funds for the ARMB that has an objective of having low volatility as well as a premium return to riskless assets. Crestline varies the allocation of assets within the fund of funds where they see opportunities, and Crestline has indicated they see potential opportunity in distressed debt. But Crestline's ability to expand that has to be limited by the need to limit overall volatility in the portfolio. He asked how big distressed might be in the context of the overall portfolio.

MR. BRATTON replied that the portfolio is diversified in 15-16 strategies, and no manager generally has more than 4%. However, Crestline does actively allocate the portfolio and will take advantage of the market opportunities to make excess returns within the box of low volatility absolute return. So if the current weight of distressed in the portfolio is 10%, it might go to 15%, or with distressed special products it can get to 20%. But it would not be bigger than that as far as a diversified portfolio. Some clients have decided that there are enough opportunities that they will add a separate distressed-only type allocation that is outside the existing investment parameters.

CHAIR SCHUBERT asked if the U.S. political and regulatory system would have to change to accommodate the inflow of capital from sovereign wealth funds that would bail out the economic system. She mentioned the example of how public and political fear axed the Dubai Ports World deal to buy port management in the U.S. in 2006. She said she heard the CIO of that fund say at a recent conference that they would never again invest in America because of the kinds of problems that erupted for them over that port deal.

MR. BRATTON responded that CNBC had a report this morning about why the U.S. government allows these entities to come in now when things are tough, when it had a very strict policy a few years ago. The difference is that the foreign funds currently are not taking over the entities but are making minority investments in them, while the Dubai Ports World deal was to take over port management businesses at six U.S. seaports. The other difference is that the overall amount of opportunity to put the money to work means it will be distributed. Part of the discussion on TV was why the U.S. government was not using its own funds (Social Security, etc.) to rescue companies, where the market provides the opportunity to get excess returns. He said there seems to be an issue that is surfacing on the very subject that Chair Schubert brought up.

CHAIR SCHUBERT thanked Mr. Bratton for an interesting and informative look at the market environment. She called a scheduled break from 10:55 a.m. until 11:10 a.m.

8. Capital Guardian Trust Company

MR. BADER reported that the ARMB has about \$520 million invested with Capital Guardian in international equities and roughly \$260 million in emerging markets.

PAULA PRETLOW, Relation Manager, and DAVID POLACK, Research Portfolio Coordinator responsible for global equity portfolios, made a presentation on the above-mentioned accounts. *[A copy of Capital Guardian's slides are on file at the ARMB offices.]*

MS. PRETLOW briefly reviewed Capital Guardian's business approach, investment philosophy and investment process. The firm's fundamental belief in managing money is that individuals make better decisions than committees. So their multiple portfolio manager system allows individual decision-makers to buy those stocks that they have the highest conviction in. The stock picks of each portfolio manager on the team are combined to produce a well-diversified portfolio. The approach combines growth managers with core managers with value managers with growth-at-a-reasonable-price managers. The non-U.S. equity team is specifically made up of non-U.S. managers (64%), regional managers (13.5%) and a research group of 34 investment analysts (22.5%).

MR. POLACK next spoke about how the research portfolio is an important component of the non-U.S. equity team and helps to drive the overall results. He said analysts at the majority of money management firms make recommendations but do not invest. At Capital, the analysts are also portfolio managers and so act upon their convictions.

MS. PRETLOW reported that Rudolf Staehelin will be replacing the retiring John Mant on the non-U.S. equity team. Also, Gerald Demenoir from the research portfolio is being made a full-blown portfolio manager. An advantage of Capital's multiple portfolio manager system is that these changes will not cause a drastic change to the ARMB portfolio. While investment results have been mixed over the last five years, they believe that the firm's refocus on the people involved in the portfolio is a new beginning of sorts. The portfolio, as structured now, is set up for a long-term period of outperformance.

MR. POLACK explained that over the past five years investors have been very focused on cyclical growth, and one indication of that is how well value stocks have done. During 2007, Capital saw other investors move away from cyclical growth and toward secular durable growth, and the non-U.S. equity portfolio started to do better. Capital tends to do better when fundamentals are the key to investment performance, not shifts in the cycle.

MR. POLACK stated that the subprime credit crunch dominated the second half of 2007. It is clear that the U.S. economy is slowing, but it is less clear what is going to happen with other parts of the world and how much that will be an offset. Capital Guardian believes that the urbanization of China, Indonesia, Vietnam and India are going to provide very strong growth that will at least partially offset what is happening in the U.S. The other piece of the equation that has yet to work out is what the impact of low interest rates will be for the U.S. economy itself. Every slow down is different, so it will be interesting to see how the impact plays out. Capital is cautiously optimistic.

MR. POLACK reviewed what helped the non-U.S. equity portfolio in 2007 and what hurt.

Stock selection in materials and consumer discretionary was the biggest contributor to returns. The drag on the portfolio came from Japanese financials, but positioning in European financials actually was a positive. They intentionally avoided some of the worst hit stocks from the credit crunch — UBS, Credit Suisse, Barclays, or HSBC. They can now look for what opportunities will emerge from the wreckage.

Turning to the outlook for the portfolio, MR. POLACK said that Capital is modestly optimistic about the economic outlook. They are seeing more and more evidence that defensive or secular growth companies are becoming more attractive to investors as the companies' multiples are expanding. Capital wishes it had not been in certain parts of the market in the last two years to the extent that they were, but now these areas look very attractive. Japan is the key area. Sectors where Capital is positioned are telecommunications and consumer staples because they have solid, stable, durable growth. Materials, in particular mining and metals companies, have strong secular growth characteristics because of the massive under-investment that has gone on in the past 20-30 years, and the huge current demand.

MR. POLACK reviewed the portfolio by sectors, noting that they are now overweight energy in an eclectic group of stocks that include Canadian tar sands companies, uranium companies, LNG (liquid natural gas), and Gazprom. Consumer staples has been shifted upwards. Health care has been moved to an underweight position for the first time in a very long period: they do not see durable and visible growth there but rather a lot of risk, mainly inspired by the Food and Drug Administration. Financials are underweight, as discussed earlier. Finally, technology and telecommunication services are two sectors where Capital is continuing to maintain their conviction.

MR. POLACK also discussed the portfolio diversification by country. He said that in the early part of this year there has been a couple of pieces of good news coming out of the Japanese economy, and Capital believes it won't take much to move that market. He briefly reviewed the top 20 holdings, noting that 10 of the names are new to the portfolio, which underpins the theme of refreshing the portfolio. The top 20 holdings represent 30% of the portfolio value.

MS. PRETLOW next gave an update on the emerging markets growth fund, pointing out that it uses the same multiple portfolio manager structure but has a different team of managers with only David Fisher as overlap. The ARMB portfolio was created 13-1/2 years ago and is currently \$265 million. Over the life of the mandate, the portfolio has returned 267 basis points of excess return over the benchmark annualized.

MR. POLACK stated that the MSCI Emerging Markets Investable Market Index benchmark return was all over the place in 2007 but ended up 39.4% for the year. A dollar invested in emerging markets in 2002 is now worth five dollars. Investors might question if it is time to pull the plug. Capital Guardian's sense is that there is a lot of change going on in the world,

and a lot of it is focused on the industrialization of a big chunk of the world's population. That is unleashing forces that are behind the compounding growth, and the game has a lot further to run. Some emerging markets did extremely well in 2007 — China up 67% in local currency, Brazil up 50%, and India up 54% — but Taiwan was only up 8.6%. There is a lot of volatility dispersion within the emerging markets area.

MR. POLACK reviewed the emerging market sectors that did well in 2007.

Referring to the performance numbers, MR. O'LEARY mentioned that the Morgan Stanley Capital International had some index changes, and the index that is used for this fund was changed late last year, as described in Capital's footnote. He inquired about the changes from the old index to the current index.

MR. POLACK said the changes were marginal and have not changed the way that Capital Guardian thinks about investing in stocks because they build the portfolio one stock at a time. He agreed with Mr. O'Leary that there is less weighting on some of the really small companies in the emerging markets universe.

MR. O'LEARY said it would be useful for Cap Guardian to show both the old and new indices in their reports for the next while so the Board is aware of any difference. MS. PRETLOW indicated that they would do that and also re-send to staff an amended page for the 2007 returns shown in this presentation.

MR. POLACK reviewed what helped and what hurt the emerging markets equity fund in 2007. When the credit crunch hit there was a flight to quality, and assets went from the developed markets, like the U.S., into the big emerging market stocks like Petrobras and China Mobile. Capital Guardian did not own a lot of those names that turned out to be the best emerging market performers, and that hurt returns relative to the index. Capital does not try to chase liquidity because it can ebb as quickly as it flows. Of interest is that emerging markets have come of age when a flight to quality is into EM names. MR. POLACK said that stock selection was what helped the portfolio in 2007; for example, some Russian stocks did extremely well because Russia is rebuilding its infrastructure with the money it is making from oil. Some Chinese stocks also did very well. He noted that the portfolio management team has been quite nimble in its stock selection, and there has been a lot of movement in country weights. They have taken profits in areas that have done well in the last few years, such as Brazilian banks, and have moved into roads less traveled, such as Russia and Egypt. Bigger EM companies that are now extremely well followed mean less chance of really interesting surprises. Often the best opportunities are in smaller companies in the newer markets that are less well explored and less understood.

Looking ahead, MR. POLACK said they are looking for infrastructure investments as emerging markets urbanize; defensive, more predictable businesses; consumer spending as people finally have some extra money to spend; and technology, which has become

very cheap.

MR. BADER pointed out that in 2000 the Capital Guardian emerging markets fund made 13 basis points of excess return, net of fees. The fund in the years 2001 through 2004 did not beat the benchmark after fees. Some people might question why go to the trouble of having active management for that type of return. However, the longer-term return numbers show that the ARMB has been amply rewarded over time by staying the course. He said it reflects a change in his opinion about having good managers and having the ability to stay the course with them if a person believes in what the firm is doing. It does not always play out when looking at the annual return, but the Board needs to give a manager the opportunity to be successful. This fund was on the Board's watch list for a long time for poor performance, and it is good to see the returns are back in line with expectations.

MS. PRETLOW said she was happy that the ARM Board gave Capital the opportunity to generate the high return of 1999 and did not give up on them so that it has paid off over the long term.

At MR. RICHARDS' request, MR. POLACK spent a few minutes explaining in more detail how the multiple portfolio manager team approach works.

MR. TRIVETTE stated that currency has been a big component of equity returns from emerging markets, and he pointed to Brazil as an example. He asked how much of return in the next year Capital Guardian expected to come from currency.

MR. POLACK said it is very hard to tell what currency rates are going to do in the short term. Capital Guardian is very cautious about the dollar, given the well-known impact of the twin deficits, meaning that nearly any foreign currency is going to have a head wind. And with interest rates declining rapidly, that rationale for holding dollar assets is beginning to move away. The 20% currency return from Brazil was not by accident. Brazil has got extremely strong foreign currency reserves and a great balance of payment. These countries did not become geniuses overnight but the dollar helped and copper helped. But they are in much better fiscal positions than they ever were before. As a consequence of that, and with some inflationary pressures in the emerging markets keeping interest rates a tad higher, there is no reason to think that what has been seen in terms of foreign currency appreciation against the dollar — particularly in the emerging markets — won't continue for some time. Capital would be long-term dollar bears and long-term emerging market currency bulls.

CHAIR SCHUBERT thanked the Cap Guardian people for their presentation and called a lunch break at 11:55 a.m.

When the Chair called the meeting back to order at 1:00 p.m. Trustees Trivette, Harbo, Semmens, Pihl, Richards, Williams and Schubert were present. Trustee Kreitzer was

absent after lunch but rejoined the meeting at 3:15 p.m.

REPORTS (Continued)

9. Citizens Advisers - Core Growth Fund Update

SOPHIA COLLIER, President of Citizens Advisers, Inc., introduced STEPHEN GREENHUT, the representative of Sentinel Investments. She stated that Citizens was merging with Sentinel in March, subject to shareholder approval. *[A copy of the Citizens-Sentinel slides containing detailed graphs, charts and spreadsheets is on file at the ARMB offices.]*

MS. COLLIER stated that Citizens is a mutual fund company, and the Core Growth Fund has seen about a 33% increase in usage by State of Alaska shareholders in the past year. Citizens will continue its mutual fund structure, however, it will now be under the corporate umbrella of Sentinel Funds. Citizens is a smaller investment company, and being part of Sentinel will provide a lot of new resources and new ideas to enhance the Citizens Fund efforts and its social mission.

MS. COLLIER said that Sentinel has about \$15 billion in assets under management, has 31 investment professionals, and is part of the National Life Group, which is a mutual insurance company based in Montpelier, Vermont. The Citizens people who perform the social screening that is the special characteristic of Citizens will be joining Sentinel and will continue to do the exact same social screening on the fund.

