

**ALASKA RETIREMENT MANAGEMENT BOARD
MEETING**

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

MINUTES OF
November 28-29, 2006

Tuesday, November 28, 2006

I. CALL TO ORDER

CHAIR SCHUBERT called the meeting of the Alaska Retirement Management Board to order at 9:01 a.m.

II. ROLL CALL

ARM Board Members Present

Martin Pihl
Sam Trivette
Gayle Harbo
Gail Schubert
Larry Semmens
Mike Williams
Bill Corbus
Scott Nordstrand (via teleconference)

Consultants Present

Rob Johnson, Legal Counsel

IAC Members Present

Jerrold Mitchell
William Jennings
George Wilson

Department of Revenue Staff

Tom Boutin, Deputy Commissioner, Department of Revenue
Gary Bader, Chief Investment Officer
Susan Taylor, Comptroller, Treasury Division, Department of Revenue
Judy Hall, ARMB Liaison Officer, Department of Revenue
Bob Mitchell, Senior Investment Officer
Zachary Hanna, Investment Officer

Steve Sikes, Investment Officer

Department of Administration Staff

Melanie Millhorn, Deputy Commissioner, Department of Administration
Charlene Morrison, Chief Financial Officer, Division of Retirement and Benefits,
Department of Administration

Others Present

Jay Dulany, RPEA
Alex Slivka, McKinley Capital
Pat Pitney, University of Alaska

III. PUBLIC MEETING NOTICE

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

IV. APPROVAL OF AGENDA

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

CHAIR SCHUBERT noted that there would be a report from Mike Barnhill under the Legal Report portion of the agenda.

MR. PIHL indicated that the Audit Committee Report could be moved to tomorrow after the Audit Report.

There being no objection, the agenda was approved as amended.

V. PUBLIC/MEMBER PARTICIPATION, COMMUNICATIONS AND APPEARANCES

PAT PITNEY, Vice President for Planning and Budgeting with the University of Alaska (UA) asked that the ARM Board support a proposal of changing the funding methodology for the TRS system. Currently the TRS system is based on a rate method. Rather than having the legislature appropriate money to each employer, UAA is recommending that the appropriation be paid directly to the TRS system. She was aware that the current governor intends to support this proposal. She asked that the method be changed so the money goes into the system and not passed through the employer. This is a flat amount and there is a shared liability. Every employer has the incentive to reduce participation in TRS, but that does not help the liability. As a result the rate will continue to go up as participation declines. MS. PITNEY explained that UA is looking for stability in the rate and the solvency of the system through direct appropriations. This will stabilize the payments and the financial constraints for the university and K-12 employers. This works best for TRS because it is a shared liability system, unlike PERS. She noted that the ARM Board had been provided with a letter from University of Alaska President Mark Hamilton, as well as additional information.

MR. CORBUS noted that some of UA's salaries and fringe benefits are paid for by the federal government and grants, etc. He asked what would be the impact of this change overall. MS. PITNEY stated that staff benefits rates are currently competitive with other universities. Universities are looking for the scientist who can get the most done for the funds available. Doubling of the rate will threaten the University's competitiveness in the research arena. The University's benefits are 20-25% funded by federal and private entities, TRS is more, and the optional retirement system is more. TRS is primarily state funded.

MR. SEMMENS asked that the ARM Board be given a report on how this recommendation could be implemented. It seems the method for TRS to get contributions is through the rate, so he was somewhat concerned about any discussion of reducing the rate that has been set. He asked for an answer to the question whether, if the State agrees to pay some amount of money, the employer would be able to offset the rate with the State contribution or is there some other methodology that could do this; or would the ARM Board have to reduce the rate it established in order to accomplish this recommendation.

MS. HARBO was aware that part of the problem with the TRS system as it regards the university system is that in the 1990s part of the university employees were given the choice to join other retirement programs. This resulted in a loss of employees contributing to the TRS system. TRS is also affected by the fact that the University hires a significant amount of teaching positions as adjuncts that have no benefits. These things have had an adverse effect on the TRS system. She asked how many adjunct positions exist at the University. MS. PITNEY stated that a small number of people that were in TRS went to the other retirement system (ORP). The optional system was instituted because in the 1980s there was a budget-constrained environment and the University was looking for a retirement system that is portable because the University is recruiting in a national market. When people came from out of state and went into the ORP program, there was no impact on the TRS system. Past service liability is not being carried on those individuals. There are few staff benefits for adjuncts and if these over 1000 people had been brought into the TRS system, there would be past service liability on those individuals.

MR. PIHL stated that in some presentations he heard in Ketchikan, Commissioner of Administration Nordstrand stressed that the liability is a liability of each employer across the state, not a State liability. He wondered how the University's proposal would square with that position. MS. PITNEY understood that the PERS system is an employer liability, so this solution is not as good for that system. The TRS system is a shared system and, therefore, from an accounting perspective all of the liability is held on the State's financials. MR. NORDSTRAND stated his remarks referred to PERS and not to TRS.

VI. MINUTES

MS. HARBO moved to approve the minutes of October 2-4, 2006. MR. SEMMENS seconded.

MS. HARBO noted that on page 40 her statement should read, "MS. HARBO understood that TRS would be 91% funded without healthcare." She noted that CalSTRS is 86% funded without healthcare.

There being no objection, the motion passed unanimously.

VII. ELECTION OF OFFICERS

MS. HARBO nominated Gail Schubert for Chair. MR. SEMMMENS seconded.

There being no objection, the motion passed unanimously.

MS. HARBO nominated Sam Trivette for Vice Chair. MR. WILLIAMS seconded.

There being no objection, the motion passed unanimously.

MR. TRIVETTE nominated Gayle Harbo for Secretary. MR. SEMMENS seconded.

There being no objection, the motion passed unanimously.

VIII. REPORTS

1. Chair Report

CHAIR SCHUBERT indicated she has had several conversations with Mike Barnhill about legal matters of interest to the ARMB. He will report under the Legal Report portion of the agenda. She also signed a notice acknowledging receipt of the CIO's action of investing funds on the ARMB's behalf; she believed Mr. Semmens received the same notice. She believed due diligence is ongoing. She reported that the fund's performance is in the top 10th percentile of public pension funds, which is an acknowledgement of the incredible investment staff working with the ARMB. She thanked the staff for their hard work and for Mr. Bader's leadership.

MR. PIHL asked if it would be appropriate for the Chair and counsel to prepare a formal acknowledgement of the staff's work. CHAIR SCHUBERT asked that Mr. Johnson assist her with this request.

2. CIO Report

GARY BADER reported that the Callan Associates Inc. ADV Part I is in the packet. This is the primary document that investment firms use to advise the SEC of the work they are doing. He has gone through Callan's ADV and found nothing extraordinary. Also included in the Callan documents are the names of investment management organizations that have purchased services from Callan, either by membership in their Institute or through other activities offered by Callan. This information is made available so the ARMB is aware of the relationships Callan has with managers. MR. O'LEARY added that Callan has been offering this information for some time and about one year ago began including it as an appendix in all of the ARMB's investment reports.

MR. BADER stated that Fortis has purchased Cadogan, which is one of the ARMB's absolute return managers. The ARMB's initial allocation to Cadogan was \$100 million. The packet also includes a review of the Cadogan purchase by Callan; after reading that document, he

understood that Callan was not troubled by the purchase. There is also a communication from Cadogan about the purchase and a description of how the business will be organized and a statement that the leadership of Cadogan will continue. He noted that whenever there is a change in an organization of this magnitude, the organization is put on the Watch List. He so recommended.

MR. SEMMENS moved to place Cadogan on the Watch List. MR. TRIVETTE seconded.

MR. O'LEARY noted that when there are these types of changes, the events are protracted. In the past managers have been put on the Watch List for 15 months in order to allow sufficient time to watch the operations of the firm.

There being no objection, the motion passed unanimously.

MR. BADER reported that the absolute return investment to Mariner has been increased by \$15.5 million. There was also an increased allocation to Crestline of \$30 million. These are changes in asset allocation that are within the ARMB's guidelines and can be made by the CIO in order to keep in line with the ARMB's investment targets. There was an additional increase to Mariner of \$9.5 million. There was a decrease to Turner Small Cap by \$70 million and to TCW Small Cap by \$70 million and of that total \$140 million, the allocation to McKinley Capital International Equity was increased by \$55 million, to State Street Global International Equity by \$55 million, and \$30 million to Luther King Small Cap. Luther King had the smallest allocation and this allocation balances the slate of managers in the small cap field more evenly.

MR. BADER reported that the ARMB has a handful of mortgages in its portfolio that are pension fund assets carried over from before the formation of ASPIB, the predecessor board to the ARMB. One of the first things the ASPIB did was ratify the sale of the mortgage portfolio to Alaskan banks, but some of the mortgages were not performing. He thought that most had been written off. One of the mortgages was given to Mr. Johnson for collection and he was successful in getting \$150,000 in settlement.

MR. BADER referred to Resolution 2006-36 relating to actuary litigation. This resolution will be discussed with Mr. Johnson and Mr. Barnhill at tomorrow's session and is provided for review prior to that discussion. This resolution will also be emailed to Trustee Nordstrand's office.

MR. BADER stated the ARMB took action at its meeting to amend the real estate policies and procedures to authorize the CIO to make up to \$75 million investment in new real estate opportunities, working with the real estate consultants. There has been research into some real estate funds and due diligence has been conducted. CALLAN has concurred in the hiring of two investment managers: \$75 million in BlackRock's Diamond Fund, which has a team that includes Eileen Byrne and Cathy Ebert, and \$74.8 million to Colony Fund that will have a global perspective. He stated it is his intention to bring these firms before the ARMB at its next meeting in order for trustees to become more familiar with the asset investment strategies they will employ.

MR. BADER noted that the ARMB has been provided with the Watch List.

MR. BADER stated he met with Mr. O'Leary and the CALLAN members at the Manager Review Meeting last month and there will be a report on that meeting later in the agenda.

3. Committee Reports

a. Audit Committee – Postponed to later in the meeting

b. Report to the Legislature Committee

MR. SEMMENS stated the Committee met October 16, 2006 to discuss further recommendations to the legislature. The conclusion of the Committee was that there is no recommendation to the full ARMB to request a supplemental appropriation to the PERS and TRS systems. The ARMB made its report to the legislature on April 14, 2006 and stands by those recommendations. The Committee also discussed some requirements of SB141 and Mr. Bader assured the Committee that the required reports would be made to the legislature on time.

4. Fund Financial Presentation

SUSAN TAYLOR, Comptroller, stated it was remarkable that Mr. Johnson achieved a settlement on a mortgage. She noted that the amount of effort spent when there is an inquiry on a mortgage is out of proportion with the benefit to the system of owning the mortgage.

MS. TAYLOR reviewed the Schedule of Investment Income and Changes in Invested Assets by Fund. As of July 1, 2006 there is the hybrid defined contribution (DC) plan with a defined benefit (DB) portion, which is why there is a \$0 balance in beginning invested assets for PERS. The TRS system DC/DB occupational death and disability has no activity. There will be no activity because there is no funding mechanism in SB141. She understood there would be a recommended fix proposed to the legislature to develop a funding mechanism. She noted that the assets over which the ARMB has fiduciary responsibility totals \$17 billion.

MR. PIHL thanked Ms. Taylor for breaking out the investment income, contributions, and withdrawals. This highlights the problem and the need for additional funding. Obviously the contributions are far short of withdrawals and cash flow is a mounting problem. In particular when the ARMB reviewed the audit reports, the last two fiscal years for PERS and TRS showed contributions at slightly over 50% of withdrawals. This confirmed in his mind the ARMB's action for increased contributions.

MS. TAYLOR noted that contributions and withdrawals had been netted for PERS and TRS and they are now broken out. Participant directed contributions and withdrawals contains an error in the report; however, the total ending invested assets is correct. She noted that in September's Fund Financial Report her staff brought to her attention a question about the withdrawals and it seemed that the fees were exceeding investment income. This does happen at times because of market conditions, but in the September report it was consistent across all of the investment options. She checked with the Division of Retirement & Benefits (DR&B) staff and she understood that when the participant-directed accounts for the new DB was done there is a \$35 fee and 9 bps is charged. She suggested the ARMB might want a presentation on the fees for the

new DB program. At the Audit Committee meeting yesterday there was a question about the fees charged for plans.

MS. TAYLOR stated that because this is a transition year, the current governor will present a budget to the new administration and then the new administration will have an opportunity to make changes before the December 15, 2006 statutory deadline for budget presentation. The ARMB recommendations to the current administration are included for increased State Investment Officer salary and additional investment management fees, taking into account the expected \$1 billion in additional contributions in FY08. Mr. Bader's staff had also asked for additional assistance for fixed income and equity and those items included in the budget. Staff will work with the new governor on a request as a result of the cost allocation plan review, which is not included in the current governor's budget. A result of the cost allocation plan review is that the State should be paying a greater percentage of Treasury costs, which would reduce the amount paid by the pension funds to the Treasury. She understood the current governor did not include this because they were including only continuing items or continuing initiatives.

MR. SEMMENS asked if it would be possible to produce corrected financial statements for the record. MS. TAYLOR replied in the affirmative. She indicated the financial statements are posted on the website and she could send hard copies to the trustees.

MS. HARBO noted that two of the numbers are reversed on page 3 of the report. MS. TAYLOR indicated that high yield and absolute return figures are transposed in the Actual Asset Allocation v. Target Allocation chart on page 3 of her presentation. This has been corrected and is shown correctly on the website. She complimented and thanked Ms. Harbo for her thorough review of the Fund Financial report.

CHAIR SCHUBERT noted that at the Budget Committee meeting several months ago there was a discussion about staff salaries and the possibility of the Salary Review Committee meeting to develop recommendations. She recalled requesting that staff compile information for that committee in order to see what salaries are being paid by other agencies. She did not recall receiving that information. MS. TAYLOR responded that at the second Budget Committee meeting there was information presented comparing Treasury investment salaries to those of the Alaska Permanent Fund Corporation (APFC). This appeared to be an appropriate methodology as it is the local market. APFC periodically contracts for a national salary survey. The budget request to the legislature was to bring all State Investment Officers up to parity with the APFC. She indicated that a meeting of the Salary Review Committee could be scheduled. She recommended that it be scheduled closer to the end of the fiscal year so the committee can have actual dollars to work with in making a recommendation to the Department of Revenue. MR. PIHL stated that he would like to see this information, as a member of the Salary Review Committee. He thought it should be a part of building the budget, rather than after. MS. TAYLOR stated the Budget Committee reviewed the information used to build the budget request, but she agreed that in the future the Salary Review Committee could meet concurrently with the Budget Committee. CHAIR SCHUBERT asked if the salaries for the State Investment Officers are on par with those at the APFC. MS. TAYLOR replied that they are not, but the

budget request would increase them. There has been movement in this direction under the current administration and in some cases there is parity with the APFC.

TOM BOUTIN stated there has not been a comparison of the job descriptions of the State Investment Officers at the APFC and those at Treasury. He also noted that, unlike the APFC, the Treasury Division has State Investment Officers that have nothing to do with the investments of the ARMB; the salary increment deals with those jobs as well.

DR. JENNINGS remarked that there is a global market for investment talent and he would recommend a broader set for comparison. He believed that the fund would find other states have been more aggressive in providing incentive compensation for their staff.

BREAK 9:53 a.m. to 10:10 a.m.

5. Performance Measurement – 3rd Quarter

For more information on this presentation, please refer to the document entitled “Alaska Retirement Management Board, Periods Ended September 30, 2006, Preliminary Performance Review & Evaluation,” kept on file at the ARMB offices.

MICHAEL O’LEARY with Callan Associates Inc. (Callan) stated the market environment for the third quarter was characterized by a substantial change in rates, attributable to the Federal Reserve no longer raising rates, concern that the economy was slowing and that demand for funds would diminish, and continued strong buying of US investments from abroad. It ended up being one of the best quarters for the bond market in history. For the year, the Lehman Brothers (LB) Aggregate Index returned slightly less than for the quarter and stocks have done better than bonds. It was a significant quarter in that the crosscurrents in the market were such that the average manager under performed the indices.

For the quarter, the domestic market did better than the international market. Currency was not a big factor during the quarter. For all periods out to five years international stocks have out performed domestic stocks. The S&P 500 had a terrific quarter returning 5.7% while small cap stocks were up just 0.4%. Small cap stocks, which had been doing very well, had a weak June quarter and now a weak September quarter. This has resulted in a meaningful change in valuation levels. MR. O’LEARY noted that the Russell 2000 was up 18.86% calendar year-to-date (YTD) through last Friday.

During the quarter, growth under performed value, continuing a trend over all periods. This is somewhat deceptive because mega cap, growth oriented stocks performed well during the quarter. Tukman, which invests in mega cap high quality companies, was among the ARMB’s best performing managers for the quarter and they are ahead of the S&P 500 for the trailing 12 months. That performance improvement began in May.

The ARMB’s performance for the year has been very good and the things that have contributed to that include being lower weighted in bonds than the mean, higher weighted in international than the mean, higher weighted in real estate than the mean, and higher weighted to alternative investments than the mean. The ARMB’s three absolute return portfolios have been under performing their objective of Treasuries +5 bps, but they have been doing better than bonds.

For the quarter, PERS and TRS returned below the target at 3.84%, mostly attributable to domestic equity. For the trailing 12 months, performance was 11.43% for PERS and 11.46% for TRS versus the target return of 10.71%. In aggregate, managers added to returns, but not domestic equity managers. Variances from the ARMB's asset allocation policy aided performance, primarily the over weighting in international.

MR. CORBUS asked if the asset allocation effect basically represents the CIO's freedom to move within the allocation bands. MR. O'LEARY replied that several factors contribute to the asset allocation effect. In illiquid market areas such as private equity, not being at target weight means there is over weighting in other areas. Choosing where the over weighting occurs is qualitative. This can also clearly happen in real estate.

MR. O'LEARY stated that cumulative total fund returns are actually higher than the Callan report shows because it does not include final real estate returns. Subsequent to preparing the report, Townsend prepared its preliminary report and the figures are above what were estimated. He indicated that final analysis would be done once the final figures are received. MR. WILSON asked if these figures are pre- or post-fees. MR. O'LEARY replied that real estate is net of fees, private equity and absolute are net of underlying fees, and other asset categories are before fees.

MR. SEMMENS stated he is distressed to see manager effect on returns as a negative. He thought there is something fundamentally wrong if over the last five and seven years the manager effect for domestic equities has been negative. He understood this analysis also does not include their fees. MR. O'LEARY explained that this is explained by a review of value and growth. There has been a tremendous difference between value and growth and the ARMB has a value "hole" in its structure. MR. SEMMENS asked if this means the ARMB does not have many managers using the value style. MR. O'LEARY replied that this is correct. At the last meeting, the ARMB approved proceeding with a large cap value manager search. The ARMB's individual managers are generating competitive returns given their style.

CHAIR SCHUBERT asked for the status of the large cap value manager search. MR. O'LEARY indicated that a Search Committee meeting was held on Monday; the profiles of the candidates that survived that process will be expressed mailed to staff on Friday; there are a total of eight. Staff will review those and narrow them down. CHAIR SCHUBERT recalled that five to six years ago Ark Asset, a large cap core value manager, was terminated; she was the only trustee who voted against that termination. MR. O'LEARY recalled that Mrs. Schubert did not favor that action. CHAIR SCHUBERT asked if her position was correct. MR. O'LEARY indicated that conceptually her position was correct.

DR. MITCHELL agreed that there is a growth bias in the portfolio; nevertheless, he indicated that over long periods of time it will be difficult for any domestic equity manager to out perform the index. He did not expect much of a positive manager effect. MR. O'LEARY noted that much of the large cap pool is passively managed and in this particular five-year period, the average manager has beaten the S&P 500 by a wide margin. In the third quarter, the S&P 500 was difficult to beat because it is comprised largely of mega cap companies.

MR. SEMMENS asked if Dr. Mitchell could extend his comments to a recommendation that the ARMB depart from its current practice and move more toward passively managed funds because over time managers are not expected to beat the index. DR. MITCHELL stated he would not form his comment as a recommendation. He believed that a good part of the ARMB domestic equity commitment should be passive, but he thought there are managers that, from time to time, can add value. The ARMB has a good consultant and an attentive board that can try to choose those managers.