MS. COLLIER said Citizens Core Growth Fund had a very strong year in 2007, up 13.9% versus the S&P 500 Index return of 5.49%, and they also beat the Russell 1000 Growth Index. Last year Jonathan White had told the ARM Board that Citizens felt there would be an economic slowing, and that has occurred. Citizens thought in an economic slow-down that they should focus the portfolio in the areas of the economy that were growing, and in companies that had strong secular growth and were also positioned for near-term growth. The key themes in the portfolio were:

- Emerging world - seek large U.S.-based companies that had strong exposure to international markets - like Pepsi and Nike, and companies that had special technologies or know-how, because a trend in the emerging world is the ability to deliver labor at a very low cost - a company like Precision Cast Parts
- Offshore energy plays - like Transocean and Global Sante Fe that wound up merging, and National Oil Well Barco, the largest manufacturer of oil rigs
- Growth of the internet - companies like Google, Apple Computer, and Netflix
- Decision to underweight pharma and focus instead on rapidly growing medical technology companies - like Intuitive Surgical, a company that does robotic surgery, and Prologic, a digital imaging company
- Invest for growth in non-U.S. financial stocks - names such as ICICI, an Indian

bank; AFLAC that focuses in Japan; and Banco Santander. They did not invest in some of the large cap banks that suffered down turns in the subprime area.

Prompted by a question from MR. BADER about how Nike passes the social screening process when it has been accused of child labor exploitation in the past, MS. COLLIER explained how the socially responsible concept uses investing or divesting to try and change a company's behavior. Then Citizens acknowledges companies as they make continuing and long-lasting progress, but not just for short-term changes or because of a few press releases. MS. COLLIER confirmed for Mr. Bader that it is a formal, fact-based committee decision, but a social analyst would do a qualitative examination and deeper research on a company and make a recommendation to the committee. She noted that "converted" companies are often the best places to invest after they have corrected problems.

MS. HARBO asked what the term "labor at a low cost" meant and if it was exploitation of a labor force in exchange for a cheap product. MS. COLLIER explained the concept of a living wage in countries where people decide to seek factory jobs for whatever reason, and how Citizens tries to understand what part of the road to a better life those jobs serve. She said that sadly there is a vast network of subcontractors that is sometimes difficult to follow all the way to where the pieces were actually made versus where they were assembled. Citizens has a network of about 300 sources to gather information from, and sometimes they contact companies directly if they are not 100% sure on certain points. Even though Citizens is a small fund, it has been successful at advocating with some companies and getting them to do things. There is a rising awareness of social responsibility as an important part of corporate life.

MS. COLLIER stated that while the Citizens Fund returned 13.9% in 2007, they had ground to make up from the poor performance in 2006. She reviewed the portfolio characteristics and pointed out that the sector weightings were close to the S&P 500 Index weights last year.

MR. O'LEARY asked which sectors in the S&P 500 Index are most affected by the social restrictions. MS. COLLIER said that for a long time it has been the energy sector and basic large industrial companies. Citizens does not invest in aerospace companies that have significant defense exposure. However, if they wanted to be sector neutral, they would not be impaired in finding plenty of companies to invest in. For example, General Electric is not approved, but Citizens could create a synthetic GE out of some financial service stocks, a few medical stocks, and a couple of industrial companies.

In response to the Chair, MS. COLLIER said they avoid aerospace companies because one of the tenets of their social investment philosophy is to avoid profiting from war.

CHAIR SCHUBERT said she heard at a recent conference that the U.S. defense spending

budget was larger than the combined defense budgets of every other country in the world. She said that ought to create some good investment opportunities.

MS. COLLIER stated that Citizens is not against a country having a defense force. For example, Marriott is one of the largest providers of food to the military, and Citizens would invest in Marriott, or in companies that make uniforms or body armor, or trucking companies and railroads. But they do not invest in companies that make nuclear warheads or F-14 fighters or things of that nature. So Citizens is not missing opportunities to invest in economic activity related to defense. But most social investors want to avoid making money when a bullet is fired.

MR. O'LEARY commented that some firms involved in socially responsible investing use what could be viewed as very arbitrary prohibition criteria. He said he sensed that Citizens' criteria was much more judgmental. He cited Sudan-free investing as an example of an issue that has been front and center stage.

MS. COLLIER stated that their job is to make money for their investors in a way that meets high standards of corporate and environmental responsibility. Citizens tries to have a fixed criterion for any particular point and to do quality research necessary to evaluate whether a company meets that criterion or not. They want to have the tightest screens possible, consistent with having an investment universe that avoids strange sector risk factors. So it is not a beauty contest or whether certain people feel this way or that way about a company. Citizens' screening process is transparent: if a company meets a standard, it will be included; if it does not, it will not. With South Africa, a full divestiture campaign worked and assisted in ending apartheid. The Sudan is a similar but emerging situation, and the question is whether the idea of Sudan-free investing will gain the momentum to become a campaign similar to South Africa. Institutional investors will have to decide where to draw the bright line, and funds like Citizens will decide whether to meet that standard or not.

STEPHEN GREENHUT, Director of the Investment Strategy Group at Sentinel Investments, gave a quick background of the 70-year-old firm that manages 13 open-end mutual funds with separate investment teams focused on the mandate for each fund. He said the merger will take the Citizens Fund social screens and apply them to Sentinel's large cap core strategy, where 75% or more is invested in companies with market caps over \$10 billion, and over 50% of that is in mega cap companies of over \$50 billion. The investment team for that fund is portfolio manager Dan Manion and three analysts. The expense ratio on the fund is slightly lower than the Citizens Fund. MR. GREENHUT briefly reviewed the investment process, sell discipline, and risk management. Through December 31, 2007, this fund performed in the top quartile for all periods out to ten years, according to the Morningstar large cap core blend universe. In closing, he said the merger of Citizens with Sentinel will continue the successful process of applying the SRI screens to a large cap core portfolio.

MR. TRIVETTE inquired about the outcome of yesterday's vote on the merger. MS. COLLIER said a portion has passed, and they have to get a few more votes to meet the quorum needed. March 4 is the expected date to complete that.

MS. COLLIER thanked everyone for the using Citizens Advisers and for the relationship with Board members and staff over the years.

10. McKinley Capital Management, Inc. - U.S. Large Cap Update

ALEX SLIVKA, primary client contact, and Chief Investment Officer ROB GILLAM addressed the Board about the \$423 million large cap equity portfolio that McKinley Capital manages for the ARMB. *[The McKinley slides used in the presentation are on file at the ARMB offices.]*

MR. SLIVKA began by reviewing the firm's organizational chart. He said that effective January 1, 2008, Rob Gillam was appointed chief investment officer and assumed responsibility for the investment models; J.L. McCarrey was appointed as chief operations officer and assumed responsibility for software infrastructure and operations risk management; and Diane Wilke was appointed executive management officer specifically responsible for facilities and firm accounting. He said these assignments were made to proactively prepare the firm for continued growth and to more clearly align responsibilities with the staff's skill set.

MR. SLIVKA briefly covered the 17-year-old firm's structure, quantitatively driven investment strategies offered, the client base, assets under management, and the performance summary. He noted that, as part of their focus on limiting assets in order to provide clients with returns in excess of their respective benchmarks, McKinley has closed the non-U.S. Growth and non-U.S. Developed Growth mandates to new clients. The ARMB is invested in the non-U.S. Growth product and may add money to that portfolio.

MR. SLIVKA related that McKinley published a white paper at the end of 2007 confirming the continued effectiveness of their process. The paper concluded that McKinley would be more effective if they expanded the number of holdings in the ARMB portfolio from 50 to 60. They shared those conclusions with ARMB staff and Mr. O'Leary before starting to expand the holdings gradually over several months.

MR. SLIVKA reported that McKinley initiated a 130/30 portfolio in the non-U.S. space and has managed it for a little over a year. The returns have been in line with what their research estimated, and they currently manage close to \$500 million in that mandate.

MR. GILLAM reviewed McKinley's investment process, first describing their quantitative analysis that identifies companies that are: (1) doing better than the Russell 1000 Index on a risk-adjusted basis; (2) liquid enough to buy and to get out of if something goes awry; and

(3) accelerating their growth. With this group of identified quantitatively attractive securities, they then seek to offset beta risk by controlling for sector exposure, industry exposure, and size exposure. McKinley's latest research indicates that in certain market environments it might take as many as 60 securities, as opposed to 50, to best control risk. In any quantitative environment there needs to be some human element. McKinley achieves this qualitative overlay by tracking every analyst in the world that publicly publishes earnings forecasts to determine who is the single most accurate predictor of earnings for each company, and is that person more optimistic than consensus. That gives McKinley confidence that there will be a positive earnings surprise for a company. This is one of the reasons that McKinley believes that the large cap space is not totally efficient, and why last year 84% of the companies in the ARMB's large cap U.S. portfolio had a positive earnings surprise. Finally, McKinley has a very consistent sell discipline, with turnover last year being roughly 80%. Most of the reasons they sold a stock were the opposite of the quantitative things that they look for when buying — not keeping up with the benchmark, and earnings deceleration or an earnings miss. That company will likely underperform, so holding it would put at risk McKinley's ability to generate excess returns.

MR. GILLAM stated that when there is a radical shift or dislocation in the market, that tends to be a period when McKinley's investment process underperforms for a time. However, their 2007 return was 16.42% compared to the Russell 1000 Index return of 5.77%. He reviewed the portfolio characteristics, noting the concentration in 51 securities, the high market capitalization, and in particular the earnings growth that is much higher than the benchmark.

MR. RICHARDS asked how much McKinley would liquidate when things go bad. MR. GILLAM replied that typically things go bad in an individual sector or an industry. They don't sell just because there is negative return, because they believe there are short, furious periods where fear drives the market. There is not generally a whole fire-sale type of situation across the entire portfolio. But if it is significant enough to cause the securities in the portfolio to turn negative relative to the benchmark return then they will sell. A month with 10-11% portfolio turnover would be significant, and he could not recall when that happened last. MR. GILLAM explained that McKinley would not raise cash if there was a terrible month in some sector or industry, because they believe the world is relative and there will always be stocks that are outperforming to take the place of something that is sold. So the ARM Board would see a rotation in the portfolio, but the cash position would stay at 2% or less.

MR. O'LEARY asked Mr. Gillam to remind the trustees about McKinley's sector diversification limit. MR. GILLAM said that previously their rules focused around keeping a very tight band, +/-5% of the index sector weights. Their research published in the white paper said that they needed a relative band, so they want to be no more than two times the benchmark weights in any particular sector, or 10%, whichever is greater. They are trying to keep it banded as close as they can, and practically speaking, they will be very tight to

the sectors in the benchmark.

MR. SEMMENS questioned what happened in the process that caused Starwood Hotels & Resorts to be listed in McKinley's material as one of the ten biggest detractors from performance in 2007. MR. GILLAM said that when they originally bought Starwood it had better risk-adjusted returns than the Russell 1000 and had good earnings acceleration. In Starwood's case, it simply was not keeping up with McKinley's benchmark criteria and was sold.

CHAIR SCHUBERT commented that when the retirement board first hired McKinley it had under a billion dollars in assets and now it has over \$16 billion. The organization has a fairly lean investment team structure but appears to be set up to continue on and produce the performance results if anything were to happen to the founder and president/chief executive officer Robert Gillam.

MR. GILLAM said that they are proud of having a long-term stable work force, and his father is still an active CEO and intends to remain so. The firm is designed to remain stable, and employees have first right of refusal on any stock.

11. TCW Energy & Infrastructure Group - Update

TCW Group Managing Director R. BLAIR THOMAS addressed the Board by telephone. CLAUDIA SCHLOSS was present in Juneau. *[A copy of the TCW presentation booklet of slides is on file at the ARMB offices.]*

MR. THOMAS said TCW is among the largest institutional investors in energy globally, and they run a global platform. He said the 34-member energy and infrastructure team is located in Los Angeles, Houston, New York, London, and Sydney. Their target investing market is broadly defined as everything from the well head, where hydrocarbon is produced, to the spark spread, where a hydrocarbon is converted into electricity. TCW invests globally for several reasons: to diversify the exposure across types of projects and geographic locations; because they can follow trends in the industry on a global basis; and because it allows them to make a conscious choice about where to focus at any time. A good example is that a number of other managers raised U.S.-focused alternative energy funds — the vast majority of energy investment opportunities in the last two or three years have been ethanol in the United States. TCW tends to be pretty negative on that subsector and so has no exposure there. Investing globally also allows TCW to dampen their correlation to commodity price exposure, and they are much more than a commodity price play. Returns over 20-plus years have demonstrated that TCW can make money for clients in both a rising and a falling commodity price environment.

MR. THOMAS stated that the overriding theme in the global energy industry is that demand has finally caught up to supply, driven by consumption in China, India, and the

Middle East in particular. In the past there was an abundance of supply, and supply was regulated by a cartel to achieve a price target. There was always excess capacity where the cartel was able to control price and punish anyone who speculated in commodity prices. Now, between 86 and 87 million barrels are produced a day in the world, and about 85 million barrels are consumed. The cushion is quite small, and that is what creates the volatility and political risk. Just looking at India and China, last year they grew 1.1 million barrels a day year-on-year. So if the rest of the world stopped growing and just those two countries grew, the world would be at supply/demand parity in about 18 months. MR. THOMAS showed a graph of the declining production from the world's five largest oil fields, and a pie chart illustrating the limited access to the world's oil and gas reserves. He said the world is not running out of energy but has run out of cheap energy. The vast majority of energy is coming from unconventional sources, which are expensive and difficult to replace: ultra-deep water (off-shore Brazil, off-shore West Africa), tar sands in Canada, coal bed methane, and alternative energy (wind, solar, bio-fuels). So there has been a shift in the price of energy globally, and TCW does not see that reversing any time soon. They believe that all the easy reserves have been found. Between 2005 and 2006, industry-wide, upstream investment increased 45%, which is a startling percentage increase. Proved reserves increased by 2%. So it cost 45% more for 2% reserve growth. That is the environment in which TCW has been investing for the last several years.

MR. THOMAS reviewed TCW Energy Fund X, in which the ARMB committed \$80 million, saying it is shaping up to be the best performing mezzanine-oriented fund that TCW has ever done. They are looking at a 20% return at about 1.9 times return on investment. Fund X had 21 investments with 11 realizations. There is one impaired investment in the fund, Trident - a coal bed methane play in Canada. Normally TCW would expect two impaired investments in a portfolio this size, so having only one is good. Of the ARMB's \$80 million commitment, about 70% of the capital has been returned at this point, and the pension fund should see the return of all its cash within the next two quarters.

MR. THOMAS drew attention to several charts illustrating the fund portfolio's diversification, as well as the pace of ramp-up against what TCW projected when the fund was closed.

MR. THOMAS said the successor fund is TCW Energy Fund XIV, with the final closing in December 2007. There are ten investments to date, plus several transactions that have been approved by the investment committee. The ARMB committed \$100 million to Fund XIV, and approximately \$22 million have actually been contributed. Five million of that was just returned in January in connection with the last closing. Things are off to a fairly fast start, with the first distribution being paid out in the last two weeks: Alaska's share of that was \$2.4 million. TCW expects to be paying a distribution every quarter from this point forward, and the size of the distribution should grow over time.

MR. O'LEARY asked Mr. Thomas to remind the Board how the objectives of Fund XIV are different from the prior fund that ARMB invested in. MR. THOMAS said Fund XIV is a clone

of the prior fund with a mezzanine and equity investment focus. There is a bit more investment flexibility related to geographic diversification because they see more and more activity coming from places like the North Sea and Australia. He added that Fund XIV is quite a bit larger than the predecessor fund. The prior fund had a relatively short three-year investment period, while Fund XIV is for five years.

MR. PIHL inquired about Batesville in the portfolio, which has already been repaid. MR. THOMAS related that Batesville is a 800-megawatt gas-fired power plant in Mississippi. There were incentives for the management team to make improvements, and TCW sold the plant while the market was strong.

MR. JENNINGS asked for comment on whether the French ownership was relevant to the TCW Group. MR. THOMAS replied that since the transaction with Societe Generale in 2001 there has not been a single occasion where any SG person has ever sat in an investment committee, looked inside the portfolios, or ever tried to ask TCW to make an investment. TCW acts completely autonomously, and the Energy Group within the company runs its own business. He said he was shocked by the discovery of fraud at the bank (Societe Generale) in France and did not understand how it could happen, but it has no impact at TCW. He made it clear that their compensation at the group level is tied to their success in managing the portfolios and none of it comes from Societe Generale.

MR. THOMAS mentioned that the dislocation in the credit markets right now, along with the whole energy system being in need of capital investment, and with energy being one of the few sectors where the underlying fundamentals remain strong, makes it is a good time for TCW's value-oriented approach to investing.

12. Rothschild Realty - Five Arrows Realty Securities Update

MR. BADER stated that about five years ago the Board hired five real estate firms to expand the real estate program, one of those being Rothschild Realty and its CEO John McGurk.

[A copy of the Rothschild presentation slides is on file at the ARMB offices.]

JOHN MCGURK said that the ARMB committed \$50 million to the Five Arrows IV Fund in November 2004 and recently committed \$30 million to the Five Arrows V Fund. He explained that Five Arrows Realty Securities (FARS) invests in real estate operating companies, sometimes known as equity investments. The purpose of this structure is to keep the assets and the brains under the same roof. These companies have portfolios of existing stabilized properties, but they also include management and leasing, and typically construction. The FARS investments also have features that are not characteristic of equity investments: high current return, and it is senior to the common equity - so it has debt attributes. The typical investment hold period is five years, which is somewhere between the opportunistic and core styles.

MR. McGURK explained that the investment is for growth in the real estate operating companies, and the companies typically use the funding to capitalize either value-added or development projects. The capital structure of these companies is also supported by stabilized cash flow from existing properties. The equity of this investment puts Rothschild into the governance situation. The governance of private companies is split - half to Rothschild and half to management. Thus, the Board has to approve all debt, all acquisitions, all dispositions, and all major hire/fires. This protects Rothschild in risk mitigation as these companies invest the money. This structure provides Rothschild with tremendous alignment of interest, since typically all of management's money is subordinate to Rothschild, and all a company's real estate activities for the next five to eight years are going to be conducted through the fund entity.

MR. McGURK next reviewed the details of the ARMB's \$50 million commitment to Five Arrows IV. About \$37 million of that was contributed by the end of 2007, and the ARMB has received roughly \$4.8 million as returned capital and realized earnings. The net return since inception is about 14.2%.

MR. McGURK also presented the investments in Fund IV, drawing particular attention to the coupon yields on the debt piece that range from 8% to 9% and that are distributed back to the investors.

At MR. BADER's request, MR. McGURK described the structure of the typical company that the FARS funds invest in. He then went through the Fund IV portfolio of real estate operating companies and underlying properties in detail. *[This information is contained in the Rothschild presentation slides on file.]* He mentioned that one of the key characteristics of most of Rothschild's investments is finding companies that are very hard to manage, because they can bring in management teams to handle those. He also gave a brief update on Fund V, which has one transaction so far.

MR. McGURK recounted recent incidences where the disruption in the credit markets has impacted sales. He noted that another effect is the number of people who are willing to bid, as the capital markets have wiped out the highly leveraged bidder. The Five Arrows Funds are not leveraged, and the companies tend to be leveraged in the 60% to 70% range, so the combination is fairly low volatility. The benefit to Rothschild of the bubble passing on the highly leveraged buyers is on the buy side. The companies that Rothschild invests in must have existing portfolios with strong cash flows and have growth opportunities ahead in their own market. The companies that Rothschild sees are beginning to cut back on development. In the nine companies they still hold they have not seen any weakness in the fundamentals so far - no decline in rents or rollback in vacancies. However, if weakness in the economy occurs, weakness in the real estate fundamentals will occur. But clearly the capital markets have changed, and the underwriting is completely different. Depending upon the market, very few people are underwriting very large increases in rent. Nobody is

underwriting the same exit cap rate as the going-in cap rate. So just the underwriting is essentially lowering the price.

MR. MCGURK said that Rothschild has not seen a large diminution of value yet, but people who bought late in 2007 and closed without a price adjustment have experienced a diminution. The \$125 million that Rothschild sold within the last 90 days got the cap rates that they anticipated getting, but if they had sold all \$725 million that they had wanted to sell at that point they probably would have gotten at least a 10% haircut. Whenever they are selling now, they are breaking them into smaller, discreet pieces and aiming them at discreet local markets. There are still people in the local markets who are willing to buy, who have never used the highly leveraged approach to real estate. So in the end, the current market environment has clearly slowed down the sales process. But on the buy side, it has accelerated the process, because entrepreneurs in their local marketplace suddenly have an ability to buy where they haven't had a chance to buy in the last 24 months. Those things are beginning to emerge, though they have not come to fruition yet. The ask on the part of the sellers has not come down, and the bids on the part of the buyers have not come up. That is the thing that has changed in the last six months. Transactions are occurring but not at the same volume.

MR. MCGURK stated that the current volatile market is creating tremendous opportunity for Rothschild. They bring stability to an entrepreneur, and stability has become a very key factor. Governance usually is the threshold philosophical question for most of the private entrepreneurs concerned about giving up control of their company for five to eight years. Rothschild provides the names of the other entrepreneurs they have done business with over the last 13 years, and that usually answers the question of whether they have added anything to the company boards. Most of these companies are going to double in size, and some of them have tripled. It is not just about adding assets or development; it is about how to approach the whole organizational side of a business. It is much more like a private equity type approach to real estate, and Rothschild has that experience.

CHAIR SCHUBERT called a scheduled break from 3:08 p.m. to 3:15 p.m. Commissioner Kreitzer rejoined the meeting immediately following the break.

13. UBS Realty Investors - Update

TOM ANATHAN and JEFFREY MAGUIRE, both managing directors of UBS Realty Investors, made a presentation on the two real estate mandates the firm manages for ARMB - a separate account and a commingled fund. *[The slides containing detailed information from the presentation are on file at the ARMB offices.]*

MR. ANATHAN gave a quick chronology of the pension fund's relationship with UBS, as well as an overview of UBS's global real estate organization. He mentioned that although UBS has maxed out its position with the ARMB, they are happy to continue to be an

educational resource in any way they can.

MR. ANATHAN stated that in July and August 2007 liquidity in the market started to dry up. While it was a subprime issue in particular, overall liquidity in terms of lending to commercial real estate dried up as well. UBS noticed and began to adjust up cap rates for the quarter ended September 30, 2007 because of P/E contraction. A good bit of the rest of the industry did not. UBS's total composite return was 2.3% for the September quarter against the NFI-ODCE Index return of 4.0%. UBS has been through this before in 1991 and right after 9-11 in 2001, and they tend to move more rapidly in response to changing economic environments. The portfolios are doing beautifully, and he encouraged the Board to remain focused on the five- and ten-year return numbers where they have been a top-quartile performer.

MR. O'LEARY commented that the spread in performance between UBS and the NFI-ODCE Index seemed to have widened in the fourth quarter 2007, and it might be that UBS is being more conservative than other real estate funds. MR. ANATHAN replied that he was not comfortable with the word conservative, but over the course of the last several decades UBS has tended to move in a more timely way when the markets turn against them. That will impact the very short-term performance, but their long-term performance continues to be very strong because, as the markets come back, they have done very well on the rebound.

MR. O'LEARY mentioned that there are starting to be net redemptions from open-end real estate funds, and a UBS competitor has established a redemption queue. He asked if the redemptions were happening industry wide or just specifically with one program.

MR. ANATHAN responded that the particular fund Mr. O'Leary mentioned had performance issues and also a significant change in staffing. Those two issues probably exaggerated the situation for that fund. He said UBS has had a few withdrawals related to rebalancing because real estate has done well relative to the other asset classes.

MR. ANATHAN explained that RESA is being converted from a separate account structure to a new open-end fund structure and renamed the Trumbull Property Fund (TPF). The strategy remains to invest in core direct U.S. real estate. He briefly reviewed the TPF portfolio by property type and geographic location. He stressed that the TPF can add meaningful diversification to the ARM Board's real estate portfolio through access to larger properties. TPF is 82% invested in properties which are over \$50 million in size, and 55% invested in properties which are over \$100 million in size. In general, the large properties have performed exceedingly well, but returns in the short term are lagging some competitors. The primary performance objective is 5% real rate of return. That has not been a heroic objective in the last few years, but UBS believes it will be harder to achieve in the next couple of years.

MR. ANATHAN stated that the TPF portfolio is very well positioned if there is an economic down turn because properties are 94% to 95% leased. He said property sales have been critically important this year, and he described two of the major transactions. One was a \$245 million combination of two office towers in Atlanta that were bought three to four years ago. The properties did not perform very well and were sold. The internal rate of return was 9%, not bad, but not as good as the rest of the portfolio. The sale illustrates UBS Realty's monitoring and active management of the portfolio, and selling a property that does not work if that is the best solution. The other major sale was a \$200-plus million portfolio of properties that were purchased in the late 1970s and early 1980s in Silicon Valley. UBS believes they achieved sales prices that are probably not achievable in today's market. They expect to continue some selling into 2008.

MR. MAGUIRE next presented information about the individual client account that UBS Realty manages for the ARMB. The account is an unlevered core strategy portfolio that started about ten years ago and now holds 12 properties worth \$377 million. The Board allocated \$305 million to this account, and the remaining allocation is about \$27 million. Over 60% of the capital has been returned to the ARMB - most of it from operating cash flow, some from property sales, and the rest from realized gains.

MR. MAGUIRE reviewed the portfolio's diversification by property type — apartments, office, retail, and industrial — and by geographic location. The portfolio is above the market weighting in industrial, which provides a solid income return and stable cash flow over time. Retail is a bit underweight, but office is significantly underweight the market, which reflects the lower risk strategy that UBS pursues for the ARMB in this core account. About 70% of the portfolio is on the east coast or west coast. The primary investment objective of the account is to generate at least a 5% total real rate of return, net of fees, over rolling five-year periods. UBS Realty has been successful at that over all the periods, with a 9% net real return per year since inception.