CHAIR SCHUBERT recalled reading an article recently that funds are diversifying and in the future will be investing in hard assets, such as roads and tunnels. She thought it would be good for some of that information to come before the ARMB so it can start to think about those kinds of investments.

MR. TRIVETTE asked that the Callan report be sent to the ARMB members when the final real estate figures are available. MR. O'LEARY replied that those parts of the report that are affected would be transmitted.

MR. O'LEARY continued with his report. The ARMB's international returns for the quarter were above the EAFE Index and the MSCI ACWI ex-US. The ARMB also achieved very strong relative performance.

Taking out the dedicated emerging markets portfolios, the ARMB international equity was very competitive compared to the Callan international equity style group.

MR. O'LEARY next reviewed absolute return funds. The return for the LB index for the year was 3.67% and in each case the absolute return managers produced a return significantly greater; however, they under performed their performance objective of Treasuries + 5 bp. Crestline's and Mariner's performance is satisfactory. Cadogan is measured against another benchmark and their numbers are not as attractive, but their performance is consistent with their style. MR. BADER stated this asset class was added about two years ago and the ARMB was aware it was not trying to be as aggressive in this investment area as some other funds. MR. O'LEARY stated each of these managers is investing in 20-40 underlying hedge funds and, on balance, are striving not to have significant directional exposures. The ARMB's allocation is very diversified and will not do as well as the more aggressive hedge funds in a rising market. He noted that this allocation is largely a bond substitute and, therefore, he first sees whether these managers have returns that are better than bonds. The expectation of manager performance relative to any target is over a complete cycle and these managers have been with the ARMB for only 1.75 years.

MR. O'LEARY stated that for the quarter the total investment grade bonds were slightly below the LB Index, but for the year they were well above that index. In a comparative sense, the fixed income ranked strongly. He explained that the in-house portfolio earned 4.29% for the year while the LB index returned 4.67%, yet the in-house portfolio did not include high yield bonds. For the full year the attribution analysis shows that duration, sector, and quality were positive contributors, while term structure helped for the first nine of the 12 months, but hurt in the September quarter.

The two new high yield bond managers had a good quarter relative to peers. Mondrian, which manages an international bond portfolio, is a hedge against the weak dollar as it is a non-dollar denominated bond portfolio.

The ARMB's domestic equity pool was close to but below median for the quarter and the year. The three- and five-year returns are weak. The components of the domestic equity include Capital Guardian, which beat the S&P 500 and its peers for the year; McKinley, which was negative to large cap growth peers and the market index for the quarter and the year; RCM, which was negative to the broad market but strong relative to other growth managers for both periods; Relational, which had a good quarter; Tukman, which was positive to the market and peers for the quarter and the year; and the S&P 500 index fund. Relational is a value-oriented manager that was hired as an activist manager. The large cap pool has a slight growth bias with a tendency to over weight sectors that are growth oriented. There is agreement among the IAC, Mr. Bader and he that there has been a persistent growth bias in the ARMB portfolio.

The small cap component of the ARMB's portfolio has a concentrated growth bias that was helpful through the dot.com period and hurtful thereafter. ASPIB expanded the number of managers and since that was done, this component has been turned around. At the Manager Review meeting there was discussion to create better balance amongst the managers and that has been done, as Mr. Bader reported. There does not appear to be a pronounced growth bias in the small cap pool, but the sector analysis shows a significant over weighting to information technology. Nearly half of the TCW portfolio was in information technology and, prior to adjustment in size of portfolios, TCW was a large part of the pool. There is also an under weight to financials. REITs constitute a large part of the Russell 2000 Index and they are characterized in financials; most active managers tend to not have market-like weights in REITs.

The internally managed REIT portfolio was up 9.59% for the quarter, while the Russell 2000 Index was up 0.44% and the NREIT Index was up 9.27%. Returns since inception for the internal portfolio continue to lag. The management approach for this portfolio changed at the end of 2005 from highly concentrated, deep value to more broadly diversified. The three quarters since that change have been positive.

The SBS results for the quarter are the reverse of last quarter. Last quarter the returns were slightly below benchmark for the majority of funds and for this quarter most funds were ahead of their benchmark. Citizens Core Growth Fund, which is on the Watch List because of organizational change, had poor June and September quarters. The best performing fund for the year was the Brandes International Fund. Both Balanced Funds had better than benchmark results for the year. The longer-term Balanced Fund did better than the other. The Target 2020 Fund had attractive absolute returns. MR. O'LEARY explained that the dollars invested in some form of balanced option is 69% of the total. There are stories of other DC plans trying to get participants to invest more aggressively. A smaller proportion of contributions are going to the balanced options than is currently in the balanced options. The target maturity funds are not getting as much investment as he would have expected at this stage.

MR. SEMMENS asked if it is possible to get a performance figure for the total SBS funds. MR. O'LEARY replied in the positive. MR. SEMMENS noted that it has been said that employees

and individuals do a poorer job of investing money than the professionals and it would be interesting to him to now have performance figures for SBS. With that information, the DR&B could communicate with employee members to let them know the results of the allocations done professionally by the ARMB compared to individual results. MR. O'LEARY noted that in the Long-Term Balanced Fund PERS had a return of 9.11% for five years and 11.40% for the year. He indicated that the information Trustee Semmens is requesting could be provided.

MR. WILSON noted that this comparison is difficult because DC does not have real estate or emerging markets, which were the best performing assets over the last five years. DR. JENNINGS added that an analysis aggregating the SBS funds would not reflect any individual or perhaps even the average individual. There are academic studies that the average individual under performs the average of their investment opportunity by chasing returns and moving to the wrong funds at different points in time. He also noted that the Tactical Allocation Fund managed by Barclays is a small fund, but over the longer horizon it has significantly under performed its benchmark. During his tenure on the IAC, Citizens has been before the ARMB four times and he would encourage that the Tactical Allocation Fund be brought before the ARMB. MR. O'LEARY stated he would only vary on the narrowness of this being domestic stocks, bonds and cash. Citizens was added as a socially aware investment in response to a participant survey.

MR. BADER noted that the PERS real estate return was over 18% for the year and the private equity return was over 18%. Given that a defined contribution retirement (DCR) plan is available to new employees and that is the national trend, he asked if there is any way that DCR plans can participate efficiently in private markets as can the defined benefit plan. MR. O'LEARY replied that the best proxy for real estate is REIT exposure. There are entities exploring the possibility of this investment within a balanced fund. There is the inevitable valuation challenge; if the asset cannot be fairly valued, some participant is advantaged and another is disadvantaged. If the asset is valued too conservatively, the participant that is already in it is disadvantaged at the expense of the participant that is coming in. He indicated he was an expert witness in a lawsuit where there was real estate in a profit sharing plan and, in that circumstance, the real estate was not increased, but the plan assets were depleted and real estate became 50% of the portfolio and it was in funds that were not properly valued. Those who were still in the plan were disadvantaged. He stated he worked with a large corporation that offered multiple employee benefit plans, one of which was a profit sharing plan that was 50% in the employer's security. They had a third party valuation annually that was rigidly analyzed. That has been operated for 20 years and has not been problematic. MR. WILSON added there are some options to DC plans in private real estate that have become popular in recent years. MR. O'LEARY stated the State of Idaho has a DC plan that is comparatively small and the DB plan is large. The majority of assets in the DC plan are in an investment option that is in essence the DB plan. The DB plan has small allocations to private equity and real estate.

MR. O'LEARY continued his presentation. Capital Guardian Large Cap has done better than the S&P 500 for the year. McKinley had out performed for some time and now is under performing largely as a result of energy exposure. He noted that some of the stocks with the best relative price performance in prior quarters were very weak in the September quarter. RCM has out performed the S&P 500 over the long-term. Relational has been managing for the ARMB for a short time and has 61% of the portfolio in financials, 29% in healthcare, and 8% in information

technology. Tukman has managed for the ARMB for 6.5 years, over which time the S&P 500 return is (0.14)% and theirs is 3.75%. Since inception they have added a lot of value to the passive alternative, however, the 5-, 3- and 2-year numbers are below the index.

MR. O'LEARY next reviewed the ARMB's small cap managers. TCW has a volatile performance pattern. They performed 2.63% for the quarter, which is above the index. This manager's since inception figures are poor. Turner has done satisfactorily since inception, but had a poor quarter. They had energy and industrial exposure in their 100-stock portfolio. Of the three newer small cap managers, Jennison and Luther King had good performance and Lord Abbett did not.

Capital's international portfolio slightly out performed the index for the year and is ahead of the index since inception. McKinley did better on the international portfolio for the quarter and had strong performance for the year and since inception. State Street has had good performance since inception. Lazard Global, which is on the Watch List, benefited from the change in the market environment and has good results for the trailing one-year. Capital Guardian's emerging markets portfolio is on the Watch List and the trailing one-year performance was great. JP Morgan's emerging markets fund has low tracking error and has slightly better than index performance, but performance has been comparatively weak recently.

MS. HARBO remarked that the difference between growth and value is not as notable in international as in domestic. MR. O'LEARY agreed because there are other things going on with international. There are styles, but country differences still do matter.

6. Target Fund Glide Paths

DR. WILLIAM JENNINGS, Investment Advisory Council member, stated he engaged with the SBS Committee in 2004 on issues related to the target funds. He argued that Alaska has been at a huge competitive advantage in this area by virtue of being early in offering target funds. The marketplace for target timeline funds has evolved in recent years and he wished to present best practices.

DR. JENNINGS explained that best practice for defined contribution (DC) plans seems to be auto-enrollment with auto escalation into target date retirement funds. He stated that 30.6% of plans have auto-enrollment and it is encouraged in the Pension Protection Act. He stated that Schlomo Bernartzi, his predecessor on the IAC, is involved with a program called Smart, (save more tomorrow), an auto escalation feature. He explained the idea of target retirement date funds is to emphasize that they are not risk-oriented asset allocation funds. This option is being encouraged as a default in lieu of a stable value or money market fund. It is a cheap route to professionally constructed portfolios that have appropriate risk. Most funds do not charge fees at the fund level, so participants are essentially getting professional advice for free.

DR. JENNINGS stated these funds offer investors simplicity. Instead of asking people to fill out a risk profile, they are asked if they want a professional to handle the investments based on when they plan to retire. He explained graphs that he had provided to the ARMB, which depict data points that create an "equity glide path" for a target fund. The left axis of the graph is the percent of the portfolio in equity. He thought Alaskans should focus on a 30-40 year investment horizon

and should invest in stocks. He reviewed the Vanguard funds, which have an endpoint of 50% equities. He noted that Vanguard has multiple funds with nearly identical allocations. The “youngest” offering in the Alaskan funds is 2025. Vanguard is significantly lower in its equity glide path than Alaska. The evolving best thinking is for higher equity allocations. Vanguard went from having portfolios every ten years to having portfolios every five years; Alaska has five-year increments. Fidelity is similar to Vanguard, but it is actively managed. There is more nuance in terms of how the timeline changes over time for Fidelity. T. Rowe Price is Alaska’s provider of target funds and their mutual fund, which is the public offering, has a slightly higher equity allocation endpoint. They manage Alaska’s funds quite differently. Alliance Bernstein is something of a thought leader in this area and they have a higher equity allocation endpoint. Vanguard, Fidelity, T. Rowe Price and Alliance Bernstein have similar equity allocation endpoints in the area of 50%. MFS, an insurance-oriented mutual fund family, and the federal Thrift Savings Plan, which is the largest DC plan, have much steeper equity glide paths with a 20% equity endpoint. Alaska’s 2025 fund is projected to have a 35% equity allocation endpoint, similar to the Alaska Balanced Fund. The 2010, 2015, and 2020 funds have a steeper glide path ending with a 0% equity allocation.

DR. JENNINGS thought that Alaska having its own funds is good and having five-year increments is good, as is offering these funds instead of risk-based funds. However, some work should be done on the asset mix of these funds. He noted that plan sponsors are adding more and more sophisticated asset mixes including REITs, high yield bonds, etc. He felt that having higher equity at retirement should be examined, particularly with respect to the 2010, 2015 and 2020 funds.

MR. O’LEARY stated that when the 2025 fund was introduced it had and still has an ongoing equity commitment. Vanguard had 2025 and 2030 funds and then decided to increase the equity allocation. He asked what Dr. Jennings’ thought is on changing existing target funds, knowing that people invested in a fund knowing the glide path endpoint. DR. JENNINGS thought that these funds are being offered as well designed portfolios for employees intending to retire at a certain time; the higher equity allocation does not represent that. He thought it was advisable to create a reasonable portfolio to hold for someone retiring at 65.

DR. MITCHELL asked if target funds have existed long enough so there is data about what happens at the end-date of the fund, that is, at retirement. He asked whether people die with enough money or have exhausted their fund before death. DR. JENNINGS stated that the original offerings of this sort were through Wells Fargo in the 1990s, so the history is not sufficient. He indicated that increasing asset classes and raising the glide path, as Vanguard has done, is the trend in the industry.

MR. WILLIAMS noted that when Resolution 2005-03 was adopted relating to choice of funds in the new DC plan, there was discussion that the default option would be the Target 2025 Fund. However, the Fund Financial presentation shows no dollars going into the 2025 fund by DC participants and a lot is going to the Alaska money market account. He asked what is the default option for the DC participants and is the DR&B encouraging people to go to time-based funds as opposed to money market funds. MS. MILLHORN understood that the default plan is the Alaska Balanced Fund. She explained that what happens now is that new members under the DC

retirement plan are automatically enrolled in managed accounts. Those managed accounts work with the member and diversify that portfolio. MS. HARBO believed the Long-Term Balanced Fund is the default. She asked once the money goes into the money market account, how long do those in the DC plan have to move it into something that will earn more than 5%. MS. MORRISON explained that in the new DC plan members are automatically enrolled in Reality Investing. The money first goes into the money market account and sits there for three days while Great West sets up asset allocations. Any contributions that are received later go into the asset allocation set up by Reality Investing. MR. WILLIAMS realized there is a certain level of member choice in allocation, but he found it surprising that, even after financial counseling, money is not going to the 2025 Fund. He realized because of budgetary and personnel issues there was slow start up of the DC retirement plan, but he was surprised that nothing was going to 2025. MS. MORRISON agreed that no dollars are going into the 2025 Fund. MR. O'LEARY confirmed that the Long-Term Balanced Fund is the default option for SBS. MR. BADER believed the default plan is for members failing to make an election. He asked, if the money goes into a cash account and a participant never sends information to Great West, what is done with their money. MS. MORRISON replied it goes into Reality Investing and, based on five information pieces provided to them by DR&B, an asset allocation is set. The default essentially is Reality Investing. DR. JENNINGS stated the idea of having target funds as defaults is that there is professional advice. For plans with which he has worked the difference between Reality Investing and a timeline fund is that the latter is cheaper to the participant.

MR. TRIVETTE asked what are the fees for Reality Investing. MS. MILLHORN indicated she would find this information and report back to the ARMB.

MR. PIHL asked, once a fund is established and an employee has elected into it, can it be changed without the participant being able to opt out. MR. O'LEARY replied that the asset allocation could change. MR. BADER noted that there have been times when participants have been notified regarding potential changes and allowed to make a change, if they so desired. MR. PIHL understood that Dr. Jennings was indicating that the existing SBS option is not desirable and asked whether the ARMB might do something about that. MR. BADER stated that the staff would bring forward a recommendation for the ARMB's consideration and, if a change were desired, the Department of Revenue would work with the Department of Administration to effect that change. He stated that staff is of the belief that the all-cash option at retirement is not in the best interest of the employees.

LUNCH BREAK 11:38 a.m. to 1:05 p.m.

7. External Manager Review

For more information on this presentation, please refer to the document entitled "Report to Board, Manager Review Meeting, Staff, IAC and Consultant," dated November 7, 2006 and kept on file at the ARMB offices.

GARY BADER stated there is an annual meeting of the CIO, the IAC members, and the ARMB's consultant Michael O'Leary to discuss the ARMB's portfolio, managers employed by the ARMB, and other items useful to consider in planning for the coming year. An agenda was set for this meeting and among the topics was the slight growth bias in the ARMB equity program. All participants agreed that, if there were to be a bias, it would be toward value. As a

consequence, two of the managers were examined, Turner and TCW, and \$70 million was taken from each. The bulk of those funds were re-allocated to international equity and the rest to Luther King, a small cap manager. There was also discussion of Relational and Tukman, both of which are managers with concentrated portfolios. They have been categorized as value managers, but they do not necessarily fit that description. The discussion was to view them outside of the equity portfolio in terms of a growth or value bias. The ARMB has approved adding a value manager to the roster of managers, which will provide active management alternatives in the active space that will balance the portfolio. MR. BADER indicated that later in the meeting a number of investment actions would be proposed to provide additional flexibility to staff to balance the portfolio between growth and value. He noted that it seems that when a radical change occurs it is usually when it will hurt the most; so the staff has not made radical changes in the large cap equity portfolio. Staff is seeking to balance the portfolio between growth and value without terminating any managers.

MR. O'LEARY stated the recommendations Mr. Bader will propose would provide the tools to mitigate any unintentional bias without shifting a lot of active assets. He stated that CALLAN has done research that indicates the opportunity to out perform in smaller cap is greater than in large cap. The risk budget for the ARMB should be spent in the areas where the payoff for success is greatest. A large part of that is having a multiplicity of managers. The ARMB has five small cap active managers, which is beneficial. These firms might close and not accept additional assets. Capturing the average out performance is more likely with multiple managers. Adding small cap managers in the future would also be beneficial.

DR. JENNINGS stated academics believe in a value premium and a small cap premium. He thought that getting back to 50% value/50% growth is a good objective.

MR. BADER noted that Milton Freedman said, "There is no free lunch," and a University of Chicago professor suggests that if there is a free lunch in investing it has to do with diversification. At the Manager Review meeting there was a review of infrastructure, commodities, currency, distressed debt, strategies such as portable alpha, multi-strategy funds, Treasury inflation protected security, and timber. Inflation is one of the biggest influences on the funded status of a pension fund. Inflation affects the cost of medical services, salaries, and the return premium gained by certain assets. The IAC, Mr. O'Leary, and he feel it would be good to have Treasury Inflation Protected Securities (TIPS) as part of the ARMB's asset allocation study. The ASPIB considered timber years ago, it was approved, and then on reflection a decision was made to not move forward with those investments. Many investment minds in the country believe timber is a good investment class in which to be invested. He suggested modeling this into the ARMB's asset allocation process going forward.

DR. MITCHELL stated that over the last 6-8 years, beginning with some of the larger universities, endowments, and foundations, timber has become a legitimate asset class. The movement of these universities, endowments, and foundations into this asset class coincided with integrated forest companies divesting themselves of land. After the university, endowments, and foundations invested in timber, pension funds followed. Timber has more of a bond characteristic than stock characteristic. He also thought that investing in TIPS is extremely logical for a pension fund; most funds have TIPS exposure. MR. O'LEARY noted that stocks are

thought of as a good long-range hedge against inflation, which he believes. Inflation-linked securities are attractive because they provide a hedge against unanticipated acceleration in inflation. Financial markets price in what people expect inflation to be and, if it is greater than expected, the characteristics of a TIPS instrument has greatest attraction.

MR. BADER stated the group also considered other types of investments, including distressed debt. The group does not intend to recommend this to the ARMB; distressed debt is included in the portfolios of some of the ARMB's private equity and absolute return managers. Distressed debt is thought to be an asset class with great opportunity for the astute investor when companies have problems making their bond payments. Distressed debt might be brought forward as an investment option within the private equity allocation. There was also discussion about global REITs and there was general agreement among the group that this would be a good addition to the portfolio, however, the ARMB is over allocated to real estate and has international exposure. The internal staff will continue to examine global REITs and perhaps a recommendation will be forthcoming to hire an outside manager. The group also considered portable alpha, but agreed not to pursue that with the ARMB at this time.

MR. BADER explained that at the beginning of the manager review process, Ms. Hall distributes a questionnaire to all of the ARMB's investment managers. Some questions were added to the questionnaire this year based on input from the IAC. There was a nearly 100% response to the questionnaire. The responses are available to any trustee who would like to review them. The group reviewed each manager's responses and, while there were comments on some managers, none were recommended for termination. There was some concern that some of the managers have a large amount of money under management that might result in them having index-like returns over time.