MR. MAGUIRE presented the strategy for the separate account. He said he believes the portfolio is well positioned to be defensive over the next year or two. It is well leased at 96%, and there are few lease expirations over the next 18 months. The next significant amount of lease expirations come in the second half of 2009, mostly in industrial properties, and two of the markets currently have vacancy rates 5% or lower. There has been a bottom line improvement in apartment performance as people become more wary of buying houses, and UBS has seen an ability to push rents and limit concessions. Finally, there are two grocery anchored centers with long-term leases, and UBS feels comfortable with those two retail assets.

MR. MAGUIRE noted that the years 2005 to 2007 were great years, with gross total returns in the 16% to 20% range in the portfolio. He said the market is coming back down to more realistic long-term expectations for real estate fairly quickly. He reviewed income and return numbers for the separate account compared to the NCREIF Property Index,

with two specific comments. The income return has exceeded the index, partly due to UBS's strategy and partly due to the overweighting to industrial. On the total return side, UBS has seen over the last year or two that the NCREIF Property Index has become a very highly priced and robust total return index. That may not be sustainable going forward, partly because of timing and valuation policies of some of the managers that Mr. Anathan mentioned earlier. Another element is the Index composition and how the mega properties have really grown significantly over the last two to three years, fueled in part by growth in value of CBD (central business district) office towers and by the NCREIF Property Index including some properties that were never there before - mostly Manhattan office towers that now constitute 5% of the Index. Over the last year there also has been an interesting difference in performance: the mega properties had a total return of 19.75%, and the other properties were between 13.75% and 15.0%. It is hard to predict what property size performance differences will look like going forward.

MR. MAGUIRE stated that one of the reasons the separate account continues to do well compared to its cohort is the solid income return, which comes from the strategy, the composition of property types, and from UBS's approach to valuation. He said the portfolio has a 12% increase in net operating income projected over the next three years. That is due to anticipated growth in apartment revenues, as well as lease rolls on the commercial properties, rent escalations, and some leasing activity that is taking place at the one core-plus asset in the portfolio.

MR. SEMMENS requested a more detailed explanation of UBS adjusting cap rates up. MR. ANATHAN said that market inflection points are very difficult to judge exactly what is going on. UBS Realty has clearly seen the volume of transactions drop off since July 2007. From the little evidence there is of trades, the large, well-located properties do not seem to be materially impacted. So at this point it is very difficult to say exactly how much of a price adjustment is occurring, in other words, higher cap rates (net operating income divided by the market value). Whether that number is 3%, 4% or 5% is hard to say. UBS started moving cap rates up in its portfolios in the third quarter of 2007 and again in the fourth quarter. The independent appraisers adjusted the values of the properties to require a higher going-in cap rate. UBS had increases in operating income that offset that. The result is that the value of some properties went down, or they went up less than they would have had the cap rates not been increased.

MR. BADER asked how often properties are appraised. MR. ANATHAN said that 25% of the Trumbull Property Fund portfolio gets a full independent appraisal every quarter. So if a property is appraised on December 31, the appraiser does a desktop update on June 30, which is a full appraisal, but they do not necessarily visit the property. UBS does a review on the March 31 and September 30 quarterly dates. If something has changed relative to what the last appraisal said — say, a new lease was signed at a higher or lower rate than what was anticipated in the appraisal — and if there is more than a 3% adjustment in value, UBS will go to the appraiser with a recommendation that the property be written up

or written down. So essentially every property is looked at every quarter. MR. MAGUIRE stated that appraisals are done at the same frequency for the separate account, but one difference is that they do not apply a materiality hurdle every quarter. But the value of each property is adjusted every quarter.

MR. O'LEARY referred to UBS's spreadsheet of property sales in the Trumbull Property Fund going back to 1982. He noted that in almost every case the net sales proceeds exceeded the last independent appraised value of a property. He said that was not really a good thing, and he asked for comment.

MR. ANATHAN agreed and said UBS Realty continually reminds the appraisers that it is just as bad to be wrong low on an appraisal as it is to be wrong high. In their defense, he said the valuation process assumes a typical buyer, but UBS works the market hard when selling a property to find that one buyer who will pay more than anybody else. So he views that not as a weakness in the overall appraisal process but as recognition of the strength of UBS's sales process.

MR. O'LEARY remarked that TPF is an open-end fund so people are having transactions at the appraised value, in effect. He said that was his motivation for the question.

MR. PIHL commented that he drew comfort from the net sales proceeds being higher than the last appraised value. MR. ANATHAN said it was a spreadsheet he had had prepared for his own use years ago, but clients began asking how the sales were going against the last independent appraisal, so UBS included the chart in presentations.

14. Contingency Plan Adoption - Resolution 2008-01

MR. BADER reported that Mike Barnhill of the Alaska Department of Law had pointed out that a contingency plan was required under the statutes for the Supplemental Benefit System (SBS). The Defined Contribution Plan Committee met twice and took up the question of what a contingency plan should look like. The resulting contingency plan is included in the meeting packet. The plan defines an exigent event as a situation where significant investment loss or other impairment has occurred, or could occur, for reasons other than market losses associated with an investment advisor's approved investment mandate. So an exigent event is not when the market is selling off heavily and reason to convene the Board to make some decision relative to that. When September 11, 2001 happened, the previous board did not call a meeting, but the chief investment officer conferred with the board about whether the typical rebalancing plans in the investment guidelines should be followed, given the magnitude of the market volatility. The board had said to follow the investment policy in place.

MR. BADER said the Defined Contribution Plan Committee was not anticipating that type of situation would give rise to use of the contingency plan. The Committee anticipated such

an event that would come to the attention of either the Commissioner of Revenue or Commissioner of Administration, and that the Commissioner or their designee would notify the Board chair that it was necessary to convene the Board to take action relative to that event. If the Board chair was unreachable, then they would attempt to reach the vice chair. Reasonable public notice would be given, within the context of the type of investment loss that was envisioned. During the meeting, the Commissioner would present the facts and circumstances surrounding the exigent event and possibly recommend corrective action. The Board would take action it deemed appropriate to protect the assets of the beneficiaries and fulfill its fiduciary role. If a quorum of the Board could not be gathered within 24 hours, the Board chair or vice chair would be empowered to take authority, if they saw fit, given the exigent event. This would likely be a rare event. If independent action were taken by an officer of the Board, it would be reported to the Board at its next meeting. The Defined Contribution Plan Committee thought the contingency plan should apply to all assets under the fiduciary role of the Board, not just SBS.

MR. TRIVETTE, as chair of the Defined Contribution Plan Committee, moved that the Board adopt Resolution 2008-01 and the attached contingency plan. MS. HARBO seconded.

MR. PIHL suggested an amendment to #6 in the contingency plan, as follows: "If the appropriate officer under paragraph (2) above determines that a quorum cannot be assembled within 24 hours, then the appropriate officer, upon the recommendations from the Departments of Revenue or Administration, shall take action..." He said the officer of the Board would be acting upon the recommendations of the commissioners.

MR. TRIVETTE said that the committee had discussed the whole issue of whether this ought to be a Board responsibility, an officer's responsibility, or should it be on the departments. He said chances are miniscule that an officer of the Board will ever be in that position, because exigent means something extremely unusual. The committee believed it should be incumbent upon one of the officers elected by fellow Board members, whomever it might be at the time, to take that responsibility, versus someone who is an exempt employee of the State of Alaska.

MS. HARBO stated that she also thought it was a lot of responsibility for one person and wondered if the officer could act with the concurrence of the two commissioners who are Board trustees, because they are likely to be here.

As a member of the committee, MR. WILLIAMS said the provision in #6 was the subject of a lot of discussion. The committee recognized that #6 would only come into play if the officer could not establish a quorum within 24 hours. They also discussed the intent that none of the Board officers would be taking action without having had input from the Department of Revenue or Department of Administration. No one Board officer wants to bear the sole responsibility to make decisions on behalf of the Board, and that person

would be looking for help.

MR. RICHARDS mentioned that there would be minutes from the meeting to show that the Board officer's decision was not made alone. If the Board member was brought up for fiduciary problems in the future, they could say look at the minutes of the discussion. Then if the Board officer did not take the advice of the commissioners, then maybe they would have a problem.

MR. JOHNSON stated that any actions taken under the contingency plan presuppose that the officer is acting in a fiduciary capacity. And for that person to act in a capacity without taking any advice from Revenue or Administration and so on would most likely be well outside the scope of fiduciary capacity. He said that while he understood Mr. Pihl's suggestion, it was sort of redundant, because throughout the plan there is the supposition that people are going to be acting to satisfy their fiduciary obligations.

COMMISSIONER KREITZER said she appreciated the lawyer's perspective, and she would have confidence in leaving it to the trustees who are Board officers currently. But if the Board were in a lawsuit and someone wanted to look back at the contingency plan and how clearly it was laid out, for that reason she would support something along the lines that Mr. Pihl stated, even though the Board and its officers have their fiduciary responsibility. Her suggested wording for #6 in the contingency plan was "..., then the appropriate officer, in consultation with the Department of Administration or the Department of Revenue, is delegated the authority to make decisions on the matter on behalf of the Board." She had a question about where in the plan was the direction on the Board getting together, so her suggestion was to include "until a quorum can be established." That would make it clear that it was a temporary action and liability or burden on that officer until there was a quorum.

MR. TRIVETTE stated that everyone on the committee felt that the chances of the Board being unable to establish a quorum ever happening were pretty slim in this day of easy access through various types of communication.

MR. RICHARDS indicated that #8 in the contingency plan dealt with reporting actions pursuant to the plan at the next board meeting. It could be an emergency board meeting that took place a week or so later.

MR. BADER stated that the Defined Contribution Plan Committee was considering that whatever action was taken would be like ringing a bell: you cannot unring it by convening the Board later. For example, a subsequent board meeting could not undo the Board officer's action to liquidate an investment.

COMMISSIONER KREITZER reminded everyone that the Board's most recent emergency action in August 2007 took two days when the first day was recessed to gather more

information. She was thinking of a situation like that, where the board officer might have to take an initial action but then continue to try to get a quorum together to finish the action. She made it clear that she was not at all worried about anyone on the current Board taking action and leaving her out of the loop, but setting the process down in policy might want to include "until a quorum can be established" to show the intent to hold a Board meeting, that this is not something that will go on for a month where the chair is burdened with this responsibility alone.

MR. RICHARDS indicated that Commissioner Kreitzer had convinced him, because he would not like someone to look back at the minutes of this meeting and say that the trustees had an opportunity to add additional clarifying language and turned it down.

MR. RICHARDS moved an amendment to #6 of the Contingency Plan using the language that Commissioner Kreitzer suggested.

CHAIR SCHUBERT said that before there was an amendment on the table she thought the language about "until such time as a quorum shall be established of the Board, etc." raised a question as to whether either the Board chair or the vice chair action was authorized. She wanted to see language that the Board would ratify the action of the appropriate officer at its next meeting or at a meeting at which a quorum is established. She said she agreed with including the first clause about consultation with the Department of Administration or the Department of Revenue.

COMMISSIONER KREITZER indicated that she would accept that as an alternative because that was what she was getting at, that there was some closure.

MR. WILLIAMS pointed out that paragraph #3 of the plan deals with board ratification.

CHAIR SCHUBERT acknowledged that her concern about later board ratification of any officer action was addressed in #3.

MR. PIHL drew attention to the Chair's use of the word "or," as in, the Department of Administration or the Department of Revenue. He thought it should be "and" rather than "or."

MR. RICHARDS moved an amendment to paragraph #6 of the Contingency Plan to read, "..., then the appropriate officer, in consultation with the Department of Administration and the Department of Revenue,..." MS. HARBO seconded.

MR. TRIVETTE inquired of legal counsel if there were any issues with the proposed amendment.

Assistant Attorney General MIKE BARNHILL read the following from statute: "If the Board

is considering entering into a contract or modifying an existing contract concerning the management or investment of the mandatory receipt for supplemental employee benefits program the Board shall consult with the Commissioner of Administration before making a decision on it." He said it might make sense for the contingency plan amendment to specify commissioner, because someone might consult with the Retirement and Benefits Division director instead, and there could be an issue there.

COMMISSIONER KREITZER said to be clear it should not be at the division level; it should be consulting either with her or with the deputy commissioner. Otherwise, something could sit at the division level for too long and she or the deputy commissioner would not be aware of it. She said she had not been going to bring this up because they have settled the question internally between the two departments.

MR. JOHNSON read aloud suggested language for the amendment, "..., then the appropriate officer, in consultation with the Commissioners of Revenue and Administration (or their respective designees),..." He said that would cover specifying the commissioners instead of the departments, and if there is a designation of a particular line of authority, that is covered as well.

MR. RICHARDS accepted Mr. Johnson's suggested wording for his motion to amend.

Roll call vote (on amendment)

Ayes: Harbo, Kreitzer, Pihl, Richards, Semmens, Trivette, Williams, Schubert

Nays: None

The motion passed unanimously, 8-0.