MR. BADER stated that, in order to keep the ARMB portfolio balanced, staff is recommending that a Russell 1000 Growth Index separate account be established, as well as a Russell 1000 Value Index separate account, a Russell 2000 Growth Index account, a Russell 2000 Value Index account, and a Russell 200 Index stock fund. These allow the CIO to balance the portfolio by taking passive investments and tilting them more toward value. Moving assets amongst managers brings with it a cost whereas using index funds would not. In addition, the cost for passive investing is 1-2 bp. He explained that the Russell 200 Index is the largest 200 capitalization stocks. Later in the meeting, the ARMB will be asked to take action to allow investment in these funds.

DR. MITCHELL endorsed this recommendation as an easy and a very cost effective way to get achieve portfolio balance.

MR. SEMMENS asked what is the difference between an index separate account and an index account. MR. BADER stated an index account attempts to match the returns of the index. In the ARMB's S&P 500 account the ARMB owns the stocks that try to mimic the index. In the Russell 2000, the ARMB buys into a commingled fund that manages those returns. In a separate account, the ARMB owns the stocks, whereas in a commingled account, the ARMB owns shares in the fund.

8. TIPS Presentation

For more information on this presentation, please refer to the document entitled "Portfolio Management TIPS Presentation," dated November 28-29, 2006 and kept on file at the ARMB offices.

BOB MITCHELL, Senior Investment Officer, explained that Treasury Inflation Protected Securities (TIPS) are issued by the US Treasury and are designed to provide protection against inflation over time. The first TIP was issued in January 1997. The current market value of TIPS is \$389 billion; this compares to the LB Aggregate Index market value of \$8.5 trillion and the US Treasury Index has a market value of \$2 trillion. TIPS have existed for 10 years in the US. They were part of the LB Aggregate and LB Treasury Index at one point, but they were removed and are now classified within the LB Global Inflation-Protected index. Inflation protection is gained by having the coupon fixed and paid semiannually on the adjusted principal.

MR. MITCHELL explained that if a 10-year nominal Treasury is bought, one bond costs \$1,000. A coupon is received every 6 months, which is half of the stated coupon, until maturity. When the bond matures, the investor receives the final coupon payment, as well as the \$1000 principal. Unlike nominal Treasuries, TIPS accrete their principal over time. The coupons that are paid every six months are a fraction of the growing principal of the TIP over time. For example, if a 10-year TIP with a 3% coupon is purchased and there is 1% inflation over the first six months, the principal would grow by 1%, in this example to \$1010, and the coupon would be half of the annual coupon, or 1.5% applied to the higher accreted principal balance. If over the subsequent six-month period inflation increased to 2% the principal would grow at 2% and the principal would be 102% of what it was at the time of the last coupon payment. After another 9 years, if inflation averaged 3%, the principal balance would continue to grow and coupons would as well, so upon maturity the principal balance would be worth \$1,344.18.

MR. MITCHELL used a simplified example of a nominal Treasury purchased at par with a 5% coupon and a TIP purchased at par with a 3% coupon. When a nominal Treasury is purchased, a nominal return is guaranteed, but when a TIP security is purchased, a real rate of return is guaranteed. If over a one-year period the inflation rate were 2%, both securities would have the same return of 5%. In the case of the nominal Treasury, the investor receives a coupon payment while the TIPS investor receives a coupon based on the 2% accretion in the principal value. If inflation averaged 3%, however, the real return for the Treasury would be the 5% coupon plus the 3% inflation rate, for a real after-inflation return of 2%; whereas the TIP would have a 3% real return. If inflation averaged 1%, the nominal Treasury would out perform the TIP.

MR. MITCHELL reviewed the Consumer Price Index urban, non-adjusted, which represents the inflation rate that covers 90% of the US population. He noted that housing and energy are the most notable components of the CPI. Housing represents 42% of the CPI and half of that is a construct, an attempt to determine the true cost of housing. He explained that a large part of the housing component is "owners' equivalent rent" or the amount that an owner believes they could rent their house. This methodology changed approximately 20 years ago based on the argument that housing had a consumption component and an investment component and using "owners' equivalent rent" would allow those to be broken out. Home price appreciation has grown and during that period the supply of apartments has declined. As a result of this, rental rates have been increasing. In recent months there has been higher housing inflation in the CPI as a result of

that dynamic. Energy is also important. Although it represents 8% of the CPI, it is a very volatile component. MR. MITCHELL noted that TIPS accrete on a daily basis.

MR. MITCHELL reviewed the returns of TIPS compared to Treasuries. TIPS have had a strong period of performance since 1999, partly attributable to a difference in duration and partly because there has been a growing acceptance of TIPS in the marketplace. When TIPS were first issued in 1997, returns were upwards of 3% and now 10-year TIPS are 2.25% and 20-year TIPS are 2%, so there has been a dramatic decline in real yield.

MR. MITCHELL displayed a listing of the eight major categories of the CPI urban.

MR. O'LEARY stated he is aware of a board member of another CALLAN client with allocation of 10% to TIPS and he believes they are a bad investment because the issuer ultimately controls the CPI. He asked for comment on the method of calculating the CPI. MR. MITCHELL stated that ultimately there is a very technical side to TIPS because inflation has to be estimated. He stated the federal government could benefit by changes to the methodology that reduce the apparent inflation rate. MR. O'LEARY understood the TIPS index being used is a sub-index of the LB Global Inflation-Linked Securities Index. He asked about the composition of the parent index and what is the history of the index. MR. MITCHELL replied that the LB Global index is comprised of government inflation-protected securities from a broad range of developed country issuers. MR. O'LEARY noted that other countries have had inflation-linked securities longer than has the US. DR. JENNINGS stated the pension's liability is tied to CPI, so both the liability and the asset, if there were manipulation, would be manipulated in the same way; the synchronization between TIPS and the liability is good. He noted that the vast bulk of federal debt is not inflation indexed.

DR. MITCHELL asked whether, in executing a TIPS strategy, given the smaller market and fewer issuances, it would be indexed or actively managed. MR. MITCHELL recommended that if the ARMB decides to initiate an allocation to TIPS, it consider flexibility in funding that allocation. The ARMB may want to consider the ability to scale its investment into TIPS. He commented that more flexibility is best when giving a mandate to a new manager. He stated that if index returns are accomplished, that is satisfactory, and returns over the index would be an added benefit. He thought that taking a low tracking error approach is advisable.

CHAIR SCHUBERT recalled a visit to Goldman Sachs in 2000 to discuss TIPS and there was another discussion about TIPS at one of the educational conferences. She wondered why there is now another discussion about TIPS. MR. BADER indicated that he brought this topic forward. MR. MITCHELL noted there is a fair correlation between TIPS or inflation and the liability side of the ARMB's considerations.

MR. WILSON asked if staff is recommending global TIPS or only domestic TIPS. MR. MITCHELL replied that the global market is deeper than the US market and provides a greater opportunity to protect, but he did not have a recommendation.

MR. O'LEARY stated TIPS generally are not in a typical bond portfolio because they are slightly less liquid and they are not in the index. Most plan sponsors who have embraced TIPS

have done so through an asset allocation and typically view them as a large passive allocation and manage them internally. If they were actively managed, they would probably provide global flexibility to create a broader opportunity set in order to add value. In addition to protection against acceleration and inflation, TIPS are a consideration because the closer the date of Baby Boomers retiring, the greater the worry about a secular increase in inflation.

MR. TRIVETTE asked if staff is recommending investing with the index versus index plus. MR. MITCHELL replied that staff wishes to give more thought to implementation. It would be relatively easy to do some sort of limited tracking error approach. He did not recommend an approach that would result in large variances in performance between the portfolio and the index.

MR. BADER explained that today's presentation was intended to introduce TIPS to the ARMB. He anticipates that when CALLAN models this it will be an attractive asset class to add to the ARMB portfolio. The preliminary thinking is that it would be managed internally and would not be intended to mimic the index entirely. He noted that there has been a change in investment climate and the way the State invests its funds, which precipitates this topic being brought to the ARMB. The staff is competent and managing TIPS would be inexpensive.

9. T. Rowe Price

For more information on this presentation, please refer to the presentation entitled "State of Alaska Retirement Management Board" dated November 28, 2006 and kept on file at the ARMB offices.

EDMUND NOTZEN, ROBERT BIRCH and CHARLES SHRIVER presented to the ARMB. MR. BIRCH stated Mr. Notzon, Mr. Shriver and his team are responsible for managing \$35 billion in various asset allocation portfolios. He thanked the ARMB and staff for continued confidence in the firm and for the recent allocation for the DC plans. He stated the relationship with the State was initiated in 1992 with the Balanced Trust, which was designed in large measure with the help of a number of staff members, including Mr. Bader. Since that time a number of investment options have been added to the SBS Plan, including the Long-Term Balanced Fund, Target Date Funds, Money Market Master Trust, Small-Cap Stock Trust, Stable Value Fund, and Interest Income Fund. The portfolios were designed in line with the risk tolerance of the SBS, as an alternative to social security. There have been no changes in the investment team responsible for any of these portfolios.

MR. BIRCH explained that T. Rowe Price continues to operate as an independent, publicly traded firm focused exclusively on investment management related activities. The firm has remained stable and has experienced continued growth with a total of \$308 billion under management today. The firm is managed by a 6-person Management Committee. The long-serving chairman of the Committee, George Roche, has announced his retirement at the end of 2006 and will, at the end of a long-staged succession, give his responsibilities to a long-standing member of the Committee, Jim Kennedy.

MR. BADER asked for comment on **Mr. Repee's** retirement. MR. BIRCH stated Jim **Repee**, who served as the vice-chairman of the firm, retired early this year. His responsibilities have been assumed by Ed Bernard, who has been with the firm approximately 20 years.

MR. BIRCH reviewed the individuals involved in the management of the relationship with the State, including Ned Notzon and Rich Whitney, who is the head of quantitative equities, and specialist portfolio managers.

MR. NOTZON stated that the Alaska Balanced Trust retains 68% of the assets in the offerings to the SBS participants and PERS and TRS participants. The Alaska Balanced Trust is 35% equities and the remainder in fixed income and cash. Later the Alaska Long-Term Balanced Fund, which is 60% stocks/40% fixed income and cash, was raised. This is a social security replacement plan, so the firm felt it did not have the same risk tolerances as a normal investment portfolio that would supplement Social Security. MR. O'LEARY asked how the recommended asset allocation was determined for the Alaska Balanced Trust. MR. NOTZON explained it is a fund that would have little likelihood of poor performance. Stocks do produce volatility, so this fund was designed to produce decent returns from 35% equities and to provide downside protection and stability from fixed income. The first 12 years of the fund was a good time for bonds, so the annualized return is over 8%. MR. O'LEARY asked if the original policy had an objective to minimize the possibility of having a negative return over a 12-month period. MR. NOTZON replied in the affirmative, explaining that there was a goal of no negative years, but also of achieving capital gains from the equity component. This structure has functioned exactly as designed with better returns than T. Rowe Price or the Board anticipated.

MR. NOTZON explained that there were people who wanted more equity exposure so the 60/40 option was created. Four of the funds, the Alaska 2025, 2010, 2015, and 2020 funds, are relatively new. If a participant is young, there can be greater equity exposure because the horizon for the return is longer. The longer-term funds start with 90% in equities and 10% in bonds. As the target maturity date gets closer, the money is shifted more into bonds. Return and risk are reduced as the retirement date approaches.

There is also a Small Cap Stock Trust option and a Stable Value Fund. Three-quarters of assets are in the two balanced funds, 9% is in target date funds, 7% is in the Small Cap Stock Trust, and 9% is in the Stable Value Fund. Stable Value is a bond fund that has an insurance company wrap. If money were taken out of the Stable Value Fund, the insurance company guarantees principal and some interest.

MR. CORBUS asked why there are trusts. MR. NOTZON replied that T. Rowe Price used to put everything in portfolios, but when they were invited to manage for PERS and TRS they had to create a legal structure for investment because it is not legal for two organizations to invest in the same portfolio. Trusts are regulated by the Maryland Banking Commission and additional audits are required. MR. CORBUS asked what is meant by a more technical structure. MR. NOTZON explained there are more audits and closer regulation. MR. BIRCH stated that until six months ago these operated as separate accounts with the sole investment being the SBS and DC. With the introduction of the new DB, an alternate structure was created. Nothing about the underlying investments was changed. A trust structure was the only legal vehicle to allow investment by multiple plans into one vehicle. MR. NOTZON added that if the firm had tried to design its own portfolios for these assets, it could not have been diversified and represent sectors because it was expected there would not be many defined contribution assets initially. By creating an additional

share class of existing portfolios, although only \$1 million has come in from DC plans, they are joining building blocks that represent \$1.6 billion in assets.

MR. NOTZON noted that the portfolios managed by the firm buy shares in building block portfolios: GNMA, Government/Corporate fixed income, large cap, small cap, international, and money market. Each building block is managed by an investment team that only manages assets in that sector of the market. There are three ways to add value to the State's portfolios: the design, the building block managers doing a good job, and the work of the T. Rowe Price Asset Allocation Committee.

MR. O'LEARY noted that today Dr. Jennings gave a presentation on the evolution of target date funds and various glide paths. He thought the ARMB might benefit from the historic sense of how 0% cash at terminal allocation came about and what is the flexibility to change the glide path at some point. MR. NOTZON stated the State was the second oldest organization to adopt target date funds, the first being Wells Fargo. T. Rowe Price was asked to create target date funds using the building blocks being used for the balanced funds. The glide path went from 90% stocks at the start to 100% cash at the end. It was felt that not a lot of stock market volatility was desirable just before retirement. Since that time, many companies have brought up target date funds, including T. Rowe Price. The firm has concluded that it is better for its customers to have some exposure to equities on the day of retirement. This is because people are living longer. When the 2025 fund was begun, the change in stock/bond balance was stopped before the target maturity so that the money would last another 30 years or more. This question is more important now than it was in 1992 when the State did its target maturity funds, because Baby Boomers will retire, there are many longevity improvements, people are adopting healthier lifestyles, and people are generally expected to live longer. When Social Security was begun the thought was that people would retire at 65 and die at 70, in which case bonds are a good investment. However, bonds do not generate capital gains while equities do offer capital gains. After retirement people are in a more challenging environment. If 4-4.5% of assets are being pulled out each year, it is important to have more stable returns; thus, T. Rowe Price does a Monte Carlo analysis. MR. O'LEARY asked if T. Rowe Price would work with staff to help evaluate expanding the range of assets used as building blocks and consider multiple glide path scenarios and different terminal points. MR. NOTZON replied in the affirmative.

MR. BADER noted that when Mr. Hanna and he visited with T. Rowe Price a year ago in July they reviewed the Monte Carlo analysis. He asked if the firm's opinion has changed regarding the 4-4.5% withdrawal amount. MR. NOTZON replied that the withdrawal amount depends on many factors. If the desire is for assets to last 30 years, that percentage is a good one to use. He noted that when State employees retire, they have the option to buy an annuity. This would generate a 6% return, but the assets are not owned so nothing can be left to heirs. The firm has consulted with well-known financial advisors and they tend to agree with the 4-4.5% figure. Many of the firm's competitors use a higher percentage. He suggested that plan sponsors should do an educational program and also design options for how they will actually be used.

MR. WILSON asked if asset classes like REITs have been added to target funds in recent years. MR. NOTZON replied that the assets in T. Rowe Price's retirement funds are traditional investment grade bonds, high yield bonds, large cap growth and value, mid cap growth and

value, small cap growth and value, and international with some emerging markets exposure. Both emerging markets stocks and REITs have been examined and the firm found that the REITs are actually mid-cap value stocks and, since that is already a sector, they are fully represented in the current asset allocation for the funds. If there were a way to take actual real estate assets and turn that into a liquid asset class, it would be included. T. Rowe Price has a good REIT fund that has been included in other managers' target funds. He thought that emerging markets is an important sector going forward, largely because developing nations represent 50% of global GDP. T. Rowe Price concluded that international is a certain percentage of the equity allocation, equities are a certain percentage of the portfolio, and emerging market stocks are a certain percentage of international and given that there was only a few basis points of out performance for emerging markets, there was not sufficient benefit to complicate the product with an additional sector. He stated that emerging markets is his favorite sector for the next 10 years. MR. WILSON asked if emerging markets is a building block. MR. NOTZON replied that the State's current international portfolio has 3% exposure to emerging market stocks. Emerging markets could be added as a separate sector of the international portfolio manager could be encouraged to be more aggressive. T. Rowe Price's Prospective Growth Fund has an emerging markets allocation; it is a risk-based balanced fund of 100% equities.

MR. NOTZON stated that the single Balanced Fund was brought up in 1992, four years later the target date funds were added, four years later an additional target date fund was added, a year later the Long-Term Balanced Fund and the Small-Cap Stock Trust were brought up, three years later the Stable Value Fund was brought up, the next year the 2025 Fund was raised, and this year the commingled trusts were created to meet the needs of the TRS and PERS DC participants and the SBS. He noted that changes have been made when appropriate and perhaps more changes are desirable with respect to the end dates of the target funds.

MR. NOTZON next reviewed performance for the options offered to participants for the one-year period and since inception. He noted that the performance figures are net of fees. Some of the funds have less than \$100 million and for funds with that level or less, T. Rowe Price voluntarily calculates the net asset value. The Balanced Trust out performed the benchmark by 15 bp (27 bp gross of fees) for the year and under performed by 1 bp since inception (out performed 11 bp gross of fees). The Long-Term Balanced Trust out performed by 8 bp net of fees (20 bp gross of fees) for the year and under performed by -8 bp (out performed 5 bp gross of fees) since inception. The 2010 Fund out performed by 24 bp for the year; the 2015 Fund under performed by -6 bp for the year, and the 2020 Fund under performed by -38 bp. Since inception, the 2010 Fund under performed by -12 bp; the 2015 Fund under performed -23 bp; the 2020 Fund out performed 59 bp; and the 2025 Fund under performed by -44 bp. He noted that the Money Market fund has always out performed its benchmark.

MR. BADER stated the LB Government/Corporate Index has been the benchmark for the fixed income component since the start. He asked if Mr. Notzon would prefer the LB Aggregate Index as a benchmark. MR. NOTZON stated he would consider this question. He stated he has only two Government/Corporate assignments and the other client will not allow him to buy any BBB although it is 17% of the Government/Corporate Index. All of his other accounts are LB Aggregate.

MR. WILSON noted that many people are moving toward an equity allocation of 50% domestic/50% international. He asked how T. Rowe Price views this notion. MR. NOTZON replied there was an internal discussion of this at the last asset allocation meeting. T. Rowe Price has concluded that for its retail mutual funds, thought should be given to increasing the exposure to international, in part because in this global economy, the US economy is heavily impacted by other countries, including developing nations. Because developing nations have access to huge productivity increases they could be the most productive asset class going forward.

MR. WILSON asked if T. Rowe Price would not go higher than 30% in international. MR. NOTZON stated that if one is to retire in the US economy, the largest single factor that will affect the ability to live well is making the kind of returns people make in the US. When he first started including international in the diversified portfolios, the currency effects were 4-6% of the overall performance, but in the last year international was 19% and the US was 12%, but 6% was currency exposure. He thought that 50% non-US is a big bet. He stated he has met with two pension plans that had 50% of equities in international and they questioned why he did not also have that level. He indicated he would feel comfortable with that in a pension plan, but not equally comfortable with that allocation in the target date funds. Without any analysis the range of 20-30% is a common thought. There is a short-term trend where a number of developing nations are reluctant to emulate what the US has done in terms of productivity increases. Ten to 20 years from now, if the developed nations of Europe do not bring in workers from less developed nations and use them productively, capital will move to less developed nations.

Small-Cap Stock Trust

MR. BIRCH stated the Small Cap Stock Trust has grown to be the second largest investment in the SBS. It was introduced to SBS as a standalone small cap equity offering in 2001 and with the launch of the new DC plans, it was made a part of the initial options. The Trust consists of a broadly diversified portfolio of 300 small growth and value stocks. The Trust exposes participants to a small swath of the market and protects them from disparate returns between value and growth. The investable opportunity set is companies with market caps between \$100 million and \$2 billion. Value has been added relative to the Russell 2000 Index over the long-term with less volatility. Approximately 50-60% of the portfolio is invested in value stocks with 40-50% invested in growth-oriented stocks. Small cap core investing is a foundational strength of the firm, which has \$9 billion invested in various small cap core portfolios. The Small Cap Core Strategy was closed when the State initiated its investments and it has remained closed since. The performance of the Trust is favorable for the three-year period and since inception, while the one-year period and three months have been more difficult. The objective for this Trust is to add value over time with lower risk than the benchmark.

Stable Value Portfolios

MR. SHRIVER stated the Stable Value funds (Interest Income Fund and Supplemental Annuity Plan) invest in cash, government bonds, MBS and investment grade corporate bonds. The Deferred Contribution Interest Income Fund plan goes back to 1994 and the Supplemental Annuity was begun in September 2004. The Supplemental Annuity now has \$150 million in assets, outpacing the older Deferred Contribution plan in terms of asset growth. It has increased by \$35 million over the last 12 months. It has completed its transition from a money market portfolio to a stable value portfolio. For the one-year period the return for this portfolio was

4.31%, which is between the Heuler Pooled Fund Universe return of 4.66% and the Lipper Money Market Index return of 4.16%. The Deferred Contribution plan has \$137 million in assets with returns close to the Heuler Pooled Fund Universe over its history. It saw greater cash flow during a period of declining interest rates from 2001-2003.

The structure of the stable value portfolios is managed by creating three buckets based on liquidity. Tier 1 is a cash allocation, Tier 2 is a short-term portfolio with a two-year duration, and Tier 3 has a four-year duration. The cash in the portfolio was 12% at quarter end; it has been 8-10% typically. The credit quality of the portfolio is that of the wrap provider, which enables it to retain its \$1 per share value.

MR. BADER asked for a brief explanation of what a wrap enables the fund to do. MR. SHRIVER explained that the wrap locks in the book value of the investment when it is made. As a result of the wrap, the portfolio is able to maintain the book value regardless of other events. One of the impacts of this is that there is perhaps a greater significance to when cash is invested than in other portfolios. If money is put to work in a rising rate environment, one is able to capture higher yields. The Deferred Contribution plan saw a greater cash flow during a period when there were lower yields and those valuations were locked in. The critical feature of a stable value fund is maintaining stable principal value and offering a higher than money market yield. MR. NOTZON explained that if money is invested in a stable value fund, it can be returned with interest. If that same investment had been made in a bond, for instance, and interest rates had gone down, not all of the principal could be withdrawn. In exchange for the premium paid to the insurance company for a wrap, the insurance company agrees to pay the original amount invested plus interest. Money could be put into a money market fund, but such funds pay low interest rates, while putting money into a stable value fund means the return is similar to that of bonds. MR. BIRCH explained the benefit to the participants is that they experience stable value versus other investments; it is the lowest risk safe haven.

MR. O'LEARY commented that decades ago SBS experienced a problem with the purchase of guaranteed investment contracts (GIC). It is important that the ARMB understand the difference between what a wrap provider does and what is a GIC. The wrap provider is pre-funding and is repaid the difference in return over an amortization period, so it effectively lowers the return of the portfolio. MR. NOTZON added that with a GIC the insurance company owns the assets so 100% of assets are at risk. With a stable value fund, the participants own the assets, so if the insurance company goes bankrupt the difference between market value and book value is the only thing at risk. MR. O'LEARY noted that risk is further mitigated by using multiple wrap providers. He added that the Deferred Compensation plan had a good, functioning stable value option and when SBS decided to offer one, the board concluded that SBS had to have a separate stable value option so as not to disadvantage participants in the Deferred Compensation plan. MR. BIRCH added that SBS initiated assets gradually over time instead of establishing a fund immediately.

BREAK 3:00 p.m. to 3:10 p.m.

10. Economic Roundtable

Moderator: Gary Bader

Panelists: David Fisher, Capital Guardian; John White, Citizens Fund; and Ned Notzon, T. Rowe Price

Question: Does Mr. Fisher think the US election will have implications on the stock market outlook over the next 21 months?

Answer: MR. FISHER stated that if that question had been asked before the election and he knew the election results, he would have said that the effect on the market would be negative. As he watched the election returns, he thought it was and will be positive. He thinks this because the Democratic candidates had “defense credentials”; an amazing number were veterans. The Republicans who won distanced themselves from the President. The President has been “in your face” during his tenure, but in his history as governor he was capable of working with a Democratic legislature and did it effectively. Finally, the 11 points the Democrats want to get done in the House are middle-of-the-road. He thought things would be accomplished in the near and longer term.

Question: Did the market affirm your expectations?

Answer: MR. FISHER replied that the market did well in November until last Friday, which was a result of the decline of the dollar and the market being extended.

MR. NOTZON added that it is always good when one group is not solely in control. Legislation will be closely scrutinized so both the executive and legislative branches are under pressure. The White House has indicated it is willing to give up its focus on personal accounts, which pleased him in order to get a serious look at social security reform, which is overdue.

MR. WHITE stated that what the market has done over the last month or two is irrelevant of the forces that came out of the election. The election was not an affirmation of the Democrats’ positions but a repudiation of issues that voters had with Republicans. The current period is a honeymoon period where it does not hurt either side to say they will work with the other. When the new Congress meets, there will likely be a drift back to the old ways and there will be re-emergence of animosities that have existed in the past.

Question: Will the lower number of housing starts spoil the soft landing scenario?

Answer: MR. WHITE replied both in the affirmative and in the negative. Housing starts topped out at \$2 million a month and the most recent figure was a sharp fall to \$1.4 million. If housing starts stabilize at the \$1.4-\$1.6 million per month level, the soft landing is possible. If it continues to drop, the soft landing is not going to be a theme. Over the past 20 years housing starts have been in the \$1 million range. Indications are that the housing market is weakening, but some commentators are indicating there is a firming.

MR. NOTZON did not feel housing starts are interfering with the soft landing scenario. He noted that the decline in the housing market has been sharper than he expected. There is equilibrium of

housing starts based on population growth and in the last six months that point was reached. If it continues going down, there is a natural demand that should begin to bring it back. He noted that this change in housing has not seemed to spill over into other areas of the economy. A number of sectors of the economy seem to be doing quite well and the unemployment rate is 4.4%, so there is consumer demand. He did not think inflation was likely.

Question: In the age of global liquidity, does the Federal Reserve have an effective toolkit to fight inflation?

Answer: MR. FISHER thought global factors have always been at work. He noted that he could not recall a time when so much of the US debt was held by countries where the US has little control and maybe little influence. What they do is not necessarily good for the US economy; they are motivated by what is good for them.

MR. WHITE thought the Federal Reserve's tools are a fair amount less effective than they have been in the past. The clear evidence of this is that, in order to get the economy going again, they had to take the federal funds rate down to 1% and even that was iffy in terms of whether it was helping. They got back up to 5.25% with no firm evidence that it was having a substantive effect on economic growth. The tools are working less effectively because the four-year business cycle that the Federal Reserve was affecting has now gone away.

Question: Will the consumer ever roll over?

Answer: MR. NOTZON replied that with unemployment at 4.4%, people would spend. There are not as many cash out refinancings in the mortgage market, but there are more than he would have expected given that housing prices are going down. Short-term it is good for the consumer to spend, but in the long-term people retiring have significantly under funded their retirement accounts and there will be serious crises in the next 5 to 10 years.

Question: Does the low US savings rates and high deficits matter?

Answer: MR. FISHER replied in the affirmative.

MR. WHITE replied that short-term it probably does not matter, but longer-term it does. There is a real question of where the money would go if the savings rate were higher. There is a high level of investment. There is a high level of investment capital available in China in their reserves. There is already money chasing a shortage of good investments. Therefore, the savings rate, on a macro level, is probably not a critical factor. MR. FISHER asked why Mr. White feels there are a limited number of investment opportunities; he argued there are an unlimited number of investment opportunities. MR. WHITE responded that the market going up, interest rates being low, and the risk premium for high-risk debt being low indicates there is more money chasing not as many decent opportunities.

Question: What comfort is there that the current equity valuations are sustainable?

Answer: MR. NOTZON stated interest rates have stabilized and cash flows will be discounted at the same rates or lower. The earnings growth forecast for 2007 is lower than the earnings growth that has been seen, so it is already factored into current prices. If growth is moderating, it is already in today's stock prices, so there should be nothing precipitous unless there is a precipitous event. He thought most people would be pleased if stock prices rise 6-9%.

Question: In an interview with Abby Cohen she said that Goldman is bullish on equity markets and she projected a return one year from now that that was less than 5%.

Answer: MR. NOTZON thought a 6-9% return would be outstanding and 5% would be level with bonds. MR. O'LEARY noted that Ms. Cohen was predicting price levels. MR. NOTZON commented that would be 7%.

MR. FISHER stated he has had a much higher return expectation than his associates and the rest of the world and he still feels that way. He holds this belief by looking at companies; he can find many companies around the world that are very attractively priced. Also there has been an incredible compression of valuation around the world and that has just unwound. It is possible to find high quality companies that sell at no premium to the markets and that will correct some day; that gives him the confidence that this is not a low return environment.

Question: MR. O'LEARY noted that corporate profits have been marvelous and corporate profitability is high. With all of the perceived needs of the budget deficit, is the government going to take the country back toward the mean?

Answer: MR. FISHER asked if Mr. O'Leary was asking if the government would raise taxes. MR. O'LEARY replied in the affirmative. MR. FISHER thought there would be tax increases of some form or another. There may be industry-directed tax increases. One way or another, individual income taxes on high-income people will be revised. For top income people, the lows in tax rates are over.

MR. NOTZON thought there was a sense of morality about companies making high profits and raising taxes may be an outcome, particularly in the energy area. There is also a definite sense that those in higher tax brackets are not paying the taxes they can reasonably pay. He would be surprised if wealthy people did not pay more taxes and corporate taxes were increased on a targeted basis.

Question: MR. O'LEARY stated that in order to forecast the future of the stock market one must understand the current situation. Looking at P/E on consensus expectations for next year and comparing it with interest rates, he would say the market does not look expensive. A key ingredient in that is whether the projections for next year are reasonable. If they are not, the market does not look so fairly valued. He asked for comment on the 2007 earnings outlook.

Answer: MR. WHITE thought the current P/E ratio on the market is deceptive. The current P/E for the S&P 500 is 17X, but that is because there is a high percentage in energy stocks and 20% is in financials that are at 13X to 14X. The rest of the S&P 500 sectors are up 20X or more. He thought the earnings estimates for next year are probably reasonable. The surprise over the last

year is how often and by what magnitude earnings expectations have been beaten. If there is a correction in the profitability of companies, he hoped it would not come from the tax area, but rather through competitive price pressures and margin pressures that take prices down.

MR. FISHER stated the environment would continue to be good. He was reminded of how people in the investment business are worriers. He recalled that when he started in this business he wondered if he should be a pessimist or optimist. He noticed that optimists are happier than pessimists and the stock market goes up more than it goes down, so he is an optimist.

Question: MR. BADER asked what defines a good equity investment and what do you look for in evaluating numerous investment opportunities?

Answer: MR. FISHER responded that he thinks about whether he or his firm has special insight beyond what the market knows. Capital has had a strong feeling since the mid-1980s that what was going on in the developing world was significant and exposure to that would be beneficial. At that time this was a special insight. He shared an example of a Mexican cement company that was criticized for buying two Spanish cement companies. He remembered being in London and having lunch with an owner of a cement company who thought the acquisition was brilliant because the Mexican cement company was sending a message that he should not interfere with their holdings in Mexico because they could interfere with his European company through their holdings in Spain. This was an insight into the cement industry.

Question: What defines a good equity investment?

Answer: MR. WHITE replied that if a company has a good business model and good management, and the management has the resources necessary to implement the business model effectively, it is potentially a good equity investment. The only missing ingredient is a sign that the market cares about this investment. When all of those four factors are in place, there is potentially a good, profitable, long-term investment.

MR. NOTZON agreed with Mr. White and added that companies waiting to be acquired are bad investments. Management is important in order to know the company is good and honest and the business model is important because a good company will do well whether there is an expansion, a recession, or whatever economic environment exists.

MR. FISHER remarked that a discipline that helps in thinking about this is a whole company approach: that is, multiply the price of the stock by the number of shares outstanding and that says what the market says the company is worth. The question is whether you would buy the whole company for that price.

Question: MR. O'LEARY stated that over the last 12 months there has been unprecedented activity in buyouts of major public companies. Do private equity buyout artists see something that public investors do not see or is there something going on that is not apparent to public investors?

Answer: MR. FISHER stated he worries about this a lot. Private equity investors are taking places where there is reasonable cash flow and leveraging it up. He is troubled because most of these are not places where they will improve the operation of companies. He thought some of these situations would go badly wrong. He also thought there were enormous potential conflicts. It does not seem that the major firms are actively competing for deals and then they are extracting fees from the companies they are taking over. He assumed that something will go wrong in a regulatory or legal sense or someone will put on too much leverage.

MR. NOTZON stated bond managers look at most of these deals from the junk bond side and he has observed that leverages this time are much higher than last time, which suggests they are not as good for people who are buying bonds. He stated he is buying 60% of the deals coming to him because they look good through analysis. Further into the cycle, 80% of the deals will look bad. He explained there are entire sectors that T. Rowe Price does not buy, such as retail. Most of the high yield is private equity, not more traditional forms of junk bonds.

Question: MR. BADER asked that each panelist indicate what will be the best performing asset class globally over the next 12 months.

Answer: MR. WHITE chose high quality long bonds. He thought a coupon of 4-5% will be achieved plus depreciation as there is the potential for interest rates to drop by maybe a full percentage point. This will happen because the economy is softer, more money is chasing fewer quality investments, and there is more potential for a disaster to occur geopolitically that would create a flight to safety.

MR. NOTZON agreed with Mr. White over a 12-month horizon, particularly investment in 30-year Treasuries, but he chose emerging markets stocks over a 10-year horizon.

MR. FISHER chose emerging markets stocks over a 10-year period. He noted that it is amazing to him that emerging markets returns have been so much higher than the developed world over the last five years. They began at a 50% discount to the developed world and now are at a 15-20% discount. As well as they have done, the gap has not closed all the way. The earnings will continue to grow in the developing world where they have been growing faster. Over the next 12 months he favored high quality equities on a global basis; the return from those assets will be higher than from high quality bonds.

Question: MR. SEMMENS asked what impact does a weaker dollar have and it is something that is persistent or a short-term impact? Would this impact inflation in the US?

Answer: MR. WHITE felt the dollar would likely continue to be weaker until there is some resolution of the trade balance problem. That is becoming a more difficult problem to solve daily because imports to the US are 50% larger than exports, so exports will need to be raised. Imports are growing because it is cheaper for the US consumer. The weaker dollar is a long-term problem. He doubted Congress would be able to solve it.

MR. FISHER added that a weaker dollar makes investment outside of the US more interesting, it makes companies associated with tourism in the US look more interesting, it makes US exporters

look more interesting, and it makes US companies with a large component of non-US earnings more interesting, so it is a complicated question to answer.

Question: MR. TRIVETTE asked are you concerned about the amount of foreign investment money coming into the US and what impact will it have over the next 5 to 10 years?

Answer: MR. NOTZON felt this was to be expected and it would be surprising if it did not happen. He noted that he would rather buy Toyotas from a plant in the US than a plant in Japan. Investment is global and it will go where the best investments are located. He commented that the US should be beefing up its educational systems. There are a huge number of applicants to job openings who grew up in Japan and speak two languages. The US educational system is failing at the inner-city level and that will create problems that will grow in magnitude.

MR. WHITE answered that it is far better to have foreign capital coming into the US than going out of the US.

Question: MR. WILSON asked if there other assets classes that Mr. Notzon feels strongly about over a 10-year period than emerging markets? MR. O'LEARY asked where is there a mini-bubble and what would he avoid?

Answer: MR. NOTZON stated that T. Rowe Price has a global equity fund that splits the world into 100 sectors and buys the best company they can find anywhere in the world. If there is a mini-bubble, there will be a survivor that should be bought when the bubble bursts.

MR. FISHER stated that 69% of the EAFE Index is Europe and there is something wrong with that. It reminds him of 1989 when Japan was 65% of the EAFE Index. The UK is 25% of the 69% and there are companies that are not UK companies but are listed there and inflate that number. Also, 30% of the EAFE Index is financials, which is also high. As an investor, he prefers real product; the 30% figure feels inflated.

Question: MR. PIHL asked about the key factors that analysts worry about?

Answer: MR. FISHER replied that for Capital it is management, first and foremost. Other issues are who are they? What motivates them? How do they treat their families? Other questions are whether the business model makes sense, what is the environment, what are the surprises, and what will competitors do? But he feels the most important thing is management.

Question: MR. O'LEARY asked how do you react to back dating of options?

Answer: MR. WHITE replied that Citizens does not approve of back dating of options. When it is encountered, the firm takes as active a role as possible in letting management know its feelings. It is a negative in the overall investment analysis of a company. If the practice is egregious enough, companies could be sold. Back dating options is of questionable legality and it is of poor ethics.

MR. NOTZON commented that for anyone who does it, their life is ruined for the next eight months, so where would they find time to run the company?

11. Capital Guardian Trust Co. – Domestic Equities

For more information on this presentation, please refer to the publication entitled “A Non-US Equity and Emerging Markets Equity Review to Alaska Retirement Management Board,” dated November 28, 2006 and kept on file at the ARMB offices.

DAVID FISHER and PAULA PRETLOW presented to the Board. MS. PRETLOW introduced Mr. Fisher and herself. She noted that the materials provided to the ARMB are for reference, in addition to the presentation. She stated Capital Group is more than 75 years old and is comprised of the retail organization and the institutional assets managed under Capital Group International, which is where Alaska’s portfolios are managed. Capital has 11 offices around the globe, headquartered in Los Angeles, with 157 investment professionals managing portfolios and conducting research. The firm is a research firm first. MR. FISHER noted these figures are for the institutional side, not the mutual fund side. MS. PRETLOW stated that Capital’s employees also represent 27 countries and 33 languages. Diversity of background and thought leads to diversity of ideas and to superior investment results over time. The firm’s investment philosophy is that markets are not efficient and that fundamental research can identify mispricings. Capital builds portfolios from the bottom up.

MS. PRETLOW explained the investment process is a continuous loop of research and communications. Analysts pick stocks based on their highest conviction ideas. When each of the portfolio managers’ ideas is combined with those of research analysts, a well-diversified portfolio is formed. This multiple portfolio management approach is unique to Capital. The compliance and execution functions ensure that Capital meets the client’s guidelines. Portfolio managers average 21 years at Capital and have 26 years of investment experience. The research portfolio analysts average 10 years with Capital and 15 years of investment experience.

MR. O’LEARY understood that if Mr. Fisher wanted to sell a stock from his segment of the portfolio and another manager at Capital wanted to buy it, there would not be a sale of the stock, there would be an accounting movement. MR. FISHER stated if there are decentralized decision makers there must be centralized control. So long as his actions are consistent with the action list, the action will be effected; as soon as he wants to sell the stock, the other holders have the choice to take it over, wait, or agree. MS. PRETLOW noted there is no transaction cost associated with these decisions. MR. O’LEARY added that the transaction does not show up as a sale in terms of Alaska’s accounting.

MR. O’LEARY noted that the individuals at Capital are all paid largely on the performance of their piece of the portfolio relative to the appropriate benchmark. MR. FISHER confirmed this is the case; an employee’s bonus is based on how they did relative to the benchmark. He explained that if people have an opportunity to earn a bonus, it has to have meaning. No one can override their decisions, so long as they are consistent with the client’s guidelines. The bonus is unlimited. Capital is privately owned so it does not have to report quarterly earnings. Very often the biggest bonuses are paid out in bad times, which could not be done with a public company. MS. PRETLOW added that the bonus is based on the measure against the client benchmark and the analysts are measured against the benchmark for the sector for which they are responsible.

MS. PRETLOW reviewed a composite of what Alaska's funds would have looked like if it had invested with Capital in 1978. The result would have been an addition of 264 bp on an annualized basis since inception. MR. FISHER noted that the index earned \$2 billion and the composite earned \$3.8 billion over this time period.

MS. PRETLOW stated that Capital has modestly out performed for the year ended September 30 and modestly under performed over the life of the Non-US account. The emerging markets portfolio has out performed 300 bp year-to-date and 650 bp for the year.