Roll call vote (on main motion)

Ayes: Williams, Semmens, Pihl, Harbo, Kreitzer, Richards, Trivette, Schubert

Nays: None

The motion passed unanimously, 8-0.

9. Continued: Follow-up Discussion about Citizens Fund

MR. BADER said that based on what he understood from Sentinel Investments the mutual fund would be a slightly different mandate than what the Citizens Core Growth Fund currently operates under, likely changing from a growth fund to a core fund. He noted that the Citizens Fund is one of the investment options being selected under the Managed Account service, which is managed by Ibbotsen Associates for Great-West. The Managed Account service is the default option for defined contribution plan participants who have not made an investment selection of their own. He said the change from Citizens to Sentinel, if the merger goes through, would require notifying the plan participants invested in the

Citizens Fund.

MR. BADER asked the Board to authorize portfolio management staff to make a due diligence visit to Sentinel Investments, as well as give staff latitude to work with the Retirement and Benefits Division on notifying participants about any change, presuming the merger is approved. He noted that the merger of Citizens with Sentinel is scheduled to take place the first week of March, which is before the Board's next meeting. He added that there were likely other tasks associated with the change at Citizens that had not come to mind yet.

MR. O'LEARY mentioned that Great-West and Ibbotsen Associates would also have to be advised of the change as quickly as possible because it would impact the continuing investment advice they provide to plan participants.

MR. JOHNSON said there would have to be some documentation of Sentinel taking over the Citizens Fund, which would perpetuate a novation of the existing contract, if the ARM Board intended to continue with the fund. He said he recommended asking Sentinel to assume all liabilities previously from Citizens going forward and that they stand by the same investment mandate, and so on. He commented that there was an additional issue that the mandate might be changing a little bit under Sentinel.

MR. TRIVETTE commented that Sentinel's Common Stock Fund contained stocks in a number of sectors that Ms. Collier of Citizens had said she would not invest in, based on Citizens' social screening criteria.

MR. BADER said he understood that Sentinel would use the socially responsible screens and that those investments would not be made.

CHAIR SCHUBERT remarked that it seemed that the Citizens Fund mandate had morphed from what it was when the Alaska State Pension Investment Board originally retained the firm for a socially responsible equity mandate. She recalled that the ASPIB was getting pressure from plan participants that they wanted a fund that would not invest in "sin" stocks and things to that effect.

MR. BADER said that the Citizens Fund was an index fund when ASPIB first hired the firm. MR. O'LEARY added that it was a very small operation, and the primary criteria affecting portfolio construction was elimination of bad companies from the index, and what remained was invested in. So it was perceived to be a core socially responsible fund. Citizens eventually changed away from the modified index fund approach to active management and hired Jonathan White as the portfolio manager. Mr. White does not appear to be the person who will be managing the fund should the merger go through.

MR. SEMMENS moved that the ARMB grant the chief investment officer and his staff the

authority he requested associated with the change from Citizens Advisers to Sentinel Investments.

MR. TRIVETTE seconded.

MR. SEMMENS mentioned a presentation on socially responsible investing he recently heard in Arizona where he thought the person personified that type of investing. He said he was concerned that the product available to Alaska's plan participants did not meet what he would typically consider to be a socially responsible fund.

MR. BADER indicated that the Defined Contribution Plan Committee was going to be reviewing the whole menu of investment options available. He said Department of Revenue staff have identified some index funds through State Street that are socially responsible, but they have not inquired into it very deeply. He noted that a lot of participants are choosing the Citizens Fund because of the social screens they think are being applied. So the ARMB owes it to these people to give them sufficient notice to make any changes to their investment selections.

MR. SEMMENS recalled that Ms. Collier had told the Board earlier that contributions to the Citizens Fund have gone up by something like a third. He assumed that was because Great-West/Ibbotsen was recommending it to participants, or actually putting them into the fund under the Managed Account service. He noted that according to Retirement & Benefit Division statistics not many defined contribution plan participants have opted out of the Managed Accounts.

MR. WILLIAMS stated that this was an appropriate item to refer to the Defined Contribution Plan Committee as it continues its comprehensive review of the SBS and Deferred Compensation Plan investment selections.

CHAIR SCHUBERT observed that Ms. Collier seemed to be saying goodbye to Board members as she was leaving the meeting earlier. Ms. Collier herself was part of what attracted the original ASPIB board to Citizens Fund, and if Ms. Collier were to no longer be part of the company she helped create, CHAIR SCHUBERT said she would have some real concerns in that regard as well. She asked Mr. Bader to look into that as part of staff's due diligence.

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

MR. WILLIAMS moved to refer review of Citizens Core Growth Fund as an SBS and Deferred Compensation Plan investment selection to the Defined Contribution Plan Committee. MR. SEMMENS seconded.

The motion passed unanimously on a voice vote.

CHAIR SCHUBERT informed fellow trustees that she would be absent the next day. She offered comments on several agenda items, for the record:

- Noting that pension obligation bond legislation was moving forward and might very well pass, she wondered if the ARMB was prepared for that in terms of setting an asset allocation, adopting regulations, and anything else that might need to be put into place.
- Favored renewing the contract with Callan Associates.
- Was in favor of renewing the Investment Advisory Council contract with Dr. William Jennings.
- Supported suspension of the securities lending program.

RECESS

The Chair recessed the meeting for the day at 4:35 p.m.

Friday, February 15, 2008

CALL BACK TO ORDER

VICE CHAIR SAM TRIVETTE assumed the duties of Chair and called the meeting back to order at 9:00 a.m. In addition to Mr. Trivette, trustees Gayle Harbo, Larry Semmens, Michael Williams, and Tom Richards were present to form a quorum. Martin Pihl arrived at 9:15 a.m., and Commissioner Annette Kreitzer arrived at 10:25 a.m. Chair Gail Schubert and Commissioner Pat Galvin were absent.

REPORTS (Continued)

15. Economic Presentation - JP Morgan

DR. ANTHONY CHAN, Chief Economist for JP Morgan Chase Bank, had been invited to address the ARM Board about his views on the U.S. economy. *[Mr. Chan provided a paper copy of his slides which are on file at the ARMB offices.]* He began by saying he was more optimistic about the economy when he last spoke with Mr. Bader, but more data since then has him believing the odds of a recession are now between 50% and 55%. However, he is still confident that the recession will be somewhat mild because there has been so much stimulus going into the period of slow-down and credit crisis. The Federal Reserve started relaxing money market conditions in August 2007, and they started lowering interest rates. Also, he recently did some research looking at the real Fed funds rate when a recession begins: typically, if it is below 4%, it generally suggests avoiding a recession or it is very

mild. So if one assumes the recession began sometime around December or January, the real Fed funds rate is about half that amount. With that backdrop, he has confidence in his ability to forecast that if the country does go into recession it would probably be mild in nature. He said the stimulus package will not prevent a recession but is a good insurance policy against a real protracted slow-down.

DR. CHAN stated that the Federal Reserve is expected to continue to lower interest rates. He said he worked at the Federal Reserve as an economist, both in New York and in Washington, so the Fed is interesting to him. He thought the Fed has handled this economy as best as they can, but they are not infallible and can make mistakes. If the U.S. moves into a recession, it will not be because of the Fed but probably despite the Fed's best efforts. He said the European Central Bank continues to do whatever they can to stimulate the economy. They were thinking about raising interest rates in 2007, and the fact that they did not do that is enough evidence to suggest that it is somewhat stimulating, given that the ECB has an inflation mandate more than in the U.S. The ECB also recently added about \$500 billion of liquidity.

DR. CHAN said the U.S. dollar continues to remain weak, but the dollar is in an oversold condition, and the fundamentals are still very poor. But there may be a bit of a bounce-back because of the dollar being so oversold. Corporate profits are going to be weaker, and the equity markets should face a challenge in the first half of 2008. He expects some relief in the markets in the second half of the year.

MR. SEMMENS asked DR. CHAN to talk about money supply because it is not mentioned anymore. DR. CHAN said the reason why the Federal Reserve does not talk about money supply anymore is because it is intent on controlling interest rates. With that intent, the money supply number that comes out is basically what is required in order to generate that equilibrium interest rate that they target. The Fed can no longer control the money supply, and that is why they have no money supply targets or anything like that. So even though you read in the press that the money supply is growing too slowly or too rapidly at the Fed's doing, that is false. The only way the Fed can actually stimulate the economy is to lower the target interest rate, and that normally generates more money supply, but they can't go out and increase the money supply. If you increase the supply of anything, the price goes down. So if money supply is increased too much, the interest rate may be much lower than the target. It makes a mockery of the system. The term auction facility that the Federal Reserve has established to add \$20 billion of liquidity every couple of weeks, a lot of people have noticed that what the Fed is doing behind the scenes is that they are letting the securities in the portfolio basically run off and they don't repurchase them. People may say that is a back-door attempt to secretly trick them into thinking the Fed is adding liquidity but the Fed is taking it back. They are not. The reason they are doing that is simply because if they allowed all the money supply to increase and all the funds to increase, the effective funds rate would go way down below the effective rate. So if the Fed wants to stimulate, it is not by increasing the money supply, it is by lowering the interest rate, and

then the money supply falls out of the equation.

DR. CHAN mentioned what JP Morgan Chase Bank has been advising its clients to invest in. Asia ex-Japan has outperformed U.S. equities by 32%. They are excited about Europe and the EAFE Index, but they have taken some money off the table because those have performed so well. He displayed a graph showing that, excluding financial stocks, the earnings picture in the U.S. looks fine. Unlike in the prior recession, where there was basically a broad-based decline in the earnings of almost all the sectors, this time it is mostly focused on the financials. So it makes it easier for policy-makers to target policy just to help one sector.

DR. CHAN said that a lot of people have been asking him, what is a recession. The media reports that it is when two consecutive quarters of negative GDP growth occurs. That is not the definition of a recession, even though it is reported everywhere. It is the non-profit National Bureau of Economic Research that determines whether a recession occurs or does not occur, and their definition is to look at a lot of variables: monthly employment, personal income, manufacturing activity, and GDP. And they look at monthly data more than quarterly data. They meet periodically to review all the variables, and typically they call a recession eight or nine months after it starts. Not because they are irresponsible or don't know what is going on, but it is a serious decision that has massive implications. The National Bureau of Economic Research also does not say when a recession is over until a year or so after it ends. It is a huge lagging indicator.

DR. CHAN reviewed the macro economic impacts of a possible recession this time:

- Capital spending will be weaker.
- Consumer spending could grind to a halt because of higher energy prices and the declining wealth effect from housing.
- Net exports will not be able to stop the down turn, but historically they cushion the blow.
- Global GDP has weakened, but this time around it should be a little bit better, probably 3.5% or more. Global GDP is starting from such a high base that even if it falls, it will not fall deep enough, given the robust nature of global economies today, to cause a global recession.
- Inflation slows. Today core inflation may ratchet up to 2.3%-2.4%, and the unemployment rate may be 5.5%. That cannot be stagflation. Wages are starting to come down, and wages are 70% of the average cost of producing a product or a service.

DR. CHAN next discussed market impacts, because these influence the ARMB's investments during a recession:

- The U.S. equity markets usually hit bottom around the middle of a recession. The last two recessions were only eight months long. In the last 60 years, they have averaged about 10.4 months. Economic expansions average a little over 60

months. Recessions are getting shorter, and expansions are getting longer, which means more opportunities for long-term investors to make money. If the recession this time began in December, and under the worst case scenario it is as long as the last two, that means four months or so after the month of January, people should start to see the bottom of the equity market. At least if history repeats itself, and history does not always repeat.

- Small cap versus large cap - no consistent pattern. The rule is, if in the prior cycle one of those groups was dominating, then it switches to the other group. Over the last couple of years small cap was outperforming, so large cap seems to be in favor. There is a similar pattern for growth style versus value style. The price to book value of the financial sector stocks is not as low as they typically go during a recession. So if there is no recession, then financial stocks are a great buy, but if there is a recession, it would be a risk to buy now. The financials are probably 40-50% done with the write-offs, and there are still more to come. At some point JP Morgan will get excited about financials, but it is a little early.
- Europe is probably going to be the first area to show some weakness, in the event that the U.S. goes into a recession. Historically, the EAFE Index gets hammered even more than the S&P 500 Index. So something to be aware of. That is why JP Morgan has taken more profits off the table in Europe than they have in Asia ex-Japan.
- Bond yields always decline during periods of slow-down, and spreads also explode.
- Gold prices generally get weaker, but the world is more global today so a person cannot rely strictly on the history of the U.S. business cycle. The focus should be more on what is happening with respect to growth in the super-emerging economies like India and China for clues about what is going to happen to gold. Gold is a good place to have some exposure to hedge, but to the extent that global economic growth is going to slow down, and U.S. economic growth is going to slow, one could expect some air to come out of gold. But with no recession expected in China and India, gold should not completely collapse. Similar stories with oil prices — it will not pursue exactly the U.S. business cycle anymore. Many of the other economies are ruling the day. The same thing with food prices and metals.