MR. FISHER stated that neither international nor emerging markets were good for Capital since 2000, and in particular 2003 and 2004 were tough years. It is heartening that emerging markets returns are back. In the EAFE Index area Capital did well in 2005 and some of that has been given back in 2006. He stated that organizationally it feels like Capital is in rhythm. Capital is doing some things that are counter to the market. The market is allowing Capital to do some things about which it has passion. Over the last few years Capital had a huge exposure to India and a small exposure to China and in 2005 began reducing exposure to India and increasing exposure to China. That process has continued, while Capital has been very selective in what it owns in China. MR. FISHER noted in particular that the return in Europe for the year has been very good, mostly attributable to currency. Japan did nothing over this same period; its currency was not strong. Japan helped Capital's returns in 2005, but has hurt in 2006.

MR. FISHER quickly reviewed the 20 largest holdings in the Non-US Equity portfolio; 8 of those are financials and three of those are Japanese financials, but there is an under weight in financials in total. He noted the combination of information technology and telecommunications, both of which are over weight. He noted the 10.8% combined weight of information technology and telecommunications in the index, which compares to a weight of 27% in the emerging markets index. There has also been an under weight in energy in the Non-US portfolio and an over weight in materials. He noted that he owns cement companies in 17 countries in emerging markets and the developed world.

MR. FISHER noted that by country the Non-US portfolio is 27% in Japan versus the index at 23.7%. Europe is 68.4% of the index and 52.7% of the Non-US portfolio.

MR. FISHER next reviewed the Emerging Markets Growth Fund, stating that the strength of this portfolio has been stock selection, which contributed 473 bps, while sector selection was -69 bps.

MR. FISHER repeated Ms. Pretlow's initial statement that Capital values its relationship with Alaska. He also noted that Capital has never been stronger organizationally, having continued to add phenomenal people. He stated he does not believe this is a small return period; he has no reason to believe that Capital will not continue to compound over longer periods of time at 20% per annum. The Emerging Markets Growth Fund has existed since 1986 and, net of fees, it has compounded just over 19% per annum. He thought there could be a cyclical correction, but it should be treated as an opportunity.

CHAIR SCHUBERT thanked Capital for sponsoring Dr. Kotkin at the ARMB educational conference.

MR. O'LEARY was glad to see the Emerging Markets fund returns rise. MR. FISHER stated that Capital lost many clients during the period of low returns and it saddened him because he knew they were making a mistake. It caused him to review Capital's US equity results and Non-US equity results and isolate when Capital was in the top or bottom quartile, as well as what happened afterward. That review indicated that Capital should be hired when they are in the bottom quartile and should only be hired when they are in the top quartile if the investor has a long-term investment horizon.

MR. CORBUS asked that Mr. Fisher comment on the transparency and rule of law in emerging markets. MR. FISHER replied that it evolved so much faster than one could possibly have imagined. He was invited in October 1989 to go to Shanghai to talk about establishing a stock market. He did not believe it would happen, but he was there on September 11 talking about corporate governance and how to make the market user-friendly. He acknowledged that there are problems. He noted that in China 70% of the companies are owned or regulated by the government and in most cases it is not known for whom management is working and there is reason to believe it is not for the shareholders. But it is possible to have a conversation with them. He felt the progress that has been made should be celebrated. He noted that the book *The Ugly American* was written by an Australian who said Americans are guilty of going to other places and seeing everything through an American's eyes and, if it is different, finding that it is bad. Some of that is true. That is why having employees with different nationalities and life experiences is beneficial to Capital.

12. Citizens Advisors

For more information on this presentation, please refer to the publication entitled "Citizens Core Growth Fund Update, presentation to Alaska Retirement Management Board," dated November 28, 2006 and kept on file at the ARMB offices.

JONATHAN WHITE and ROBERT BEHAN presented to the Board. MR. BEHAN reviewed an agenda for the presentation. He reported that on August 2006 Citizens Funds filed a non-binding letter of intent to be acquired Pax World Management Corp. Shortly the 914 document will be filed and it will provide details about that acquisition. MR. O'LEARY confirmed through Mr. Behan that the supplemental filing did not detail anything such as motivation for the sale/acquisition. MR. BEHAN stated this is correct. He explained that anything beyond the letter of intent could be construed as solicitation.

MR. WHITE stated Citizens has had a six-month period of poor performance resulting from cognitive misjudgments on his part and misreadings of the market and the economy, although not deviance from the investment process. He reviewed returns from June 30, 2004 through September 30, 2006, indicating that returns were good until they began falling in the second and third quarters of 2006. Falling performance were attributable to a misjudgment in his reading of economic indicators that the country was in the late stages of an economic cycle. This was supported by good operating results from the industrial sector and strong relative price performance demonstrated by industrial and material stocks. Citizens was heavily over weighted in industrial stocks and they had done well for the fund for a period of time. In April and May

the market became defensive, so all of the thinking related to a late stage economic cycle, including industrial stocks, under performed. At the same time healthcare, consumer staples, and other defensive stocks began performing well. This hurt performance significantly.

The second problem was a misreading on energy. Citizens was over weighted in energy going into summer 2006. There had been a run up on the price of oil and Citizens expected the price of oil would stay steady in the high \$60 to \$75 a barrel area and had the potential to spike higher. Predictions for hurricanes in the Gulf supported this bet and then BP had a leak in the pipeline in Alaska. The leak was fixed quickly, the problems in the Middle East were resolved quickly, and there were no hurricanes in the Gulf. As a result, energy stocks dropped significantly. Seven of the 20 worst performing stocks in the third quarter had been best performers in the second quarter. There was a specific problem in Chico's FAS, a high quality retailer. This company has a niche focus on a segment of the female population. They have a good business model, good management, good resources, and a good plan and they stumbled. The stock fell 20% in one day. Citizens reviewed its basic assumptions on the company and was reassured that management is good and fundamentals are strong and allowed them a chance to recover. They did not recover and the stock continued to go down. The stock has now been sold. That stock was a 2% position in the fund when it began to slide and it had a significant impact on performance.

MR. WHITE stated that the current market environment is the worst for his investment style and philosophy. There is some economic uncertainty and the market is in transition around those opinions about the economy so the leadership in the market changes significantly.

MR. BADER asked if Mr. White could know one economic indicator before it is announced, what would it be? MR. WHITE replied that for the next six months any indicator having to do with housing he would love to know in advance of the market because it is the key to whether or not a soft landing can be sustained.

MR. BADER remarked that Citizens fills a specific need in the menu of options available in the Defined Contribution plan. He understood that social investing is not an encumbrance on Mr. White's ability to perform as a growth manager. He asked for an explanation of the criteria that limits the universe of investments for Citizens. MR. WHITE replied that the exclusionary criteria is that a company have no more than 5% of revenues generated by alcohol, firearms, tobacco, defense, or nuclear power. On the board of directors there must be an element of diversity. There is also a social research group that does an in-depth examination of a company's exposure in dictatorships, its environmental record, and the entire company to ensure it does well. This does not noticeably affect his investment style because he tends to be a risk-averse investor and the exclusion of tobacco, alcohol, etc. is not problematic because they are subject to legal ramifications. He has not liked defense companies as investments because he does not like their business model; the federal government has a tendency to go in one to three years after the fact and re-negotiate contracts with these companies, which creates uncertainty. He looks upon the social research effort as a way to help him mitigate basic fundamental risk. A company's social responsibility is necessary, but not sufficient, for Citizens' investment.

MR. O'LEARY asked what proportion of potential investments is available to Citizens; he estimated 60-70% are available. MR. WHITE thought the figure would be higher. He stated there are three to four companies he wanted to invest in and could not. MR. BEHAN stated that 75% of the S&P 500 is investable by Citizens.

MR. WHITE stated that Citizens manages from a portfolio basis and the portfolio is well diversified and risk controlled. The investment decisions are driven at the portfolio level. Decisions are made regarding what characteristics are desired in the portfolio before a company is selected. This directs the stocks that are placed into a particular portfolio. The firm's emphasis is on proven companies with a track record that proves an effective business model and practices are in place. Citizens also listens to the market in terms of what is going on in the world. The portfolio construction parameters include a position size of 0.5% to 3.5% in any particular stock, and in practice the position size is 1% to 2.5%. There are typically 60 holdings in a portfolio. The portfolio characteristics are targeted around the S&P 500. Sector weightings in consumer staples and discretionary have increased as of September 30, 2006. Energy is down to 6.1%, which is below the S&P 500. Healthcare is down to a 15% sector weighting. Of late, the median capitalization size in the portfolio has been increased to over \$20 billion.

MR. BEHAN explained that Citizens serves as an active shareholder and conducts activities through its social research department. A resolution has been served on Whole Foods to stop using products with toxic chemicals. Citizens has also worked for resolution with Johnson & Johnson for safer ingredient use in personal care products. He reviewed examples of corporate engagement with a variety of companies. Over the last five years businesses are becoming more aware of the need to be more socially/environmentally responsible because there is a bottom line benefit.

MR. O'LEARY was surprised that Target was involved with gold mining and production. MR. BEHAN stated it is not a major undertaking, but one of their subsidiaries is involved in that.

MR. O'LEARY asked if Pax World Management Corp. is also considered a socially responsible investment firm. MR. WHITE replied in the affirmative.

RECESS 5:06 p.m.

**ALASKA RETIREMENT MANAGEMENT BOARD
MEETING**

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

MINUTES OF
November 28-29, 2006

Wednesday, November 29, 2006

I. CALL TO ORDER

VICE CHAIR TRIVETTE called the meeting of the Alaska Retirement Management Board to order at 9:01 a.m.

II. ROLL CALL

ARM Board Members Present

Martin Pihl
Sam Trivette
Gayle Harbo
Gail Schubert
Larry Semmens
Scott Nordstrand (via teleconference)
Mike Williams
Bill Corbus

IAC Members Present

Jerrold Mitchell
William Jennings
George Wilson

Department of Revenue Staff

Tom Boutin, Deputy Commissioner, Department of Revenue
Gary Bader, Chief Investment Officer
Susan Taylor, Comptroller, Treasury Division, Department of Revenue
Judy Hall, ARMB Liaison Officer, Department of Revenue
Bob Mitchell, Senior Investment Officer
Zachary Hanna, Investment Officer
Steve Sikes, Investment Officer

Department of Administration Staff

Melanie Millhorn, Deputy Commissioner, Department of Administration
Charlene Morrison, Chief Financial Officer, Division of Retirement and Benefits,
Department of Administration

Others Present

Jay Dulany, RPEA
Alex Slivka, McKinley Capital

VIII. REPORTS (Continued)

13. JP Morgan Real Estate Separate Account

For more information on this presentation, please refer to the publication entitled "Alaska Retirement Management Board, Strategic Property Fund" dated November 29, 2006 and kept on file at the ARMB offices.

After introduction by Gary Bader, AMY CUMMINGS presented to the Board. She stated the ARMB has over \$200 million in the Strategic Property Fund. She has 22 years of real estate experience and is the client services individual with the firm. JP Morgan's real estate group is one of the largest institutional managers of commercial real estate capital. The firm partners with a large number of real estate operators in the industry, which has been beneficial in the recent market. The real estate company operates as a standalone operation within JP Morgan. The performance was 17.8% for the year, 17.6% for the 3-year period, and 13% for the 5-year period. Anne Pfeiffer is the manager of the Strategic Property Fund and has 28 years of experience; she has managed this fund since inception in 1998. She remarked on the between 14 and 33 years of experience of the other staff members. This allows the firm to make good judgments, avoid risk, and really see quality.

The Investment Committee must vote unanimously to approve acquisitions and dispositions in the portfolio. Ms. Pfeiffer oversees Alaska's portfolio and she is not the one outsourcing deals; the acquisitions group finds transactions. The Strategic Property Fund has 175 clients and has \$15 billion in assets. This fund is consistently a top performer. It is the firm's flagship product, but is one of many products. It is the lowest risk product. The ARMB has been with the Strategic Property Fund for some time and has increased its exposure over time as well. She noted that the high returns of late would not likely continue in the future. MR. BADER asked if the income figures would remain consistent, as they have been. He noted there has been a slight dropping off of income, which might reflect valuations. MS. CUMMINGS noted that the income is between 6-7%; for the most part the portfolio has long-term leases and in any given year no more than 10% of the leases roll. The tenants are high quality and the apartment buildings are stabilized and high quality. For these reasons it is easy to be on target in terms of income. Capital appreciation has caused a slight drop off in income of late. There is good growth in the office portfolio, which is a big driver of the income. She expected that income would be 6.5% or slightly growing.

MS. CUMMINGS noted that there is a great deal of news about the housing bubble and the information in the commercial real estate market does not mirror any of that. While there has been a drop off in housing of approximately 2.5% year to year, commercial real estate does not

show the same trend. JP Morgan looks at TIPS yields, credit spreads and what investors are expecting to see in terms of yields in order to get a sense whether pricing is reasonable. At this time, pricing does feel reasonable. Returns in the 7.5% range are sought for the Strategic Property Fund. When a property is acquired today, a 7.25% return is desired. The risk premiums in the commercial real estate market are consistent and reasonable at this time. There has been sizeable appreciation from 2004 to 2006 and the firm expects appreciation to return to inflation levels going forward. JP Morgan sees no factors that would affect real estate more than they would affect other investments. The fundamentals in the properties in this portfolio are good and there is rental growth in commercial real estate.

MS. CUMMINGS reviewed several of the assets in the Strategic Property Fund. The firm's strategy is to buy attractive, stabilized investments, with excellent locational factors, keeping the leverage below 30%, and locating in markets where there is continued demand and the credit of the tenants is strong. The portfolio attempts to mirror the NCREIF Index in large part; the portfolio is largely light in industrial, but will increase in this sector when prices are right. The average sale per square foot in the malls held in the portfolio is \$200 per square foot higher than the average. The cash position is 3%, which is improved over cash levels in the past. Most leverage is fixed interest rate; it is currently at 24% and will decrease slowly over time.

MR. O'LEARY asked for comment on the leverage flexibility permitted in the Fund. MS. CUMMINGS explained that JP Morgan does not have set limits on leverage, but the portfolio went over 30% a couple of times. More flexibility was built into the portfolio in terms of the range of leverage. That was done for all of the funds, not only the Strategic Property Fund. There is no intention to add more leverage to this Fund. MR. O'LEARY asked, if someone was not in this Fund and asked what its leverage is, how Ms. Cummings would answer. MS. CUMMINGS stated that there is the flexibility to do almost anything in this fund. This fund has been on the higher end of leverage, but on the lower end of risk in terms of the assets it buys.

MR. BADER stated he was not surprised to see an over weight on the East Coast and an under weight in the Midwest, but was surprised by the under weight in the West. He asked if this is a strategic move. MS. CUMMINGS explained this is a result of pricing. A huge apartment complex was sold in San Francisco because investors have been willing to overpay on the West Coast. With similar demographics to Florida, there are West Coast markets trading at 4.5-5% yields where in Florida they can be 6-6.5%. It is difficult to buy on the West Coast at this time. She noted that nearly all of the properties in the portfolio are in the five major MSAs.

MS. CUMMINGS noted that at one point there was nearly a two-year wait for capital to be invested in the Strategic Property Fund. There is now more looseness in the market. The portfolio includes a newly tenanted office building in Atlanta, Georgia. The Parkmerced, the property that was sold in San Francisco, had a 15% return on equity.

In terms of performance, the expectation is 9-12%, with income representing 6.5% of that and the balance being appreciation of 2-3%. The firm has strong performance with a lower risk profile. JP Morgan has not stretched to go outside of core in this portfolio. This is a high quality, very liquid product.

MR. BADER asked if there is still a queue in this fund. MS. CUMMINGS replied that the queue is now less than six months. There was a period of time when \$100 to \$200 million allocations were being made; new big allocations have gone down and the transaction flow has increased.

MR. O'LEARY asked if there were any indications that people were getting in the queue just to hold the space and then scaling back. MS. CUMMINGS replied that this did not happen. If anything, clients have added more over time.

DR. MITCHELL asked for comment on the growing role of private equity in the real estate sector and if private equity managers are looking for more than the 8-10% than JP Morgan expects over the next three years. MS. CUMMINGS stated that private equity and hedge funds are buying the type of thing the Strategic Property Fund buys and leveraging it significantly. Others are trying to find more difficult projects. She suspected that many of these firms have not been through a bad market and they may not have the experience to work through bad problems. It has always been the case that when real estate performance is good the market rushes to it.

MR. BADER noted that the previous ASPIB board was formed in 1992 and, at that time, real estate returns were poor. The ASPIB formed the Real Estate Committee to determine whether the State should invest in this asset class. They attended conferences and had discussions and the thinking was that real estate was unattractive. The decision was made to stay with real estate, but it took until 2000 to even become fully implemented in the asset allocation. There was a temptation to make long-term judgments based on short-term performance, but it is good that did not happen. He cautioned against judging an asset class based on its most recent performance.

14. Private Equity Evaluation

For more information on this presentation, please refer to the publication entitled "ARMB Private Equity Portfolio, Review and Performance Analysis" dated November 29, 2006 and kept on file at the ARMB offices.

GARY ROBERTSON, Callan Associates Inc. (Callan) joined the meeting via teleconference. MICHAEL O'LEARY led the presentation. He explained that this presentation is given to the ARMB annually because private equity does not lend itself to more frequent reporting. Mr. Robertson and his colleague Michael Bice annually review a draft of the ARMB's annual tactical plan that is prepared by staff and discuss it with staff.

MR. O'LEARY recalled that Trustee Corbus headed a committee that took 12-18 months to decide whether or not the pension systems should invest in private equity. The decision to do so was after deliberate, well thought out, and thorough investigation. This investigation included discussions with general partners of buyout and venture capital funds, a detailed review of what should be the expectations, what are the mechanics of implementing a program, and how long it would take to be invested. MR. CORBUS added that this process included interviews with other pension funds that were invested in private equity. MR. O'LEARY stated the key to the decision was that it was not good to invest in private equity unless it was possible to put together a program that included partnering with the best of class.

MR. O'LEARY stated that in 1998 the pension systems added private equity as an asset class with a 3% target allocation. This target was to be implemented over a period potentially of five

years because of the time involved in partnering with the partnerships. This would create a reasonable cycle so that each of the partnerships in which there was investment would be drawing down money over a multiple year period. He explained that if the ARMB invested with a partnership today, money would be drawn down over four or five years to actually fund the underlying investments. When a private equity program is begun, money is returned from early partnerships before the last commitment is even made.

In 2001 the target allocation was raised to 6% primarily because in the intervening three years the early experience in private equity was better than anyone had anticipated. Money was coming out of the early partnerships at a much faster rate than was expected. With the benefit of hindsight, the timing of that policy change could not have been worse. Money was flipped, companies were coming public sooner than they should, and the general pricing for anything related to technology was astronomical. Abbott Capital was hired as the initial private equity manager, but in 2001 they were faced with a doubled long-term target and a need to increase commitment. At the same time Pathway, a second private equity oversight manager, was hired. Each of these two firms manages custom portfolios for the ARMB. Within the broad private equity umbrella, Blum Capital was hired in 2005 to do activist investing. In 2006 the private equity target allocation was increased to 7%. MR. ROBERTSON added that only 12% of these two managers' investments overlap, so the ARMB has a diversified portfolio. Both managers have good relationships, but generally there is little overlap.

MR. O'LEARY proceeded with a review of the strategy for the private equity program. The program has broad diversification throughout the private equity industry, including venture capital, buyouts and special situations, subordinated debt, and distressed debt. The ARMB's private equity target is 7%, or \$966 million. Abbott has investments of \$523 million, Pathway has investments of \$241 million and Blum has investments of \$94 million, so the total private equity funding is \$859 million. He reviewed a hypothetical timeline on an individual limited partnership. The limited partnership would make commitments over a multiple year time period with the general partners making the actual investments. Distributions can begin as early as year three and they extend over a decade. It is not uncommon for particularly a venture capital partnership to have a targeted close at 10 or 12 years, but they nearly always provide for the ability to extend the maturity in order to have an orderly liquidation of any remaining investments.

MR. O'LEARY reviewed the history of the private equity industry, with the number of partnerships being raised reaching a high in 2000 and again in 2005. He stated the private equity market, particularly the buyout segment, has been hot and there has been concern that valuations may be getting stretched. There is plenty of money available to fund the leverage in buyout transactions. MR. ROBERTSON stated the credit market is driving the heat in the private equity market. MR. O'LEARY stated that when the ASPIB committee was doing research on private equity in the late 1990s buyout funds had done comparatively poorly, while venture funds did very well. In the 1980s, the buyout funds had very good returns, while venture funds had poorer absolute returns.

MR. SEMMENS asked where the sources of distribution come from in these deals. MR. O'LEARY replied that it varies greatly by type. With a buyout, the company in which there is

investment is almost by definition an operating company with cash flows, so the out takes the form of a refinancing or going public or selling to a public company. With a venture investment, there is a higher incidence of initial public offerings or sales to strategic buyers. MR. ROBERTSON added that when Abbott was first hired, there were strong initial distributions because companies were going public. In the recession of 2002-2003, the distribution slowed down. Once the debt market heated up about half of the distribution in the buyout area has come from selling companies to a buyer or another buyout firm. Half of the distributions have come from leverage recap where if a company was bought at low valuation in 2002-2003, they were then refinanced and more debt was put on the company and cash was dividended back to limited partners. That is now slowing. The cash yields on buyout portfolios were 40% for several years and last year they were 30%.

MR. O'LEARY reviewed the Abbott portfolio, which has investments in 99 partnerships (51 venture, 24 buyout, and 24 special situation). MR. ROBERTSON explained that special situation funds do not fall into the venture capital or buyout category. An example could be an energy sector investment. Distressed debt and subordinated debt might also be considered special situations.

MR. O'LEARY indicated that Abbott's portfolio is 67% paid in and has experienced an increase in internal rate of return (IRR). Over the life of the relationship, they have made commitments of \$1.1 billion and have paid in \$748 million, leaving \$360 million that the ARMB has committed but that has not been called. There has been \$437 million distributed back to the ARMB, so there is a net carrying value of \$523 million on the money paid in. The total of investments and the net carrying value of the investment is \$960 million. The IRR for this investment, which takes into consideration the timing of the cash invested and the return, is 8.96%.

Pathway started in mid-2001. It is comprised of 42 partnerships (12 venture, 19 buyout, 3 restructuring, and 8 special situations). There is 43% paid into the portfolio. The IRR decreased during the year and will continue to decrease over time; however, there was a 33% cash yield during the last 12 months. The ARMB has committed \$612 million, has paid in \$263 million, and has \$349 uncalled. The distributions have been \$89 million and the carrying value is \$241 million, so the total value is \$331 million. The IRR is currently 25.3%.

MR. SEMMENS asked what is meant by a 33% cash yield. MR. ROBERTSON stated that the Abbott portfolio has a 34% cash yield. This is the distribution the ARMB received during the last 12 months divided by the net carrying value at the start. He noted that this highlights the fact that the capital markets are extremely liquid. MR. O'LEARY explained that some of the buyout deals have occurred in year one and were completed in year two. With this quick of a completion period, there has not been time for a fundamental change in the operation of the businesses. That has not been the case in the venture area.

MR. CORBUS asked for an explanation of net carrying value. MR. ROBERTSON explained it is the capital account with the underlying partnership. That capital account is largely how private companies are valued. Typically the values of the companies being valued by the general partner, under limited partnership committee review, are conservative. MR. CORBUS asked how this relates to how the ARMB computes performance for its financial report. MR. ROBERTSON

believed this is a straight pass through. MR. HANNA stated these are pass throughs straight onto the balance sheet of the ARMB. MR. O'LEARY explained that the industry convention had been to carry at the lower of cost or market so that if something went bad it was written off, but it was not written up until there was a major third party financing event. The accounting industry says that does not reflect the true value, so there is now a trend beginning to have the carrying values better reflect estimates of market value.

MR. PIHL asked if it would be possible to show these numbers as of the last June 30 and this June 30 to see what happened during the year. MR. ROBERTSON stated the change over the year is shown on page 10 of his presentation. The numerical values as of June 2006 are subtracted from the numerical values at June 2005 to calculate the change. The commitments as of June 30, 2006 were \$327 million, the paid in was \$245 million more, the uncalled increased \$82 million from last year, the distributions were \$185 million, the net carry value was \$219 million higher than one year ago, and the total value is \$404 million. MR. O'LEARY stated when staff develops the tactical plan, they have to decide how much needs to be committed this year and in future years in order to be near the target allocation. There are several factors for consideration, including the fact that the fund will grow, what will be the drawdown rate from the partnerships, and to how many partnerships can managers make commitments.

MR. JOHNSON asked if the actual asset allocation is based on commitments or the amount paid in. MR. O'LEARY replied that the asset allocation is based on what is actually at work; paid in is what has been paid in, less distribution. MR. WILSON clarified that the asset allocation is the amount paid in, considering distributions marked up or marked down. It is in essence the current market value of the investments. MR. O'LEARY noted that at the last meeting, in recognition of future contributions to the system staff wanted to get a broadened range with respect to private equity so there could be maintenance of actual investment near the target level.

MR. O'LEARY explained that the convention in the industry to determine performance is to look at the partnerships in which a manager invested in a particular year and compare those partnership investments with all the investments that were closed in that same year. There is then consideration of their reported returns at a point in the future. He noted that the numbers for the partnerships in 2003, 2004 and 2005 are largely meaningless because there has not been sufficient time for them to perform. MR. CORBUS asked if the return shown in 1998 is a view of those investments now and for that period the internal rate of return for Abbott was 8.6%. MR. O'LEARY replied in the affirmative and added that those returns are net of fees. MR. CORBUS understood the 2003 partnerships are meaningless because they have existed for only two years. MR. O'LEARY indicated this is correct and explained that four years is the industry convention for judging performance. He noted that it is theoretically possible that a partnership could have distributed everything over four years. He stated that over all the periods from 1998, Abbott had five first quartile results, two second quartile results, and one third quartile result in 2005, which he stated is meaningless at this point. MR. WILSON asked if the benchmarks are overall or only the buyout partnerships. MR. O'LEARY stated that Abbott is diversified and tilted toward venture. MR. ROBERTSON stated the benchmark is the all private equity universe for all venture capital, buyouts, etc. The venture capital in Abbott's portfolio dragged on its performance.

MR. O'LEARY briefly reviewed the same analysis for Pathway. MR. ROBERTSON noted that this manager's style has been in favor.

MR. O'LEARY reviewed a distribution of investments for each manager. The analysis includes both called capital and net carrying value. For both managers, the venture return is slightly negative, while the buyout return is positive. He expected the buyout returns to lessen. Combined, the total private equity commitment, without Blum, is 46% buyouts. MR. ROBERTSON noted that the net carrying value for venture capital is 23%, for buyouts is 45%, and for special situations is 32%.

MR. CORBUS understood that when the pension systems' allocation was raised from 3% to 6% the timing was poor. However, when the allocation was taken to 6%, Pathway was brought on and their IRR is much higher than that of Abbott. MR. O'LEARY noted the return is affected by the shorter term and they manage a smaller amount of money. He noted that private equity is the ultimate long-term investment.

MR. O'LEARY explained that Blum manages two portfolios for the pension systems: Stinson A that invests in publicly listed securities and Strategic Partners III that invests in public companies but can use both listed and private securities. This fund is different from Abbott and Pathway but it is influencing corporate decision-making. There is some overlap between the two investment vehicles. Blum is still accumulating investments. MR. ROBERTSON stated there is a 95% overlap between the investment vehicles, so the two portfolios are essentially a single portfolio. MR. O'LEARY noted that because this money is actually invested, the returns for investments made a year ago are more meaningful than for the Abbott and Pathway portfolios. The Stinson A portfolio has a time weighted return of 10.36% as of September 30, 2006. The Strategic Partners III portfolio has a time weighted return of 4.15%. MR. ROBERTSON stated the companies in the Strategic Partners III portfolio are, by definition, under performing.

MR. O'LEARY thought the program is well structured and believed that Abbott and Pathway are the best oversight managers and both are doing what they were hired to do. MR. HANNA stated that both managers have done what they were hired to do; the ARMB is in extremely high quality partnerships and there is a lack of overlap between them. Returns to date have been decent, but the market is changing.

MR. ROBERTSON noted a robust venture exposure that should provide good returns in the future.

MR. WILSON asked if there is a need for additional capital commitments in future years to reach the 7% target. MR. HANNA replied the ARMB is close to fully committed at this point after committing \$300 to \$350 million a year; continuing at that pace, he expected to meet target. MR. WILSON asked if the distributions would match the contributions. MR. HANNA replied that this would be the case roughly. Abbott is self-sustaining; they continue to invest in new partnerships as the distributions are received. MR. O'LEARY explained the money comes back to the ARMB and staff tells Abbott their budget to commit in the next year.

15. Audit Report

KATHY PORTERFIELD with KPMG and CHARLENE MORRISON, Chief Financial Officer, Department of Administration, presented to the Board. MS. MORRISON stated that for the most part, the financial statements are in the same format as prior years, although there were some additional disclosure items. Investment data in the statements comes from the Treasury Division.

MS. MORRISON stated the Supplemental Benefit System (SBS) consists of two plans: the Supplemental Annuity Plan, a social security replacement plan, and the Cafeteria Plan, the optional insurance benefit for dependent care. There are 16 participating employers in SBS. Net assets for SBS at January 31, 2006 were \$2,038 million, up 6% from the prior year. Returns from the various investment options made available to participants are included on page 6 of the report. There were 34,000 participants at the end of this reporting year, up 1,000 from the prior year.

MS. MORRISON next reviewed the Deferred Compensation plan, the State's voluntary Section 457 defined contribution plan for eligible State of Alaska employees. This is also a participant directed plan. An amendment to the plan in March 2006 allows members of State boards and commissions to participate. There were 8,300 participants at December 31, 2005, up 200 from the prior year. The net assets are \$476.9 million, up 5% from the prior year. The returns for the various investment options are included on page 5 of the material.

The Judicial Retirement System has a fiscal reporting year from July 1 to June 30. There are new disclosure items for this system. The net assets for this system were \$80 million, up 8% from the prior year. The investment return for FY06 was 11.37%, gross of administrative expenses. Contributions covered about 60% of benefit outflows for the year, highlighting the importance of investment income to the pension plans. The funding ratio was 77.1% and the unfunded liability was \$20.9 million per the Buck Consultants replication of the June 30, 2004 valuation. The plan received \$125,000 from the Retiree Health Fund.

MS. MORRISON indicated that the legislation that affects this plan is included in the materials provided to the trustees. Senate Bill 237 was passed during the last legislative session increasing judicial salaries by 50%. In this plan, retiree benefits are based on the salary of the position from which an employee retired. There will be a significant increase in future liabilities and contribution rates as a result of this legislation. The results of the valuation replication are also disclosed. At June 30, 2006 there were 159 members in this plan. Employer contributions were 115% of what was required in FY06 as a result of an excess appropriation being remitted to the Plan.

The National Guard and Naval Militia did not see much change in the last fiscal year. No new disclosure items were required. Net assets for this system at June 30, 2006 were \$15.6 million, up 7.5%, investment return was 6.25%, and contributions amounted to 118% of benefits paid. The funding ratio is 67.8% and unfunded liability is \$6.4 million, based on information coming from the original June 30, 2004 valuation prepared by Mercer. The plan had 5,800 members, increasing 700 over the prior year.

The Retiree Health Fund statement has additional disclosures. The net assets of this fund were \$238.8 million, up 1% from the prior year. The investment return was just over 5%. There is a disclosure that the plan qualifies for the Medicare Part D reimbursement program that began January 2006. There is a footnote related to this program on page 26 of the financials. At the time the financial statements were prepared, staff was not able to reasonably estimate the amount of the reimbursement for the six months included in this reporting period.

MS. HARBO referred to page 6 and asked if the premium should be stated as \$850 per month. MS. MORRISON indicated she would change the financial statements to indicate this correction. MS. HARBO noted there are several references that should be "per month." VICE CHAIR TRIVETTE asked if the dental, audio visual and long-term care for the optional insurance are included. MS. MORRISON replied that dental, audio/visual, and long-term care are optional programs that retirees can purchase and are included in these statements. VICE CHAIR TRIVETTE asked if those benefits have also been audited. MS. MORRISON replied in the affirmative.

MS. MORRISON stated another new disclosure item speaks to the net pension obligation. As staff members who are administering the Health Fund are members of the PERS it is appropriate to allocate a portion of that net pension obligation to this fund. There is also a footnote regarding the transfer to the retirement systems for the excess reserves and the amounts transferred back to the four individual participating pension plans. That allocation process was based on premiums paid into the plan; that same process was used in 2004 when there was last a transfer back.

MR. SEMMENS understood that this fund has approximately equal cash in and cash out. The Audit Committee discussed that it is possible, given this situation and the fact there is still a sizeable reserve balance, these funds could be more aggressively invested. MR. PIHL indicated he would offer this topic for discussion later in the meeting.

VICE CHAIR TRIVETTE asked who conducts the review of all medical reserve amounts. MS. MORRISON replied that review is done by the Department of Administration with the assistance of the benefits consultant, Buck Consultants. VICE CHAIR TRIVETTE asked if this is done annually. MS. MORRISON replied that it has been done annually in conjunction with the premium development process. Transfers back to the pension plan have not been done annually in the past, but it will in the future. VICE CHAIR TRIVETTE asked that the ARMB be provided with a copy of the review.

MS. MORRISON lastly reviewed the Comprehensive Annual Financial Reports (CAFR), one for the PERS and one for the TRS. Both reports start with a letter of transmittal from the Department of Administration and a certificate of achievement for excellence in financial reporting that relates to the CAFR of last year. The introductory section includes biographies for each of the ARMB members. The financial section is a replication of the financial reports prepared by the Department and audited by KPMG. MS. MORRISON noted that all of the financial statements are finalized, but the two CAFRs are still being reviewed by KPMG. Once the final review is completed, she anticipated that the opinion letter would be signed and there would be no changes from this advanced copy to the final. The investment section contains historical information related to the investment of assets in the plan; most of that information is provided by the

Treasury Division. The actuarial section contains excerpts from the most recent actuarial valuation. The statistical section contains more historical information. MS. MORRISON explained that a new Governmental Accounting Board Standard (GASB), GASB 44, has been implemented. For the most part, the statistical section did not require much change; some schedules were slightly modified.

The net assets for the PERS were \$9.4 billion at the end of the fiscal year, up 9% from the prior year; the investment return was 11.74%; contributions were 65% of benefit outflow; the funding ratio was 65.7%; unfunded liability is \$4.4 billion from the June 30, 2005 valuation. The PERS plan received \$34.6 million of the excess reserves in the Retiree Health Fund. The legislation affecting the PERS includes \$18.4 million provided by the legislature to participating employers to help offset the rate increase from FY05 to FY06, and that SB141 closed the Defined Benefit plans to new members and created the Defined Contribution Retirement plan for new members hired after July 1, 2006. Also disclosed is the fact that the regulation that capped employee rate increases or decreases to 5% was repealed in July 2006. There were 160 employers participating in this plan, the same as last year, and there are 62,600 members, up 2,000 from the prior year.

MS. MORRISON reviewed a few schedules contained in the statistical section including changes in net assets over a 10-year period. She noted that the schedule on page 104 outlining benefit options has been expanded to individually show each option, rather than combining some. There is also a schedule disclosing the type of healthcare coverage either provided to retirees or chosen by retirees. There is also a schedule of principal participating employers. GASB 44 requires that the top employers be disclosed up to 50% of membership; three participating employees represent 58% of the plan.

MR. PIHL asked whether staff reviewed the minutes given that the report says the average required contribution for PERS is 32.51% and the ARMB adopted a rate of 39.76%. He understood that ARMB heard from Buck Consultants, which presented a rate of 32.51% and from the other actuary saying that the liability should be level funded. Buck was asked to come back with an analysis on a level funding basis, which brought the contribution rate to 39.76% for PERS. He did not want to see a report showing the difference between what was required and what the ARMB adopted. VICE CHAIR TRIVETTE asked if narrative on this subject could be added to the reports. MS. MORRISON recalled that the ARMB adopted the valuation as it was presented with the contribution rate of 32.51% and then asked for additional information so that the rate itself would take into account the change in the following year due to the closed plan. She indicated she would have to review the minutes to see if her understanding is correct; if it is, she could add a footnote to the tables in the report dealing with PERS and TRS. MR. PIHL noted there is a column in the table entitled "board-adopted" and asked that it read, "adopted rate." MS. MORRISON indicated she would make this change.

MS. PORTERFIELD stated she met with the Audit Committee in June, in October, and this week to discuss the audit process and results. There are seven sets of financial statements that are prepared by the Division of Retirement & Benefits and each contains one page from KPMG stating its unqualified opinions on each of the statements. For each of the entities there is a letter to the Audit Committee and the Board, as well as a management letter. The format of those letters is driven by Generally Accepted Auditing Principles (GAAP). The purpose of the letter to

the Audit Committee is to explain the audit process beyond the numbers. These letters discuss significant estimates. Because the investments are valued at fair value, which is an estimate, that number is easy to get for equities but not as easy for entities such as private equity that are not publicly traded. KPMG has reviewed audit reports of the underlying investments in the private equity area, for example, to be sure their auditors have determined fair value and there can be reliance on that determination in the financial statements. In the Retiree Health Plan there are claims incurred, but not recorded, that are estimated. KPMG looked at lag reports and historical claims reporting data to be comfortable with that estimate. In the Retiree Health Plan the anticipated Medicare Part D subsidy is not recorded because it was not subject to reasonable determination. The range of that estimate is significant. The reports also discuss audit adjustments. Depending on the materiality of differences between the results of the audit procedures and the underlying accounting records, there may or may not be a requirement to report them in the financial statements. There were some differences in the seven sets of statements, but they did not rise to the level of materiality. Two of the differences are very similar that affect the plans that hold alternative investments and real estate. There is a one-quarter lag in reporting fair value, so while there is 12 months of activity in the financial statements; it is not the same time period as used for the other assets. KPMG did not find this to be material. In Deferred Compensation and SBS, investment expenses are not separately disclosed. They are recorded and netted against investment income. In accordance with GAAP, they should be separately disclosed and she understood staff intends to do this in the future. She noted that management was very cooperative throughout the audit.

MS. PORTERFIELD reviewed the management letter for each of the entities for the PERS, which she noted is representative of the management letters for all of the entities. She reiterated her earlier statement that alternative investments are difficult to value because many are not publicly traded. KPMG has recommended that the Treasury Division review their internal practices and accumulate the information to value these assets. For example, Treasury should review the valuation policy the manager uses to ensure it is in accordance with GAAP, getting the annual audit reports and making sure State Street has made adjustments for any audit adjustments that might have come through, monitoring the internal fund statements for fair value and investigate if there are any changes, and look at interim financial information for unusual activity. This recommendation has nothing to do with the oversight of the portfolio, only the valuation of the assets. The second comment in the letter relates to compliance audits. The Division of Retirement & Benefits is responsible for performing employer audits and those are important in terms of the eligibility of the members in the plan and contributions, among other things. There is some guidance regarding multi-employer plans and there is a recommendation to audit each employer every 3-5 years. That has not been done for some time at the Division of Retirement & Benefits due to staffing restrictions, so KPMG recommended this be reviewed to ensure that compliance audits are done more frequently.

MS. HARBO asked whether the ARMB would receive a report when the information is available on the Medicare Part D subsidy. MS. PORTERFIELD indicated that would be in the financial statements for the 2006-2007 plan.

3. Committee Reports (continued)

a. Audit Committee

MR. PIHL stated the Committee consists of Trustee Semmens, Trustee Williams and himself. The Committee has monitored the audit process from planning through clean opinion. The Committee has held meetings with KPMG and staff. At the October 2, 2006 meeting the Committee reviewed drafts of the financial statements. These statements were finalized and presented and are incorporated in the full statement before the Board today. He felt the audit review had been complete.

MR. PIHL stated that the Committee recommends acceptance and full approval of the FY06 audit. MR. SEMMENS seconded.

By roll call vote, the motion passed unanimously.

MR. PIHL remarked on the serious shortfall between annual contributions and outflow. In the case of TRS, in the two years covered by these audits the contribution has been less than half of the outflow and is \$406 million short. In the case of PERS the contributions are 65% of outflow. He stated the action by the ARMB to increase rates was necessary.

MR. PIHL noted that there is \$300 million in the Retiree Health Plan that only yields 5% because it is conservatively invested, versus the 11.7% return that the pension system achieved last year and the 9.01% return for the 11-year period. He stated that Mr. Bader would bring a plan to the ARMB at its next meeting to more aggressively manage the money in the Retiree Health Plan.

MR. PIHL stated that Treasury has been recruiting for middle office personnel and the Committee would like that to happen soon. In the Division of Retirement & Benefits, compliance staff has done very few audits and Ms. Morrison is working to correct that. The Audit Committee will meet with both compliance offices in the spring and will look for these improvements.