Turning to housing, DR. CHAN said the homeownership rate has come down quite a bit because it is getting tougher to borrow money, and people are expecting prices to be lower next year. Housing prices relative to income are still too high relative to history. Professor Shiller at Yale University believes that house prices will decline 50% on a cumulative basis before it is over. DR. CHAN said he is not that pessimistic and expects another 7%-8% decline in the next 12 to 15 months, then maybe another 3%-4% after that, with 2009 being the earliest for a turnaround. His own research shows that the wealth effect of housing was adding quite a bit to consumer spending in the last few years, and now it is going to subtract a bit. That is why he believes if there is a recession that consumer spending can grind to a halt.

Regarding subprime, DR. CHAN reported that the latest vintage year for which there is full data suggests that about 5% of the subprime mortgages taken out nationally became delinquent before the first mortgage payment was made. The problems have spread to other areas of the market.

DR. CHAN explained that, unlike the European Central Bank, the Federal Reserve has two mandates — to maintain full employment, and to maintain low levels of inflation. He thinks the Fed has been preemptive, leading him to believe that if there is a recession it will be mild.

DR. CHAN said his conclusion was that investors have to maintain a defensive posture because he could not see things being out of the woods until the second half of 2008. Obviously, things could deteriorate further, but he was confident with that base case scenario because the fundamentals are suggesting every day that conditions are getting weaker. Consumer spending is weaker, and the commercial real estate market is starting to become a bit more challenging, although he doubted the down turn there would be as severe as the residential. Capital spending usually lags and follows what happens to consumer spending, so capital spending cannot be relied on to turn things around. Consumer spending will eventually be resilient, but it will be a slow grind upward, not a huge bounce-back. He said he researched over the last couple of decades and found out that about 30% of fiscal stimulus is actually used: the rest is saved or used to pay down debt. So a fiscal stimulus helps, but it is not a silver bullet. In fact, 30% as an average is probably a little high for the latest fiscal stimulus, because people believe that taxes are probably going to be higher and they want to be prepared for that. If he were to guess, it would be more like 25% of the stimulus money will be spent.

DR. CHAN said JP Morgan believes the S&P 500 Index will probably bottom out somewhere between 1200 and 1250. In a balanced portfolio that is between growth and capital preservation, JP Morgan boosted the cash position up to almost 18% at the end of 2007. They have put some of that back to work and are looking for opportunities in high yield, in mezzanine debt, and in the equity market. But if they see the S&P at 1250 or 1225, they would probably put another 3%-5% to work of that cash.

DR. CHAN answered questions over the next 20 minutes on topics ranging from what constitutes the CPI, to people borrowing on the equity in their houses and spending it - and also using credit to spend, to the rising number of mortgages greater than the house values, to where the Fed fund rate could end up.

DR. CHAN mentioned that the federal administration just came out with a forecast of real GDP to grow 2.7% in 2008. He said he could not see that happening, that the U.S. would be very lucky if there was 1.5% growth in 2008.

DR. CHAN stated that the Fed fund rate would probably reach bottom around 2.25%, or if

he had to say a range it would be 2.0% to 2.25%. He gathered from the language of the Fed Chairman's speech yesterday that the next cut in the interest rate would be another 50 to 75 basis points.

After thanking Dr. Chan for his presentation, VICE CHAIR TRIVETTE called a scheduled break from 9:56 a.m. to 10:13 a.m. Commissioner Kreitzer joined the meeting ten minutes into the capital market presentation.

16. 2008 Capital Market Review - Callan Associates, Inc.

MICHAEL O'LEARY, Executive Vice President of Callan Associates, Inc., made a presentation on his firm's 2008 capital market assumptions and the implications for the ARMB's asset allocation policy. *[A copy of Callan's slides, which contain a lot of detailed information on this subject, are on file at the ARMB offices.]*

MR. O'LEARY stated that in January there was a decline of 17,000 jobs reported and a decline of 27,000 jobs in construction, bringing the 12-month decline in construction employment to 269,000. The fiscal stimulus package was \$168 billion, industrial production in the fourth quarter of 2007 was up a measly 0.6%, import prices in January were up 1.7%, and export prices in January were up 1.2%. Consumer confidence was announced, and it declined from 78.4% in January to 69.6% in February. He said he was aware of all those numbers, and it did not change anything he was about to say. He also mentioned the Paulson Credit Opportunity Fund that made 591% last year, and asked the Board to think about the leverage that had to be in the portfolio in order to achieve that rate of return.

MR. O'LEARY first reviewed the basic beliefs of investing:

- An investor is either an owner or a lender, or some combination of the two.
- Over the long term, presuming economic growth, owners should earn more than lenders.
- Ownership is inherently more risky than lending, because when lending money there is some collateral to depend on to help protect the money loaned. An equity owner is the last in line.
- A great lesson from the last year is the risk from the absence of liquidity. The ARMB invests in illiquid investments, in part, and it should be paid a premium for accepting that illiquidity. Illiquid investments are private equity, direct real estate, some of the more esoteric market niches, farmland, timber, and the TWC energy fund.
- The extraordinary returns from things like private equity come in part from manager skill, but they are also seasoned with a fair amount of leverage, particularly in the buyout funds. Some of the more aggressive direct real estate investments employ fairly significant leverage. An example is the Rothschild Realty Five Arrows fund that the Board received an update on yesterday. Leverage tends to magnify the return when the manager is right, and it will also magnify the return when they are wrong.
- Diversifying portfolios tends to increase return per unit of risk. The ARMB's

Investment Advisory Council has preached diversification, and Callan supports that too. Something else that has been driven home is that in illiquid, challenged, stressed markets, the correlation of most risky assets moves amazingly toward 1. That is, if there is a desire to get liquid or a need in the short run to create liquidity, it does not matter what you own, it is going down in that type of environment. In August 2007, the quant equity funds were having difficulties. The 130/30 types of investment programs are 130% long and 30% short — the manager shorts the stocks he/she thinks are going to underperform the benchmark and they are 130% of the underlying equity. A market neutral hedge fund is a fund that has basically as many shorts as longs. So if the manager is right in identifying the stocks that are going to do well, and also right in identifying the stocks that are going to underperform, they will get the spread, and they won't have the volatility of the market. There is some leverage involved in the 130/30 and in the market neutral funds. In a stressed environment, if there is a desire to reduce the amount of leverage, the manager has to sell what they are long and buy what they are short. In that type of environment, at least for a very short-term period, the things that the manager thinks are going to go up are going to be subjected to selling pressure, and the things that the manager thinks are going to go down will be subject to buying pressure. So in a one-week period in August 2007 some of these strategies had extraordinarily weak returns. A market neutral fund might have been down 5%, even though it is not supposed to have any market exposure. He summed this up by saying that when Callan models, they come up with great specificity, but it is a specificity that is totally unfounded in the short term.

- Ultimately, market returns are linked to and limited by economic growth. The challenge is, what is the relevant economy? Increasingly, the relevant economy is the global economy. Earnings growth for U.S. headquartered companies has grown much more rapidly than the U.S. nominal gross national income. In part, that is because they have benefited from growth overseas. In part, it is cyclical. Tax cuts have helped growth. And in the short run, corporate managements can increase their use of leverage within their own business that will increase growth rates. But what the Board should be worried about, as fiduciaries of retirement plans that go on for 40 to 60 years, is the long-term growth that can be expected from major asset classes.

MR. O'LEARY reminded the Board that Callan uses a five-year planning horizon because they want to make sure that all the projections are consistent with long-term real return numbers and current inflation estimates. He indicated that part of the Callan material in the board packet was a review of historic capital market projections that he would speak more to later. Looking back, Callan's projections are almost always within the range, but the single projection that tends to be closest to the mark is the bond return, typically within a percent.

Turning to the spreadsheet of 2008 five-year projections, MR. O'LEARY noted that the

numbers have hardly changed at all from last year. The returns for international equity and emerging market equity were reduced by basically 20 basis points. He showed the projected returns and risk numbers for each asset class on a graph to visually give trustees a sense of where each asset class fits in terms of risk and volatility space. He pointed out that there is literally no difference between broad U.S. equities (combination of large cap and small cap) and international equities. International equities are a little bit more volatile than domestic equities because of the currency component to them. If a world composite is created, excluding emerging markets, the sum of the two is less volatile than either of them independently, which is diversification at work.

MR. O'LEARY said the predecessor board looked at high yield bonds for a long time and established a very small allocation to high yield. It was small because of concern that spreads were too narrow. Obviously, spreads have widened significantly. He suggested that high yield get more attention this year or next year.

MR. O'LEARY pointed out the volatility numbers for private equity and emerging markets, which arguably may be too high. There is also an equity-like volatility for real estate, which is much higher than the observed volatility in the portfolio, which is driven by appraised values.

He next showed a graph of Callan's five-year projections for domestic equity, international equity, bonds, and inflation each year since 1989. As inflation has declined over that period, the bond projections have come down. Another graph of Callan's risk projections since 1989 showed that the big change for risk was the projection used for the bond market. When interest rates were higher, the same percentage of total return change in interest rates resulted in more volatility.

MR. O'LEARY stated that Callan has been at the leading edge of pushing international for almost two decades. Intellectually, they do not see any reason why stocks in any one developed market should do better than stocks in another developed market. Ten years from now people will probably just think about the number for global equities. But there are differences in the composition of the economies. For example, Canada has a different general economic setting and is much more dependent on energy as a source of its economic activity than Japan. So it is very reasonable, as different sectors of the global economy do better or worse, to expect significant differences in the profitability and earnings and general economic health of a particular economy.

MR. O'LEARY said the two determinants of long-term growth are labor force growth rate and productivity. He led the Board through an exercise of comparing developed Europe and Japan with the United States, whether one area is expected to grow its labor force faster than another, or whether one will have higher productivity than another. The conclusion was that there is not a meaningful difference between the U.S. and other developed markets when looking at these two factors of long-term growth. Besides cultural

differences, there are differences in tax policies, because capital will find the most tax-friendly place. There is not a huge difference in tax policies among the major developed markets, although the U.S. probably has some advantage. The point is that an investor is not necessarily going to make more over the long term simply based on the domicile of the companies invested in. There can be great world-class global companies anywhere, and those companies may do exceedingly well.

MR. O'LEARY reviewed a graph of the currency impact on returns from 1984 to 2007 and discussed how the wreckage of the Japanese economy was a major factor in why the EAFE Index did so poorly in the decade of the 1990s, and the strength of the dollar during that period. He pointed out that in local currency terms there has not been a lot of difference in the returns for international developed market stocks and U.S. stocks, even in the last five years - roughly 2.5%. So currency has played a huge role in the success of international investing in recent periods. Another graph depicted the volatility of returns from 1984 to 2007, and pretty consistently international stocks have been a little bit more volatile than domestic stocks. But there can be some big differences between the volatility as apparent in dollars and the volatility as apparent in local currency. The message is that international stocks are not inherently superior to U.S. stocks. And the onus should be on those who believe that international stocks will do much better than U.S. stocks to explain why — it may well be, but what is the basis? Is it that international stocks are less expensively valued? Is it because certain international economies are going to be particular beneficiaries of the world economic environment over the next five to seven years? Those would be acceptable answers, but someone has to prove that.

MR. O'LEARY next ran through a series of graphs depicting historic return and risk statistics for the major asset classes. He spent a few extra minutes on the Lehman Aggregate Bond Index, pointing out that the income component of return is very stable and does not change much from year to year. He said that current yield is a strong predictor of returns, but it does not work all the time, particularly at inflection points in the market.

DR. JENNINGS noted that the lagged yield to worst number for the Lehman Aggregate Index as a measure for domestic fixed income is a full half a percent lower than when the Board was doing this review last year. MR. O'LEARY explained that corporate treasurers try to take advantage of changes in interest rates in the issuance of debt. He said Callan had a big debate about whether they should lower the domestic fixed income number, but they had another concern about future inflation, which they kept at an estimate of 2.75%, which has been the same estimate for three years. Callan did not want to lower the inflation projection, and even thought about raising it a little. He said this is an illustration of Callan reverse engineering the projections, but they do it knowing that if they simply relied on the naive projection they would expect less return from bonds.

MR. O'LEARY stated that the long-term expected return for equity real estate is 8.26%, less than equities but higher than bonds. Real estate has less observed volatility than the

bond market, but that is because the return series is driven by appraised values, which do not show the volatility of the public markets. No one believes that equity real estate is less risky than bonds. MR. O'LEARY also reviewed the return and risk statistics for the NAREIT Index (for real estate investment trusts). He noted that Callan uses REIT types of volatility when modeling real estate.

MR. O'LEARY said that inflation for the most recent five years has been about 3.03%. So with the cash return of 3.07% for the same period, it was basically a wash. A lot of people think that cash has an innate 1.0% to 1.5% real return imbedded in it, and for a lot of periods it does. But that is not the case in periods of steep yield curves and very low interest rates.