MR. SEMMENS remarked that it has been good to have Trustee Pihl as chair of this Audit Committee as he brings extensive experience to the committee's efforts.

BREAK 10:58 a.m. to 11:12 a.m.

16. Asset Allocation

DR. JERROLD MITCHELL, Investment Advisory Council member, thanked the Board and Mr. Bader for allowing him time on the agenda to address the ARMB. He indicated this is not an academic presentation or a substitute for the work done by Mr. O'Leary in his annual review of asset allocation. He stated he would not consider the liabilities of the fund, which is necessary when an actual asset allocation is set.

DR. MITCHELL asked the question, "Why do we do asset allocation?" If it were possible to know what asset class would do best in the coming year, all of the assets could be put into that

class and asset allocation would be unnecessary. However, it is not possible to know what asset class would do best in the coming year. The long-term evidence suggests that over multiple periods of time stocks do better than bonds, but they do not always do better than bonds and there are 5-7 year periods when they do not do as well as bonds. The primary reason for asset allocation is that, if it is not possible to know what asset class will perform best, diversification is necessary. DR. MITCHELL shared the comment of a friend that “you concentrate your investments if you want to make money; you diversify your investments if you want to keep money.” One of the primary responsibilities of a trustee is to preserve and shepherd money.

DR. MITCHELL reviewed a table depicting the returns of a large number of asset classes over 37 years. He noted that there is no discernible pattern to the yearly hierarchy of investment classes. It is therefore advisable to diversify among the asset classes.

DR. MITCHELL noted that according to a seminal study done by Gary Brinson and colleagues, asset allocation explains more than 90% of portfolio performance. This is an incredibly powerful statement. It has been criticized and debated, but whatever the figure, it is large. If this study is believed, a trustee faces the question of whether to spend more or less time on asset allocation or more or less time on manager review. DR. MITCHELL argued that, if he were a trustee, he would spend a great deal of time on asset allocation, delve deeply into the asset allocation process, question the assumptions put before him, ask to see more asset classes rather than fewer, and ask what other institutional investors might be finding in their asset allocation exercises. He would also spend time on the selection of managers. He noted that Callan and the selection committee would only bring qualified investment managers before the ARMB and while the ARMB should do its best to identify the best manager, there is the question of whether this effort is 90% or 100% responsible for the return achieved.

DR. MITCHELL noted that each year the ARMB looks at the correlations of asset classes with each other. Asset classes vary enormously in the way they move with or against each other. He noted that timber, TIPS and cash have no correlation to US large cap equities where 33% of the portfolio of the ARMB’s assets is invested. The ARMB has a large bet on the large cap US market, but there are times when that segment of the market does not do well. One way to moderate that bet is to diversify the portfolio among non-correlated asset classes. The expectation of an investment in timber, TIPS or cash is not to out perform large cap equities, but to offer protection and moderate the volatility of the portfolio because they are not correlated. He noted there are times when non-correlation does not work.

DR. MITCHELL explained that non-correlation could work not only by using low returning classes, but also by using higher returning and higher risk asset classes, such as emerging markets equity, private equity, high yield bonds, and commodities. There are many types of risk, but he focused on standard deviation. Investing the entire portfolio in one of these four high-risk vehicles would be very risky, but investing one quarter in each would produce a less risky portfolio because of non-correlation and the inherent characteristics of each of these four asset classes (emerging markets equity, private equity, high yield bonds, and commodities).

DR. MITCHELL reviewed the ARMB asset allocation as of June 30, 2006, which has produced good returns. The ARMB has a good asset allocation with 11 asset classes represented. Equity-

like assets account for 60% or more of the portfolio; traditional assets account for 86%; and new asset classes account for 14%. The equities are comprised 36% of US equities and 16% of non-US equities. He stated he is in agreement with Mr. Bader's recommendation to review TIPS and timber investing for potential inclusion in the ARMB portfolio.

DR. MITCHELL next reviewed the asset allocation of the Massachusetts pension fund PRIM, which has 14 asset classes. Equity-like assets account for 63% of the portfolio, 26% of the equity is US and 25% is international. PRIM decided to not bet on one part of the world against another, so there is a neutral equity position in the portfolio. This portfolio also did well with a return of 15.5% for the period ending June 30, 2006.

DR. MITCHELL next reviewed the TBF portfolio, which has 13 asset classes, 53% that are equity like with a nearly 50/50 domestic/international mix, and 34% that are alternatives. This differs from both the ARMB and PRIM portfolios because more is invested in alternatives. One of the reasons this fund has such a large alternative commitment is that the board thinks because of their contacts and positions in the world of investing they can get access to the private equity funds that are the best funds for a small (\$800 million) portfolio like this. This portfolio's performance was 13.0% for the period ended June 30, 2006.

The Yale University portfolio, managed by David Swensen who has written *Pioneering Portfolio Management*, is diversified among broad asset classes. Traditional assets account for 40% of the portfolio and alternatives account for 60%. DR. MITCHELL stated he could not duplicate this portfolio with PRIM or TBF nor could the ARMB because Mr. Swensen and his team are willing to invest with untried managers, very obscure managers, and become 50% of that manager's book of business. They ride herd on those managers in a way that very few investors can. International and domestic investments are nearly equal and most of the international is in emerging markets. He noted that Mr. Swensen will get into the business of oil exploration or mining, for example; he thinks it is best to be part of the ownership structure rather than the investment structure of a company.

DR. MITCHELL stated there is not one correct asset allocation; each fund has to look at its liabilities and also decide what are its limitations, what it can do successfully, how different from its peers it wants to be, and what political risk exists. Diversification is good, non-correlation is good, and some geographic diversification is good. DR. MITCHELL stated that in his opinion the ARMB's key investment responsibility is asset allocation.

MR. SEMMENS noted that annually the ARMB does an asset allocation that is run through an Ibbotson model that calculates a projected return. He asked how predictive those projections to what actually happens are. DR. MITCHELL stated that the return comes with a standard deviation number; he thought this analysis is very predictive. Over long periods of time, these calculations are very accurate. MR. O'LEARY added that Callan routinely checks hypothetical scenarios to see if the results of this work are within the predicted range and they nearly always are. He offered to send this analysis to the ARMB. He stated the criticism of that is that the 5-year ranges are so broad that it may not be helpful. The trade off is the percentile return and the increase in risk that is necessary to achieve a higher percentile ranking. He noted that the portfolio of the four high-risk asset classes Dr. Mitchell discussed is less risky than three of the

four assets individually. In recent years the biggest variable is an instance that all financial assets return less than what is anticipated. Looking back at the last three or four years, the returns have been on the high side of Callan's projections rather than the low side. He noted that the more detailed the review, the more important is the correlation estimate. It is easy to determine past correlation, but correlations are susceptible to significant change. For example, recent data would indicate that international equities have a correlation of .95 with domestic equities, but over a 25-30 year period a more typical correlation is .5 to .6.

MR. PIHL asked what the returns are for the asset allocations of the other plans that Dr. Mitchell discussed. DR. MITCHELL replied that the one-year return for Yale University is 22.9%, the one-year return for TBF is 13.0%, and the one-year return for PRIM is 15.5%. He further noted that for PRIM the 3-year return is 16.1%.

DR. JENNINGS remarked that Dr. Mitchell had previously discussed illiquid assets and noted that Yale University is 67% illiquid. In addition, PRIM is a fair bit higher than ARMB at 30% illiquid versus the ARMB in the 20% range. PRIM is larger and perhaps less nimble, but they are moving on the path toward less liquid assets. He remarked that there has been discussion of the concept of strategic time allocation. He suggested that, based on the fact that strategic asset allocation is the most important investment decision for the ARMB, some thought should be given to how the ARMB allocates its time resources. To the extent there can be a deeper investigation of the asset allocation decision, which would be time well spent.

17. Fixed Income Presentation

For more information on this presentation, please refer to the publication entitled "Alaska Retirement Management Board, Portfolio Management Fixed Income Presentation," dated November 28-29, 2006 and kept on file at the ARMB offices.

BOB MITCHELL, Senior Investment Officer, noted that this is the first presentation to the ARMB on fixed income. For that reason, his presentation would focus on how the assets are managed in-house on behalf of the pension systems. Staff manages \$2.9 billion in fixed income against the Lehman Brothers (L/B) Aggregate Index, which has a market value of \$8.5 trillion. Staff must buy only US dollar denominated bonds, they must be investment grade, duration can be +/- 20% of the index, and there are corporate bond limitations. The in-house portfolio is an integrated component of the overall asset allocation for the ARMB. The in-house portfolio is often a source of liquidity for funding retirement benefits and funding new asset allocations and flows into and out of private equity and real estate. MR. MITCHELL noted that the market value of the portfolio by Friday would be \$2.8 billion because a pension payment of \$40 million was just made and other payments are pending.

MR. MITCHELL explained that Mr. Bader oversees the activities of the staff. The organization is flat; he is the senior portfolio manager, but he manages a team. While each member specializes in particular areas, the approach is a team approach. MR. MITCHELL explained that the staff believes it can outperform the index over time by selecting securities with an aggregate yield that is greater than the index and by selecting securities with greater prospective total returns than the index. There are four ways to out perform the index: good interest rate calls, good yield curve positioning calls, good sector allocation, and good security selection. The team believes that one must be thoughtful in how the portfolio out yields the index. There is a

tendency to under weight Treasuries and agencies with shorter maturities. This structure gives the portfolio the best chance to consistently out perform the index. MR. MITCHELL noted that when interest rates go up, bond prices go down and vice versa; one of the key engines in out performing the index is selecting intermediate term bonds that have risk premiums that decline with time. This means that a five-year bond with a greater yield relative to the Treasury index than a three-year bond can be sold in two years' time at a tighter spread to Treasuries at a lower risk premium. That compression of spreads results in a capital gain, in a sense. Market conditions change, but currently risk premiums of agencies are relatively flat. Both agencies and corporates are exposed to changes in risk premiums, but corporate bonds can out perform agencies pretty consistently over time. MR. MITCHELL indicated that staff has looked at time series data for all of the sectors in fixed income except Treasuries. After analysis, staff believes that the best place to out perform by out yielding is in shorter maturity bonds.

MR. CORBUS asked what is meant by "US credit" in the sector positioning chart on page 5 of Mr. Mitchell's presentation. MR. MITCHELL explained that credit would be corporate bonds and agencies, but specifically corporate bonds in this analysis. He further explained that he could have done a similar analysis for asset backed securities and other securities that roll down the curve toward maturity.

MR. MITCHELL stated that staff pays attention to the index, but does not strive to achieve index-like returns. He in particular spends time looking at the composition of the index and ways to position the portfolio to out perform the index. The index is comprised of Treasuries, agencies, MBS, CMBS, ABS and credit. The index composition changes over time; bonds are issued daily that qualify for the index and there are bonds that no longer qualify. Every month the index resets and the bonds issued in the prior month go into the index if they qualify and those that are under one year to maturity roll out. MR. O'LEARY noted there are most notably changes in the composition and characteristics of the mortgage-backed component of the index. MR. MITCHELL added that the underlying mortgage rates change over time as people prepay and take out new mortgages.

MR. MITCHELL explained that in staff's analysis, the components of the index are broken into duration boxes; the majority of bonds have short durations, whereas bonds with 9+ year durations are primarily credit and Treasury/agency. He reviewed a comparison of the ARMB portfolio versus the index in September 2006. He noted that the Treasury/agency holdings in the ARMB portfolio are fewer with shorter maturities than those in the index and the portfolio has more Treasury/agency holdings in the longer duration area. The portfolio has an overweight in 0-2 year and 9+ year durations.

MR. MITCHELL reviewed an example of security selection by noting that a bond that is in the portfolio and one that is not, both corporate bonds from the second largest electric utility in the country. The in-house portfolio gains the characteristic of effective convexity by giving only 2 bps of yield. Despite a 15 bp pick up in yield, the actual projected performance is larger. This is an example of how to position the portfolio to out perform.

MR. MITCHELL indicated that staff holds a formal monthly meeting to discuss market developments, corporate fundamentals, technicals in the markets, investment flows, and to

scrutinize the portfolio positioning. On a weekly basis there is a shorter meeting for updates and to review Wall Street research. On a daily basis, staff coordinates and communicates.

MR. MITCHELL noted that securitized sectors, while not devoid of risk, have assets behind them. Treasuries and agencies are very high quality assets. Corporate bonds, which represent 20% of the index, have credit risk. Staff carefully reviews the holdings in corporate bonds relative to the index, subscribes to third-party research, and employs models from Wall Street in order to control credit risk.

MR. MITCHELL noted that the portfolio is underweight in the shorter maturity Treasuries and agencies. The portfolio is yielding more than the index with a duration that is close to the index. Spread duration is close to the index and convexity is slightly less than the index. The goal for the portfolio is to out perform the index. To some degree this is a function of the markets. Given the approach to managing the portfolio, it is a function of risk premiums. If risk premiums increase, there could be short periods of lower performance. He expected that prospective returns would be lower than they have been. The portfolio has returned over the index for the 1- and 3-year periods by 50 bps and by 30 bps over 5 years. Corporate bond selection has helped with performance. The portfolio owned Ford and GM, but sold prior to their credit ratings spiraling down; that decision was led by Steve Sikes.

MR. MITCHELL stated that risk premiums are low, corporate bonds are tighter, mortgage spreads are tighter, the curve is flatter, and financial innovations are creating securities that appeal to a wider audience of investors. Private equity and LBOs are a threat to corporate bonds. There has been financial innovation in mortgages as well; he anticipated an increase in defaults on mortgages. He thought the weakening of the dollar would be gradual; it is a worldwide currency and he expected confidence in the dollar would continue.

MR. SEMMENS asked if there is a standard deviation measure of risk on the L/B Aggregate. MR. O'LEARY responded that it is time period dependent, but it has been in the 4% range in recent years. MR. SEMMENS asked if the ARMB's portfolio has similar risk. MR. O'LEARY replied that the in-house portfolio does not have observably more risk than the index. MR. MITCHELL stated the in-house portfolio's bond durations are close to the index so changes in interest rates should not have a big impact on performance. If the portfolio owned a corporate bond with greater than index representation that blows up, that could cause a loss. Because the portfolio is under weight to Treasuries and agencies, if risk premiums increase there is greater exposure to that. MR. O'LEARY noted that the performance book prepared by CALLAN has scatter diagrams, calendar year returns, and portfolio returns for the in-house portfolio. There is variation in return relative to the index, but returns are always close to the index.

MR. PIHL asked if Mr. Mitchell is optimistic about the return expected over the next year. MR. MITCHELL thought at the beginning of the fiscal year that the in-house portfolio would earn its coupon. In the first quarter of the fiscal year the Federal Reserve had just paused and the L/B Aggregate had lost the most it had in a long time over the previous 6 months. The most recent return erased losses and more. There has been unprecedented growth in housing and no one knows how that will turn out. To the extent there is less homebuilding, that detracts from GDP and increases the propensity for the Federal Reserve to cut rates; it could be bad if consumers

cannot sell their homes and start spending less. To the extent global GDP slows, Chinese and petrodollar investments in US financial assets may slow or reverse, which could be bad for bonds. The Federal Reserve has raised rates 400 bps and the 10-year Treasury has not changed primarily due to foreign investment. On the other side, he thought that over the next 6 to 9 months housing would depress activity, but in the spring he is hopeful that it will have worked through relatively quickly. On the other side, the US is less productive than it has been in the recent past and the direct impact of that is that the US cannot grow as fast without sparking inflationary concerns. He stated the economy is not fundamentally broken and he did not expect yields to change much. He expected the in-house portfolio would receive the coupon payment and there would not be much change in interest rates.

DR. JENNINGS noted that in 2004 ASPIB received an education on total return swaps. He asked if there are additional investment flexibilities that would help the in-house fixed income management team. MR. MITCHELL replied that there are considerations, but there would need to be an evaluation of potential new vehicles. The bond market is heading in a direction that is emphasizing fewer bonds. Bond managers with greater freedom have greater ability to add value. Currently staff can transact only with primary dealers, so expanding that to regional dealers would give additional liquidity sources for bonds. The APFC recently authorized the use of credit default swaps, which would also add flexibility. Interest rate swaps would also be helpful, also allowing the purchase non-dollar bonds or high yield, but the ARMB already has an allocation to those. He favored the use of credit default swaps and interest rate swaps. DR. JENNINGS noted when there was education and approval of total return swaps, there was an opportunity to increase cash returns and by the time the education and approval process had completed, a fair bit of that was gone. He stated it is good to add opportunities quickly, if those are presented.

MR. MITCHELL recommended that the ARMB consider giving the CIO discretion to authorize the use of credit default swaps and interest rate swaps. The investment guidelines would have to be changed in order to permit this discretion.

LUNCH BREAK 12:20 p.m. to 1:32 p.m.

CHAIR SCHUBERT joined the meeting at 1:30 p.m.

18. Investment Actions
Resolution 2006-20 Correction

GARY BADER stated this action relates to a resolution adopted by the Board earlier this year to add language that clarifies that the crediting rate will be credited annually. Trustee Semmens brought this administrative correction to the attention of staff.

MR. SEMMENS moved that the ARMB approve Resolution 2006-20 setting the annual interest rate for PERS and TRS mandatory member contribution accounts at 4.50%. MR. WILLIAMS seconded.

Ms. Morrison noted that this resolution is not in line with statute. The PERS statute indicates clearly that interest is to be credited twice a year on January 1st and June 30th.

MS. HARBO moved to amend the motion to state semi-annually. MR. WILLIAMS seconded.

Without objection, the amendment was approved unanimously.

Without objection, the main motion was approved unanimously.

Resolution 2006-35 High Yield Guidelines

GARY BADER explained this change is to the high yield index used for the ARMB's managers. The ARMB hired ING Ghent and MacKay Shields to manage high yield portfolios for the ARMB. During contract negotiations, the index was set at the Merrill Lynch US High Yield Master II Index. Subsequent to contract negotiations, General Motors, General Motors Acceptance Corporation, Ford Motor Company and Ford Motor Credit were downgraded from investment grade to high yield. These are such large issues that the top issuers now comprise 22.8% of the index up from 16% of the index in July 2004. Concentrating in so few issues was felt to not be best practice. Working with Mr. O'Leary, he recommended using the Merrill Lynch High Yield Master II Constrained Index, as provided in Resolution 2006-035.

MR. TRIVETTE moved to adopt Resolution 2006-35 and authorize the chief investment officer to negotiate with ING Ghent and MacKay Shields to amend each investment manager contract to reflect the new high yield measurement index . MS. HARBO seconded.

Without objection, the motion was approved unanimously.

MR. WILLIAMS noted that the language in 2006-20 might be confusing if amended as the action stated. He suggested it could read that the annual rate of interest is to be credited semi-annually. MR. BADER suggested that the ARMB return to this after Mr. Johnson has time to research the statute. MR. JOHNSON stated there is a provision for PERS that the account shall be credited with interest by applying the prescribed rate of interest as determined by the board to the balance of the account as of the last day of each calendar year and each fiscal year. However, he thought the language of the resolution to credit annually covers the situation. He stated that the statutory provision could be used, which says, "annually credited to each member's individual account." He suggested that the language of the motion be amended to add "in accordance with AS 14.25.145 and AS 39.35.100." MR. WILLIAMS understood the statute reference, but his concern is the effect of saying a rate of interest is being applied semi-annually rather than annually, given the issue of compounding. MR. BADER stated the rate is annual and if the Division of Retirement & Benefits credits it twice a year, Treasury can give them information for that purpose. MS. MORRISON believed the regulations for PERS indicate that compounding happens semi-annually. She thought that should be reviewed before the resolution is changed.

MR. SEMMENS moved to reconsider Resolution 2006-20. MR. WILLIAMS seconded.

Without objection, the motion was approved unanimously.

MR. SEMMENS moved to table Resolution 2006-20 to the next meeting. MS. HARBO seconded.

Without objection, the motion was approved unanimously.

MR. NORDSTRAND asked that he be permitted to give a presentation on the same-sex benefits issue. Following a discussion of when this presentation could be given, MR. WILLIAMS suggested that the Plan Administrator Update could be presented at this time. CHAIR SCHUBERT asked if there was objection to taking this presentation at this point in the agenda; there was none.