MR. O'LEARY presented a graph that ARMB staff prepared, showing all the defined benefit related programs and what asset classes they are invested in. What is being proposed this year is just having the major asset categories of broad domestic equity, broad foreign equity, broad fixed income, and then a catch-all of real assets that would include REITs, inflation-indexed bonds, real estate, energy, farmland, and timber.

MR. SEMMENS asked why TIPS (Treasury inflation-protected securities) were included in the real assets category. MR. O'LEARY said it was because the real motivator behind owning TIPS is long-run inflation protection, which is a driver that is common to all the other assets within the real assets category. Well in advance of the Board's April meeting, in consultation with ARMB staff and the IAC members, Callan will finalize the ARMB custom composite asset categories and prepare a range of policy alternatives for the Board's consideration.

MR. O'LEARY drew attention to a spreadsheet of five illustrative efficient policies using the 2008 projections.

DR. JENNINGS said that one of things always talked about is subtracting out inflation to come up with a real return expectation, to make Callan's numbers comparable to what the State's actuaries use. He wondered if the Board should be a bit more concerned about the real return number if Callan were to adjust the bond return projection and/or the inflation expectation.

MR. O'LEARY mentioned that TIPS have done exceedingly well, and the 10-year TIPS is currently about 1.40% real yield. From the market's perspective, that might be a good blind forecast. The break-even yield is 2.25% to 2.5%, what the market is saying inflation is. Callan is projecting inflation at 2.75%. He said that when the Board has the discussion about changing the asset allocation policy, he wanted them to really think about if they are comfortable with the underlying assumptions, particularly with respect to the real assets – although the real assets will be dominated undoubtedly by real estate.

DR. JENNINGS stated that in the past there has always been a margin of safety when looking at Callan's real return number versus the actuary's real return number, but that is probably gone. MR. O'LEARY said that the actuary's inflation expectation has always been higher. Using Callan's projections, the ARMB's expected real return is comfortably over 5.0%.

VICE CHAIR TRIVETTE asked Dr. Jennings to remind the Board about the margin of safety concern at the April meeting.

MR. O'LEARY said he wanted to highlight a few things about the economy next. He said that every year when he thinks about the capital market outlook he considers the disaster scenario, and normally it is about a 5.0% probability of occurrence or less. He felt that in August 2007 it was the highest probability it has been in the 30-plus years that he has been in the business. That was because of the fragility of the financial markets. When markets cease to function, then the economy's ability to do what it is supposed to do is severely affected. Because of policy-makers' actions and the passage of time, that risk has diminished a lot, but it is still much higher than it has been every year when he thinks about the capital market outlook.

MR. O'LEARY stated that in 2000-2001 there was real concern about a serious recession. The reason Callan did not think it would be a serious recession was that the consumer could keep spending, in part because they could supplement income through refinancing mortgages and because home values were increasing. A significant portion of the population does not have a mortgage on their homes, but of those that do, the equity cushion is supposedly around 20%. That was before the recent price declines. A good portion of the refinancing that occurred when interest rates were at the lowest levels was to adjustable rates. Former Federal Reserve Chairman Alan Greenspan actually said that was a good financial strategy. A lot of people are being confronted with that now that home prices have declined in many areas. There are people who have depended on credit to sustain their style of life.

MR. O'LEARY said that financial institutions and intermediaries have put themselves in a tough spot. On one hand they are being told they do not have enough equity and to get more equity. At the same time they are being told to write down or write off assets — and then go lend. High yield bonds do not amortize, they mature, get called, or go belly up. The ideal circumstance is that interest rates have gone down, and corporate treasurers think they should be able to refinance those bonds because the companies have plenty of cash and their operations have improved. But who is going to buy the bonds? Spreads are 700 basis points over. That is the real risk out there to the economic recovery. The odds are that it will all work out, and that is what Callan's projections presume.

MR. O'LEARY stated that one of the biggest problems is that people do not know where the problem is. The expanded use of derivatives is intellectually very appealing: it allows

people to sell off some of the risks that they don't want to keep. But then somebody else owns that particular type of risk that was sold off. The challenge is in the buyer knowing what risk they bought. It appears that even some very sophisticated people did not truly understand the risks that they bought or the manner in which they attempted to hedge a risk that they already had in the portfolio.

MR. O'LEARY said that stocks go up three years out of four and have gone up a lot more than bonds over time. He did not think there was an reason for that not to continue.

MR. BADER asked why Callan captures more than the average volatility of real estate in its assumptions but does not capture the comparable return. Using REITs as a proxy does not capture liquidity premium, and it ends up with an asset allocation that continually seeks to cut the real estate program, which has been the ARMB's most successful asset class for a long time.

MR. O'LEARY explained that part of it is the innate conservatism with respect to all illiquid asset classes. Part of it is a recognition that the NCREIF Index is a very large index that is unlevered. Most institutional real estate portfolios today have between 20% and 40% leverage. Many of the strategies that institutional investors are using in real estate, beyond core, have leverage of up to 70%-80%.

MR. BADER pointed out that ARMB has real estate separate accounts that have no leverage. MR. O'LEARY said it is possible that the REIT projection should be higher because REITs have over 50% leverage. He said he personally was quite comfortable with a more stable and slightly higher real estate return projection. He acknowledged that there was a contradiction in the real estate projections that has been there for 20 years, and it would probably be there for another five or six years anyway. He said he has never suggested that a client that had a 10% target for real estate reduce their target.

MR. WILSON related that Massachusetts used a different number for unleveraged core real estate than for leveraged real estate. He said the risk/return is vastly different. MR. O'LEARY said it would be perfectly fine to do that within the real return bucket.

Continuing with Callan's economic projections, MR. O'LEARY presented a series of graphs:

- Consumer consumption and disposable income.
- Corporate profits may stall after soaring in the last five years. There have been essentially no corporate defaults, but the default rate might go up. The tax environment may be less friendly for corporations over the next five years than it was over the prior five years.
- Productivity growth.
- Core inflation 2.4%, the All Urban Consumer Index 4.1% year-over-year. Inflation spiked higher with energy prices in 2007. While the rate of inflation increase might

abate, don't expect a big decrease in inflation. Callan is concerned about inflation longer term, which supports the notion of having the real return category. It is not in Callan's forecast, but if the inflation number is wrong, their guess is that it will be wrong longer term because inflation is higher than the projection rather than lower than the projection.

- U.S. current account deficit, and U.S. export growth.

VICE CHAIR TRIVETTE asked if the U.S. export growth helped by the falling dollar would have much impact on inflation. MR. O'LEARY said it was certainly a factor that could contribute to higher inflation, but Callan has built it into their inflation estimate. There has been some improvement because U.S. exports have become more competitive.

Responding to MR. PIHL, MR. O'LEARY stated that Callan's expected return for the ARMB's current asset allocation policy is essentially the same as it was last year, a little over 8%.

MR. WILSON asked for Callan's view on emerging markets. MR. O'LEARY replied that there is population growth in emerging markets and a rapid growth rate in the potential labor force. It is where the political environments have changed markedly so that basic principles of governance and freedom seem to have taken hold. The importance of capitalism to emerging markets has become more apparent to all, so while there still may be nationalism of industry and other geopolitical risks that reside there, those countries will be the driver of global growth over the next 20-30 years. He said the whole developed world is dependent upon emerging economies continuing to emerge.

MR. WILSON inquired how to view that in light of the ARMB's fairly significant underweight to emerging markets relative to international indices. He said that of the total global markets about 10% of the value is in emerging markets. MR. O'LEARY said the ARMB's target weight to emerging markets is 2.0% of the total fund. MR. BADER noted that the current actual weight is about 3.0% of the total fund. MR. WILSON said that is a fairly dramatic underweight. MR. O'LEARY pointed out that there is some pick-up where some of the developed market managers have meaningful emerging markets exposure, like McKinley Capital. He agreed with Mr. Wilson that emerging markets is a potential area for longer-term increase.

MR. ANDREWS asked why there wasn't a currency allocation being considered in the real assets category. He added that currencies are nothing more than a short-term debt obligation.

MR. O'LEARY replied that the Board's decision to move into emerging market debt is ultimately a currency move, which is ultimately linked to inflation. Emerging market debt is currently included in the fixed income category. There are very few firms that have done as much work as Callan has in separating reality from tout on currency. It would be great if

people had the ability to successfully forecast changes in currencies, and amazingly few have been able to do it. Those who have done it and those who have not done it tend to charge high fees to do either. One of the managers with the best record has achieved a princely pre-fee return of 2.0% in this environment where it has been basically one direction on the dollar. Two percent may sound wonderful, but in order to get that return, the manager fees are 1.5%. MR. O'LEARY said that he always has a worry that most of the international assets for clients are actively managed, and somehow or another the manager is taking account of currency. Currency hedging can make a lot of sense, particularly if a fund has a big passive commitment to international equity. Once a fund gets above 15% or so in total fund assets in international, at least thinking about neutralizing the exposure over that level makes sense. If the projected return for domestic equity is at 9.0% with a standard deviation of more than 15%, and the projected international equity return is at 9.0% with a standard deviation of just under 20%, putting those two together, the standard deviation is less than the standard deviation of domestic equity alone. That is because the currency is helping diversify.

MR. ANDREWS recalled that there were discussions with managers in the early 1990s about if they hedged currencies. At the end of the day, the decision was to let the managers make the call on currencies.

MR. O'LEARY stated that now there are more momentum-based processes that have come into portfolio management, and McKinley is a good example of a firm that would be picking that type of thing up. They might not be identifying currency as the causal factor, but it would influence their portfolio construction. He said Janet Becker-Wold of Callan Associates could give the Board a presentation on currency any time they want more education.

LUNCH BREAK

The Vice Chair recessed the meeting for lunch at 11:50 a.m. When he called the meeting back to order at 1:15 p.m., Trustees Semmens, Kreitzer, Pihl, Williams, Richards, and Trivette were present. Ms. Harbo had been excused at noon for the remainder of the meeting, and Chair Schubert and Commissioner Galvin were absent all day.

REPORTS (Continued)

4. Treasury Division Report (moved forward from Wednesday)

Deputy Commissioner of Revenue, BRIAN ANDREWS, first applauded Mike Barnhill for negotiating the settlement with State Street Global Advisors that reimbursed employees and retirees for losses they experienced in the Daily Government/Corporate Bond Fund in mid-2007. He reported that next week the State would be exchanging checks with State Street for about \$1.5 million for the fee reimbursement component.

MR. ANDREWS reported that there is no over-budget variance of concern with the Treasury's budget, and, if anything, things are under budget and on target. Regarding legislative matters, he testified last week on the Sudan divestiture bill that is presently in House State Affairs. He also presented the pension obligation bond corporation legislation (HB 13) to the Senate Finance Committee. He said the department does not anticipate any delays out of Senate Finance. He stated that when those bonds are issued the ARM Board will have a lot of bond proceeds to deal with. That discussion will encompass whether the money should be commingled into the existing asset allocation structure or whether to set up a separate portfolio with a different asset allocation policy.

COMMISSIONER KREITZER related that Senator Stedman had asked her to tell the ARM Board to get ready for pension obligation bonds (POBs). She posed the question of whether this discussion ought to be on the April meeting agenda. The end of session is April 13.

VICE CHAIR TRIVETTE asked Deputy Commissioner Andrews when he expected the ARMB would actually have the bond proceeds to invest, assuming the bill passes. MR. ANDREWS estimated August or September.

MR. PIHL inquired about what role the Board should have in supporting the passage of the POB bill. MR. ANDREWS stated that there is a resolution from the ARM Board on record in favor of POBs, and he has reminded Senator Stedman of that.

COMMISSIONER KREITZER said a status report would be appropriate at the April meeting.

MR. RICHARDS asked about the value of pension obligation bonds in the bill. MR. ANDREWS replied that the bill allows for up to \$5 billion of bond issuance. He said he expected something less than that in the first allotment, perhaps \$2 billion, but it would be up to the Pension Obligation Bond Board.

17. Defined Contribution Plan Default Option Recommendation Resolution 2008-02

MR. BADER and VICE CHAIR TRIVETTE reviewed a two-page staff report in the board packet that outlined the work of the Defined Contribution Plan Committee (chaired by Mr. Trivette), staff, consultants, and advisors. At the present time, the default option for members entering the defined contribution retirement system is enrollment in the Managed Account program offered by Great-West. The default option in the Supplemental Benefit System (SBS) plan is the Alaska Long-Term Balanced Fund. At its October 31, 2007 meeting, the committee voted unanimously to recommend that the ARM Board stay with the Managed Account program until July 1, 2009, at which time age-based target date funds would become the default option. Further, staff would be assigned the task of identifying to the Board an implementation plan.