Same-Sex Benefits Issue

MR. NORDSTRAND reported that last year the State of Alaska was required to provide same-sex benefits because of a conclusion that the State was discriminating. This June a remedy was developed to provide same-sex benefits to all State employees, including retirees. Once a benefit is given, the constitution precludes diminishing that benefit. While he is concerned with the 5,700 members of the active plan, he is more concerned with the tens of thousands of retirees that would have this benefit in perpetuity if something untoward occurred. To that end, regulations were promulgated that were thought to codify a way to provide benefits in a financially responsible way. The Superior Court has concluded that the criteria used to identify same-sex partners that are eligible are unconstitutional. These are the same criteria the University of Alaska has been using for 10 years. This probably means the University of Alaska's criteria are not constitutional. Another issue arose in that the Lt. Governor has the role of endorsing regulations. The regulation becomes law 30 days after the Lt. Governor endorses it. There are two types of regulations in the same-sex benefits plan: retirement plans and active plans. Only the active plan is subject to the Administrative Procedures Act and only that plan is subject to being held up as a result of the Lt. Governor not taking action. On the other hand, Commissioner Nordstrand signed the retirement and benefit regulations for both active and retiree plans on October 13, 2006 and they should have become law for purposes of the retirement plan, 30 days later on November 12, 2006. The active plan does not become effective until 30 days after the Lt. Governor endorses it. The situation now is that the benefits plan for same-sex benefits have been filed, but the Superior Court says they are unconstitutional. The Court issued an order that Commissioner Nordstrand change the regulations to comport with the judge's view of what was constitutional. A stay was requested, which was granted. The Department has been forced to process and enroll retiree same-sex partners. There is no effective plan for active employees, however. When the Lt. Governor refused to sign regulations he raised issues, including that as a matter of law the Commissioner of Administration does not have the authority to re-write statutes. The Supreme Court has said that someone has to amend the statute governing PERS and TRS in order for same-sex benefits to be made available. The normal function of a regulation is not to amend statute. The Supreme Court's opinion that the constitution was being violated is the basis for the Department of Administration to amend regulations.

The second issue is whether authority was issued to the Department of Administration. The Department of Law has said that the Commissioner of Administration has not been granted

authority for the active healthcare plan. No regulations have been issued for the active healthcare plan.

Another difficulty is that the ACLU, which was party to litigating this issue, asked that the Court require the State to issue emergency regulations to comport with the Municipality of Anchorage's criteria to provide same-sex benefits. Their criteria were that the individuals had to live together, say they were going to continue to live together, and share household expenses. He stated that this type of standard seemed prone to incurring problems and the State found it unacceptable.

A special session of the legislature was called to deal with this issue. The legislature passed a resolution asking that Commissioner Nordstrand not implement same-sex partner benefits and that the Court stop interfering with the State's prerogative; it was followed by a statute preventing Commissioner Nordstrand from implementing same-sex partner benefits. While on its face, legislation preventing something that is constitutional is questionable, it was not retroactive and some things have already been done. There was also legislation to provide for an advisory vote of the people in April, but it has no legal effect.

MR. SEMMENS asked what the estimate of the cost to the retirement system is. MR. NORDSTRAND replied that the best estimate from when these kinds of plans have been implemented in systems similar to the State is a .5% increase on the health plan. In the case of the retirement plan, health insurance costs \$250-\$270 million a year so adding .5% to that is a fair estimate. He noted that both the Municipality of Anchorage and other states that have previously provided benefits provided them not only to homosexual couples, but also to heterosexual couples. He believed that at some point it would not be possible to say that only same-sex partners can receive this benefit while different sex partners cannot. He suggested that an increase in cost of 2.5-3% is the more appropriate number if both are included. The cost will depend on what eligibility criteria are used for the benefit.

MR. WILLIAMS asked if the Supreme Court order covered both active and retiree plans or did the original lawsuit only cover active employees. MR. NORDSTRAND replied that the order covers both the active and retiree plans for the State of Alaska. In effect, it covers every political subdivision in the State of Alaska. He noted that there is some problem dealing with the Union Health Trust. Most of the active State employees are insured by Union Health Trust, not the State's plan. He estimated there are 5,000 to 6,000 active plan members that are insured through the State and 12,000 that are part of the Union Health Trust. They have to provide this benefit, too. On the side of caution, the State sent out forms and people are enrolling based on the criteria Commissioner Nordstrand set, but the Court has said those criteria are constitutionally infirmed.

Townsend Real Estate Contract Renewal

GARY BADER explained that a re-negotiated contract was entered into with Townsend lowering their retainer contract fees from \$224,600 to \$100,000 a year. These proposed amendments to the contract were approved by the ARMB at its August 2006 meeting and have been included in the contract effective October 1, 2006. Because of these cost-savings changes and the value of consultant continuity to a relatively new board, staff sees little benefit to putting the consultant contract out to bid again and recommended extending the contract by one year.

MS. HARBO moved that the ARMB exercise its option to extend the Townsend contract for one year, to expire on March 31, 2008. MR. PIHL seconded.

There being no objection, the motion passed unanimously.

Pathway Contract Renewal

GARY BADER explained that Pathway is one of the ARMB's private equity investment managers. They have made over \$600 million in investment in private equity on behalf of the ARMB. This manager's contract expires in March of 2007. Pathway has proposed changes to the fee structure to increase its fees. Staff recommends the ARMB grant staff the authority to renew the contract subject to satisfactory contract negotiations; and the authority to engage Callan Associates to conduct a manager search or assist in structuring a replacement for Pathway should contract negotiations not conclude successfully.

MR. TRIVETTE moved that the ARMB grant staff the authority to renew the contract with Pathway Capital Management subject to satisfactory contract negotiations and the authority to engage Callan Associates to conduct a manager search or assist in structuring a replacement for Pathway should contract negotiations not conclude successfully. MR. PIHL seconded.

By roll call vote, the motion passed unanimously.

Absolute Return Allocation

GARY BADER indicated there were certain increases in asset allocation to Crestline and to Mariner. Those increased allocations were in conformance with the ARMB policy that gives the CIO some authority to change the allocation to one manager by +/- 25%. The target asset allocation of the ARMB is 4%, but the actual allocation is far below that. Staff proposed increasing the allocation to Crestline Investors by \$55 million and to Mariner Investment Group by \$85 million. Cadogan's allocation was not increased because of the change in ownership and because they were put on the Watch List.

MS. HARBO moved that the ARMB increase an additional allocation of \$55 million to Crestline Investors and \$85 million to Mariner Investment Group. MR. TRIVETTE seconded.

By roll call vote, the motion passed unanimously with Mr. Nordstrand absent.

Style Bias Adjustment

GARY BADER explained this request is to allow the ability to make style bias adjustments in the domestic equity portfolios. After the Manager Review meeting with the IAC and Mr.

O'Leary, a recommendation was forwarded that the ARMB approve authority to establish five new funds: a Russell 1000 Growth and a Russell 1000 Value to replace the S&P 500; a Russell 2000 Growth and Russell 2000 Value fund to replace what is in the Russell 2000 fund; and a Russell 200 Fund in order to keep the commitment to large cap.

MR. TRIVETTE moved that the ARMB change the index for the passive large cap equity portfolio from the S&P 500 Index to the Russell 1000 Index and allow State Street Global Advisors to additionally invest in a Russell 200 Index and in the Growth and Value variants of the Russell 1000 and Russell 2000 indexes. Further, that the ARMB grant discretion to staff to use these style variants to assist in controlling the style of the domestic equity portfolio. MS. HARBO seconded.

By roll call vote, the motion passed unanimously with Mr. Nordstrand absent.

Farmland Underwriting Criteria and Benchmark

GARY BADER explained that this request is a change in the UBS AgriVest Going-in Yield. There are two managers that make farmland investments on behalf of the ARMB. Both have a target benchmark of achieving a 5% yield return over time. In its allocation Hancock is given an opportunity to invest in investments with a 4% yield, so long as the overall portfolio yield is 5%. This is not the case with UBS. UBS has indicated they believe they can reach the 5% yield on an overall portfolio basis, but they would like to have the opportunity to invest in some properties that have a 4% going-in yield. Staff feels this is a good approach to build this asset class.

MR. SEMMENS moved that the ARMB direct staff to amend the going-in yield requirement for UBS to permit individual property acquisitions at or above a projected going-in yield of 4%. Also, that staff revise the benchmark used to evaluate the ARMB's farmland advisors to reflect just leased assets in the NCREIF Farmland Index. MR. TRIVETTE seconded.

MR. WILLIAMS asked if the effect of this action would be to put both managers on the same index rating. MR. BADER replied in the affirmative and added that staff would revise the benchmark in the contract.

By roll call vote, the motion passed unanimously with Trustees Nordstrand and Corbus absent.

19. Impacts of Experience Analysis Changes

GARY BADER explained that, at the request of Trustee Harbo, Buck Consultants was asked to produce a breakdown of the items that led to changes in the contribution rate or funded levels for PERS and TRS. That information was provided to the Division of Retirement & Benefits and they provided it to Treasury Division staff. He remarked that at the most recent meeting with the actuaries they indicated that the fund shortfall would be \$8.5 billion based on the 2005 valuation. Assuming the fund earns 8.25% on the \$8.5 billion that is not in the portfolio, another \$700 million in earnings a year would be needed in order to break even. About \$1.2 billion a year is needed on the \$14 billion that is invested in order to break even actuarially. Together, \$1.9 billion in earnings is needed in order to go forward if there is no change in the contribution rate, which the ARMB has approved. He noted that the ARMB was in the top 10% of public funds in

terms of performance last year, earning 11.7%; by his rough calculations, the fund would have to earn 13.5% in order to break even going forward without an increase in contribution rates as approved by the ARMB.

MR. PIHL asked how the 59.56% figure for TRS and 46.64% for PERS square with the figures Buck provided in September 2006. MR. SEMMENS believed the numbers used previously were pre-experience analysis impact numbers. The 39.76% figure on PERS was before experience analysis changes. This analysis tells him that if the rate had been set after the experience analysis and using the level dollar approach, the rate should have been 46.64% for PERS and 59.56% for TRS. He was pleased to have this analysis so he can share it with others.

MS. MORRISON added that the contribution rate of 42.26% for TRS and 32.51% for PERS are based on the June 30, 2005 valuation.

MS. HARBO explained that she asked for this information because she remembered the 2001 Mercer evaluation and finds it helpful to see how each change affects the funding ratio and the contribution rates. She was primarily concerned with mortality because the system is still using the 1994 table. When the change was made in 2000 from the 1984 mortality table to the 1994 table, it had a 7.62% impact on the contribution rate. She stated that eventually the tables would have to be changed again.

MS. MORRISON stated in response to Trustee Pihl that if the level dollar amortization effect had been put in first, it would have tied to the number the ARMB approved for rates, but it was not considered until the end, so the other changes affected it.

20. Plan Administrator Update

MELANIE MILLHORN, Director, Division of Retirement & Benefits, Department of Administration, referred to statistics on the number of members by tier who have come back to the retirement system in PERS and TRS, those that have terminated from the system, the number of new members who have enrolled under the Defined Contribution Plan for PERS and TRS, and the number of members who have opted for the conversion. The State of Alaska is the only employer that has adopted the provision for conversion for members who are not vested in PERS or TRS. There have been 15 conversions to date. At the ARMB's October 2006 meeting, Ms. Carpenter and Ms. Morrison presented information on the retiree reserve. Currently the Division of Retirement & Benefits is working hard to meet the timeline to produce findings and conclusions. Approximately 9 months is needed to produce recommendations and reconcile the retiree reserve matter. After the ARMB was advised of that issue, the Division of Retirement & Benefits provided an electronic newsletter to PERS and TRS employers advising them as well.

MS. HARBO asked if there would be a report on the positive open enrollment. MS. MILLHORN indicated she would provide this information. She felt it would be helpful to separately list the individuals who refunded out of the system that had indebtedness in the system and are now coming back into the system. Indebtedness provisions will be repealed as of July 1, 2010 per SB141. A total of 78,000 letters were sent to members who had refunded out of the system, but are eligible to re-establish their tier under PERS and TRS by that date. The trend has been 800 to 900 members a year doing this. There are no liabilities in the valuation report for

this group that can come back. When they re-establish their indebtedness provision those liabilities are added. The actuary has indicated this is a unique situation for a pension system.

MR. SEMMENS stated he has been asked whether, if a person re-establishes their tier, they have to pay off their indebtedness by 2010 or just become an employee by that date. MS. MILLHORN replied that they simply need to become an employee by that date. They can go back to another employer and continue to make payments on the indebtedness and receive benefits when they are eligible.

MS. HARBO asked how long a re-established employee has to repay their indebtedness. MS. MILLHORN explained that they receive a statement outlining the indebtedness amount. If they are an employee, the payment can be made through payroll deductions; if they are working for another employer, they can pay as they choose. The indebtedness has to be paid off in order to receive the benefit.

MS. MILLHORN stated that in order to comply with the court order regarding same-sex partner benefits, 14,000 special enrollment packets were sent out. The pre-deadline statement to the Court indicated that the enrollment period would run from November 20, 2006 to December 8, 2006, after which the enrollment process would begin. To date, the Division has received four applications.

MS. MILLHORN stated that the retiree dependent verification process is now complete and it has reduced the dependent membership on the retiree and active side by approximately 10%. The annual net savings to the system is \$3.7 million for the active plan and \$10.7 million for the retiree plan. This annual savings of \$14.4 million exceeds the Division's operating budget. MS. HARBO asked the number of people who were taken off the dependent list. MS. MILLHORN replied there were approximately 2,900 dependents on retiree plan and 350 on the active plan; she stated she would obtain the exact numbers. MS. HARBO asked how often this would be done. MS. MILLHORN replied that the Division currently ensures anyone who is an active employee or retiree provide requisite documentation to support dependent eligibility. The National Accounting organization indicates that this process should be repeated every four to five years and that the plan is to do it every five years.

IX. UNFINISHED BUSINESS

1. 2007 Calendar

JUDY HALL indicated there were no changes to the 2007 calendar.

2. Disclosure Report

JUDY HALL reported that a disclosure report is contained in trustees' packets.

3. Legal Report

CHAIR SCHUBERT said that because of Juneau weather, Mike Barnhill will not be attending this meeting and he will call individual trustees to discuss the issues that were to be the subject of his report.

ROB JOHNSON reported on the case regarding the appointment of Dr. Solie to PERS. That has gone through oral arguments at the Superior Court; further briefs have been filed on the ARMB's behalf. He has not provided briefs opposing on one side or the other, but did provide some information regarding the adoption of regulations. The issue effectively is that, while the Governor admits that the process was not followed in terms of statutes and regulations that require selection of a name from a list, the Governor asserts that as a matter of constitutional law and the separation of powers doctrine, the legislation specifically goes to the mechanisms for appointment as distinct from setting out the qualifications. The Governor says he should have unfettered rights with respect to the process of appointments except in those areas where the constitution specifically say the legislature has a role, which are those confirmation issues related to commissioners and head of certain regulatory and quasi-judicial agencies; the ARMB is not a quasi-judicial or regulatory agency. The Governor's position is that the governor has the right to appoint whom he/she wants subject to general qualifications. That is not how it has been done historically. The judge agreed to endeavor to issue a decision before December 4, 2006, but has not guaranteed that can be done.

MR. JOHNSON indicated he has also worked with staff on a variety of issues.

X. NEW BUSINESS – None

XI. OTHER MATTERS TO PROPERLY COME BEFORE THE BOARD

MR. TRIVETTE moved to approve the Appreciation Resolution prepared by Mr. Johnson to commend staff for their excellent investment performance results. MR. SEMMENS seconded.

MS. HARBO moved for unanimous consent.

There being no objection, the motion was unanimously approved.

MR. PIHL asked if the matter brought up by the University would be referred to the Legislative Committee. CHAIR SCHUBERT confirmed this would be done.

MR. TRIVETTE asked if the ARMB's February 2007 meeting would be held in Juneau. MS. HALL responded that she had not yet confirmed this with the Chair and she would be finalizing details.

XII. PUBLIC/MEMBER COMMENTS

MR. BADER stated that 27 years ago he came to Juneau looking for a teaching job and took a job with the Department of Revenue as a Revenue Auditor I. He had a very good career with the State, at one time as director of the Division of Retirement & Benefits. During that time, he thought he could do the investment officer job, but did not have that opportunity. Eventually he went to work for the school district and thought he would end his career there. An opportunity arose for the CIO position and Mr. Corbus went to the ASPIB to confirm their willingness to have him as a CIO. He wanted to publicly thank Mr. Corbus for appointing him as CIO and for the support of the ASPIB. During the past four years working with Commissioner Corbus and

Mr. Boutin, there has been great support of the staff; salaries have been raised, technology requests have been supported, working environments have been supported, and there has been a great deal of autonomy. He thanked Commissioner Corbus and Mr. Boutin for their service to the ARMB and their support of him.

XIII. INVESTMENT ADVISORY COUNCIL COMMENTS

MR. WILSON stated he had the pleasure of working with Dr. Mitchell for years and he found his presentation on asset allocation at this meeting beneficial. He remarked on the numerous approaches to asset allocation to achieve good results. He suggested that as the ARMB looks forward, there should be thought of where the world will be 10 years from now. He noted that Alaska has been leading edge in the conversation from a Defined Benefit plan to a Defined Contribution plan and must be leading edge for the asset allocation in that plan. He also remarked that Dr. Jennings pointed out the importance of the glide path issue for target maturity funds. This is also a challenge for the ARMB to address in the coming year. He felt that the resolution on active management of domestic stocks will be helpful going forward.

XIV. TRUSTEE COMMENTS

MR. SEMMMENS commended the IAC members, particularly those who made presentations at this meeting. He felt he had benefited from those presentations and they helped him to understand the value of the IAC. He encouraged IAC members to continue to make these kinds of presentations to the ARMB. He also commended Mr. Bader on the continuance of the roundtable discussions, which he felt add to the ARMB meetings.

MS. HARBO agreed with Trustee Semmens' remarks and noted that the ARMB Trustees learn something new at each meeting. She also appreciated the presentations by the staff. She felt it is important that the ARMB hear about new ideas. She remarked that Alaska is on the leading edge in terms of asset allocation.

MR. TRIVETTE agreed with Mr. Bader's comments regarding Commissioner Corbus and Mr. Boutin. He stated he attended ASPIB meetings before being appointed to the ARMB and his observation is that the Department of Revenue staff from Commissioner Corbus on down has been supportive. He also appreciated Commissioner Corbus's service to the State of Alaska for many years, as well as that of Mr. Boutin.

MR. CORBUS recalled that Mr. Bader, Chair Schubert and he were members of the original ASPIB board when it was founded. Other participants at that time who are here today include Jerry Mitchell and Michael O'Leary, and Rob Johnson joined shortly after inception of the ASPIB. He felt that the investments are in good hands and he stated he would be watching with interest.

CHAIR SCHUBERT commented that Mr. Bader, Commissioner Corbus, and she were on the original ASPIB and she recalled 13 years ago trying to get into Juneau and being weathered out. Commissioner Corbus was single at that time and living in a shack with no running water. Much has changed. Commissioner Corbus' stewardship on the original ASPIB set the standard for

what has evolved into a very workable and efficient board. Commissioner Corbus has provided excellent leadership as a trustee and as a commissioner. Mr. Boutin has also provided excellent service and guidance. It has also been a pleasure working with the Department of Administration; the original ASPIB did not do that and it has been beneficial to see the liabilities side of the retirement systems.

XV. FUTURE AGENDA ITEMS

CHAIR SCHUBERT asked that a discussion of investment in infrastructure be scheduled for a future ARMB meeting.

XVI. ADJOURNMENT

MS. HARBO moved to adjourn the meeting of the ARM Board. MR. PIHL seconded.

There being no objection, the motion PASSED unanimously.

THERE BEING NO FURTHER BUSINESS TO COME BEFORE THE BOARD, THE ARMB MEETING ADJOURNED AT 2:58 p.m. ON November 29, 2006.

Chairman of the Board of Trustees
Alaska Retirement Management Board

ATTEST:

Corporate Secretary

Note: The summary minutes are extracted from tape recordings of the meeting and are prepared by outside contractors. For in-depth discussion and presentations, please refer to tapes of the meeting on file at the ARM Board offices.

WORDSMITH
Kimberly D. Stalder
Anchorage, Alaska

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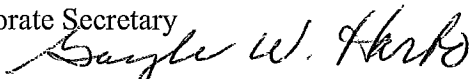
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