VICE CHAIR TRIVETTE reported that some of the Committee's decision was driven by federal regulations stemming from the Pension Protection Act of 2006. Even though the regulations do not apply to Alaska's retirement systems directly, they are the best benchmark available for what are the best practices, and legally defensible if there is ever a question about it. The Committee also received information at the Education Conference in Seattle in October, got an in-depth paper from Callan Associates, heard the perspective of advisor Dr. Jennings, and reviewed detailed analysis from Zach Hanna of the Department of Revenue investment staff. He commented that over a series of six meetings the Committee did a superb job of researching the topic, and thought the ARMB could probably share its process with other states if they wanted to do it right. He said that the Committee had initially talked about implementing the default option change to age-based target date funds on July 1, 2008. But after long discussions with the Department of Administration's commissioner and the staff working with the retirement systems day to day, the Committee decided more time was needed to implement the new plan.

MR. WILLIAMS stated that the Committee took a very deliberative process in considering its recommendation, and they were sensitive to the contractual obligations already in place and did not want to put the State in any legal liability. The Committee worked with all the parties to arrive at a solution that the members believe will be the most benefit to plan beneficiaries in the long run.

MR. SEMMENS asked if the primary reason for deferring implementation until July 1, 2009 was because of contractual issues. VICE CHAIR TRIVETTE said yes. MR. BADER explained further that at this point even accomplishing the transition to a different default option by July 1, 2008 would be impractical, in terms of notifying participants. So implementation in 2009 makes sense for a number of reasons. VICE CHAIR TRIVETTE added that no one wanted to do it mid-fiscal year in case it meant asking for additional budget appropriations. But part of it was trying to figure out the education component, because everyone strongly agreed about not only keeping the current level of participant

education but wanting to increase it.

MR. RICHARDS moved that the Alaska Retirement Management Board adopt Resolution 2008-02, (relating to the default option for defined contribution plans and the Supplemental Benefit System Plan). MR. WILLIAMS seconded.

COMMISSIONER KREITZER said this was about the belief that the State can manage the money better than the participant can. She said she respectfully disagree with all those who provided information. The information from the Education Conference presentation was about private plans, none of it was about public pension plans. She did not find that particularly helpful in making a decision. She said she remained concerned that the plan participants receive the best education that they can receive, and she was not convinced that this change will do that. She intended to vote No on the resolution.

Roll call vote

Ayes: Richards, Semmens, Williams, Pihl, Trivette

Nays: Kreitzer

The motion carried, 5-1. [Trustees Schubert, Harbo, and Galvin were absent for this vote.]

18. Securities Lending

MR. BADER had a short slide presentation to supplement the one-page staff report in the packet. He started with an explanation of what securities lending is and how the ARMB securities lending program works to generate incremental revenue, using the Navigator Prime Fund managed by State Street Global Advisors. *[See slides on file at the ARMB offices for details.]*

MR. BADER said that while it may look like free money, there is an outside chance that there could be a significant loss in the securities lending program.

MR. BADER stated that the previous board at times approved securities lending and at times restricted securities lending. When the ARM Board came into existence, there was a securities lending program in place, but it was done with the understanding that the collaterals were going into the most conservative investments. The people who borrow the securities are big brokerage firms, such as Citibank, Merrill Lynch, and UBS - all names that have been in the news lately about losses. The point is that no matter how prestigious the firm that the securities lending program is dealing with, there is an element of risk.

MR. BADER reviewed a pie chart of how the collateral is invested in the Navigator Prime Fund and pointed to the slice called repos that was at 31% at November 27, 2007. He said a look at the makeup of the repo collateral revealed that there were no Treasuries at all, there were a few agencies, and the rest were more risky investments. He indicated that he

was not saying that State Street was engaging in risky practices in the Navigator Prime Fund, but there is nothing as secure as a Treasury certificate for collateral.

Investment staff have become uncomfortable with the Navigator Prime Fund's investments, particularly the collateral accepted for short-term loans known as repos, and the concentration of loans with a single counter party, up to 15%, which is pretty high. MR. BADER said that there are a lot of guarantees in the securities lending program but nothing that indemnifies the fund against counter party risk. He said that staff believes there ought to be a better way to invest the money in this program. While it may be conservative, they do not believe the risk being taken is worth the return, especially in these volatile markets.

Staff's recommendation is for the Board to suspend the securities lending program until new investment guidelines are developed. MR. BADER noted that there would be revenue lost while the program is suspended for a period, but he thought the delay would be worthwhile. He said it might be possible for staff to work out a proposed cash investment program with State Street in time to have another recommendation for the Board at its April meeting.

MR. SEMMENS moved that the Board suspend the securities lending, as recommended by Mr. Bader. MR. WILLIAMS seconded.

MR. PIHL asked if there was any cost to get out of the program. MR. BADER said he was not aware of any.

MR. O'LEARY asked if suspending meant not initiating any new lending transactions and letting the existing transactions run off. MR. BADER confirmed that was the case. MR. O'LEARY said that in that process there ought not to be any costs associated with stopping the program.

On a roll call vote, the motion carried unanimously, 6-0.

19. Investment Actions

19(a). Callan Associates, Inc. - Contract Option to Renew

MR. BADER explained that the consulting contract with Callan has a provision for two renewals. The Board exercised one of those renewals in February 2007. The current contract runs through June 30, 2008, with one optional one-year renewal remaining. He said the services provided by Callan and Mr. O'Leary have been a benefit to the Board, and staff recommended that the contract be extended for one more year.

MR. PIHL moved to direct staff to exercise the second and final one-year contract option, extending the consulting contract with Callan Associates, Inc. until June 30,

2009. MR. RICHARDS seconded.

MR. SEMMENS asked if there were any changes in the contract, including the amount. MR. BADER said he did not think so.

For the record, VICE CHAIR TRIVETTE noted that both Chair Schubert and Gayle Harbo, who were absent, had expressed their support for renewing the Callan contract.

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

19(b). Dr. William Jennings - IAC Appointment

MR. BADER informed the Board that the term of Dr. William Jennings on the Investment Advisory Council (IAC) expires on June 30, 2008. Dr. Jennings has been an IAC member since 2003 and holds the seat designated for the academic advisor. His contract has been renewed once before, and staff believes his services to the Board and to Treasury staff have been very valuable. The recommendation was to appoint Dr. Jennings to another three-year term.

MR. SEMMENS moved that the Board appoint Dr. William Jennings to the Investment Advisory Council for an additional three-year term beginning July 1, 2008. MR. PIHL seconded.

VICE CHAIR TRIVETTE mentioned that Dr. Jennings brought valuable information to the Defined Contribution Plan Committee about what is going on in the industry and the country when it was considering the default investment option for plan beneficiaries. He said that information made him feel comfortable with the Committee's ultimate decision. He added that Dr. Jennings often provides the Board with insight that is different from the other IAC members because of his academic background. He said he strongly supported the motion.

On a 6-0 vote, the motion passed unanimously.

19(c). FY09 Asset Classes for ARMB Funds

MR. BADER reviewed the one-page staff report in the meeting packet. He explained that when the defined contribution plans were created there were several new defined benefit funds to support the new retirement systems. These new funds were invested in liquid assets across the board. Staff believes that the best asset allocation for these funds over the long term is a combination of publicly traded and private market investments. The Military Fund would not be invested in all the asset types because it is almost a cash account that is funded by the Legislature and quite different in its operation. Staff's request when they come to the Board in April with asset allocations is that each of the funds have access to asset classes similar

to the PERS and TRS pension funds. A spreadsheet matrix was included in the staff report that showed all the funds and the asset pools they would be invested in at the Board's approval.

MR. RICHARDS moved that the ARM Board approve using the asset classes recommended by staff for the FY09 asset allocation and efficient frontier development. MR. PIHL seconded.

The motion carried without objection, 6-0.

20. Asset Allocation for TRS Occupational Death & Disability Fund

Staff distributed a memorandum outlining the rationale behind the recommendation that the Board set an allocation for the Teachers' Retirement System defined contribution plan occupational death and disability benefit trust fund, a separate account created by SB 123 that is presently invested in cash. Resolution 2008-03 contained the specifics of the proposed long-term target asset allocation for this trust fund, which is the same as for the other death and disability trust funds.

MR. SEMMENS moved the approval of Resolution 2008-03 that sets out the asset allocation for the Teachers' Retirement System occupational death and disability fund. MR. PIHL seconded.

There were no questions, and the motion passed unanimously.

21. Resolution 2008-04 - Support for FY09 Contribution to TRS

VICE CHAIR TRIVETTE noted that this topic was discussed and a conceptual motion put on the table on Thursday morning under the Legislative Update from Commissioner Kreitzer. At that time, the Board had asked legal counsel and staff to draft a resolution for action later in the meeting. The resolution they prepared was handed out for trustees to read.

MR. PIHL moved that the ARM Board adopt Resolution 2008-04, regarding support for an appropriation to the Teachers' Retirement System in the amount of \$450 million. MR. RICHARDS seconded.

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

VICE CHAIR TRIVETTE was given the go-ahead to sign the resolution on behalf of the chair.

It was noted that the Board secretary, Gayle Harbo, was not present to attest the

resolution. Without objection, Larry Semmens was appointed as secretary pro tem to sign the resolution.

UNFINISHED BUSINESS

1. Disclosure Reports

MS. HALL indicated that the disclosure memo was included in the meeting packet. She reminded trustees that APOC (Alaska Public Offices Commission) reports were due March 15.

2. Division of Retirement & Benefits Report - Membership Statistics (continued from February 14)

MR. WORLEY asked if the Board would like DRB to separately report those people who have terminated from those who have retired. VICE CHAIR TRIVETTE said yes.

3. Meeting Schedule

MR. PIHL asked that a meeting of the Salary Review Committee be scheduled before the budget process gets too far along, preferably in conjunction with the June board meeting date.

MR. SEMMENS requested that the Education Conference be added to the meeting schedule. MS. HALL said the tentative date is September 8-9, and she would be contacting everyone to verify the date.

4. Legal Report

MR. BARNHILL reported that last week he attended the winter meeting of the National Association of Public Pension Attorneys in Washington, D.C. There was lots of excellent content, and he has shared the highlights of that meeting in an e-mail to Treasury and DRB staff. He said if anyone had questions to please contact him.

MR. JOHNSON stated that he had no supplemental legal report.

When queried by MR. PIHL about the status of the Mercer lawsuit, MR. BARNHILL stated that the case was filed in Juneau, and it was removed to federal court within the time allotted. The State has filed a motion to remand the case back to Juneau Superior Court. The parties are working together on moving the case into litigation, on discovery, and setting a trial schedule.

NEW BUSINESS - None.

OTHER MATTERS TO PROPERLY COME BEFORE THE BOARD - None.

PUBLIC/MEMBER COMMENTS - None.

INVESTMENT ADVISORY COUNCIL COMMENTS

MR. WILSON stated that Mr. O'Leary's presentation on the capital market outlook was terrific and set the stage for the most important decision that the Board makes, which is asset allocation. He particularly thought showing the difference between being an owner or a lender was an important distinction and probably the most important decision as a subsection of asset allocation. The amazing thing over the last ten years is that as of December 31, 2007 the 10-year returns from bonds and U.S. stocks were almost within 50 basis points of each other. So on a ten-year basis that decision was not that important, but over the last five years it was very important - the spread was almost 10%. He said he was struck that the expected return from stocks and bonds is probably the widest it has been in the last 15 years going forward in Callan's projections. So it is a really important decision for the Board to make as it looks at the new asset allocation and just how much risk trustees want to take relative to trying to get to the return targets. The Board heard today that the Fed funds rate could hit as low as 2.0%, which presents an opportunity for the Board to decide whether it wants to continue to be as much of a lender as it has been. The best-performing pension funds over the last five years had the least amount of bonds and the most amount of international stocks. The magical question is the next five years, and whether the Board will move toward more of a global allocation. That is what the foundation where he worked has done, as well as the Commonwealth of Massachusetts.

DR. JENNINGS thanked the trustees for reappointing him to the IAC.

TRUSTEE COMMENTS

MR. PIHL spoke in support of treating the contributions from employers more like a business so there is interest and fees charged for late or improper contributions. He felt this would make employers give the proper attention to correctly recording payrolls and contributions.

MR. RICHARDS indicated that his term on the Board was up March 1, and he hoped to be reappointed. He added that if he was not, he wanted to thank his fellow trustees for their support. The learning curve on this board has been tremendous, and he has found the presentations outstanding and extremely interesting.

FUTURE AGENDA ITEMS - None.

ADJOURNMENT

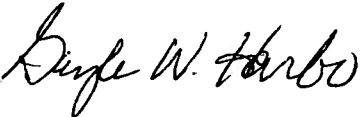
THERE BEING NO OBJECTION AND NO FURTHER BUSINESS TO COME BEFORE THE BOARD, THE MEETING WAS ADJOURNED AT 2:28 P.M. ON FEBRUARY 15, 2008, ON A MOTION MADE BY COMMISSIONER KREITZER AND SECONDED BY

MR. WILLIAMS.



Chair of the Board of Trustees
Alaska Retirement Management Board

ATTEST:



Corporate Secretary

Note: An outside contractor tape recorded the meeting and prepared this summary. For in-depth discussion and more presentation details, please refer to tapes of the meeting and presentation materials on file at the ARMB office.

Confidential Office Services
Karen Pearce Brown
Juneau, Alaska