ALASKA RETIREMENT MANAGEMENT BOARD MEETING

Location of Meeting
Skagway/Valdez Room
Anchorage Marriott Hotel
820 West 7th Avenue
Anchorage, Alaska

MINUTES OF
October 2-4, 2006

Monday, October 2, 2006

I. CALL TO ORDER

CHAIR SCHUBERT called the meeting of the Alaska Retirement Management Board to order at 10:07 a.m. COMMISSIONER CORBUS was not present at the time of roll call. CHAIR SCHUBERT noted that Commissioner Corbus and several staff members were en route from Juneau.

II. ROLL CALL

ARM Board Members Present
Martin Pihl
Sam Trivette
Gayle Harbo
Gail Schubert
Larry Semmens
Scott Nordstrand
Mike Williams

ARM Board Members Absent
Bill Corbus

Consultants Present
Rob Johnson, Legal Counsel

Department of Revenue Staff
Tom Boutin, Deputy Commissioner, Department of Revenue
Gary Bader, Chief Investment Officer
Susan Taylor, Comptroller, Treasury Division, Department of Revenue
Steve Sikes, State Investment Officer, Department of Revenue
Clay Cummins, State Investment Officer, Department of Revenue
Zach Hanna, State Investment Officer, Department of Revenue
Judy Hall, ARMB Liaison Officer, Department of Revenue

Department of Administration Staff
Melanie Millhorn, Deputy Commissioner, Department of Administration
Traci Carpenter, Director, Division of Retirement and Benefits, Department of Administration
Charlene Morrison, Chief Financial Officer, Division of Retirement & Benefits, Department of Administration

Others Present

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. WILLIAMS seconded.

CHAIR SCHUBERT stated she had been asked to move agenda item 19. Investment Actions to the end of the day on October 3 after agenda item 13. Experience Analysis Report, and to move agenda item 27. Board Discussion on Real Estate FY07 Annual Plan and Real Estate Policies and Procedures to follow agenda item 18. Roundtable: Real Estate Market Conditions and Investment Opportunities. She also suggested that agenda item 4. Retiree Reserve Fund be heard once Commissioner Corbus is available. MR. SEMMENS asked when item 4 might be heard. CHAIR SCHUBERT replied that, based on the projected arrival of the airplane from Juneau, it would likely be scheduled for noon. COMMISSIONER NORDSTRAND understood there would be a work session today to discuss item 4, rather than this to be conducted as a formal agenda item. CHAIR SCHUBERT commented that this was also her expectation. She indicated that the session would be as informal as possible. COMMISSIONER NORDSTRAND noted that he was not aware that other agenda items would be scheduled on this agenda. MS. HARBO noted that the other items could be dealt with while awaiting the arrival of Commissioner Corbus.

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

V. PUBLIC/MEMBER PARTICIPATION, COMMUNICATIONS AND APPEARANCES – None

VI. APPROVAL OF MINUTES

MS. HARBO moved for approval of the minutes of September 11, 2006. MR. TRIVETTE seconded.

MR. TRIVETTE noted that the terminology on page 13 should be “peace officer” not “police officer” and his motion should refer to “peace officer,” not “police officer.”

There being no objection, the minutes were approved as amended.

VII. REPORTS

1. Chair Report

CHAIR SCHUBERT stated she attended a conference last week with Mr. Bader that she felt was beneficial.

COMMISSIONER NORDSTRAND noted that page 5 of the minutes attributes a comment to Ms. Morrison that was made by Ms. Millhorn. CHAIR SCHUBERT indicated that this correction would be made.

2. Committee Reports

a. Budget Committee

CHAIR SCHUBERT reported that the Committee met September 18, 2006, reviewed a draft of the budget, and made some changes. Another meeting is scheduled for today. Included in the changes was a request to add money to the actuary account and a request that staff examine the salaries paid to the investment team to ensure those salaries are competitive.

MR. BADER remarked that at its last meeting the Board adopted a resolution adopting higher contribution rates for next year and was supportive of Governor Murkowski’s suggestion to add money to the retirement funds, for a total of $1 billion. He has asked Ms. Taylor to bring an increment to the Budget Committee reflecting management fees based on this additional $1 billion.

b. Audit Committee

MR. PIHL stated that at its meeting this afternoon the Committee would receive the draft of the financial statements and management letter before they are finalized. The Committee will also receive reports on the status of middle office compliance officer. The Committee will also review its annual calendar. A report can be given either October 3 or 4, 2006.

3. CIO Report

GARY BADER stated that the Board has granted the CIO certain authority to transfer funds between investment accounts. There are limitations to that authority in the Board policy. Several transfers were made in order to come closer to the asset allocation approved by the Board for this fiscal year. The first two transfers were $20 million to ING high yield and MacKay Shields high yield to come closer to target. In addition, $1.6 million was added to Capital Guardian emerging markets to come closer to target and $25 million was added to UBS Agrivest to come closer to the “other” target allocation. He noted that the “other” allocation is far from the target.

MR. BADER explained that RCM Capital Management had been placed on the Watch List for poor performance. Staff is now recommending removing them from the Watch list. He recommended placing Lazard Freres on the Watch List as they meet the performance criteria for doing so. While this manager has improved this year, he felt this action was appropriate.

MR. TRIVETTE moved to remove RCM Capital Management from the Watch List. MR. PIHL seconded.

By roll call vote, the motion was unanimously approved.

MR. SEMMENS moved to place Lazard Freres Global fund on the Watch List. MR. WILLIAMS seconded.

MR. TRIVETTE asked how long this manger has been under performing. MR. BADER explained that a manager can be placed on the Watch List for subjective reasons, such as a change in management; this is not the case with this manager. Another criterion is that the manager has three years of returns below the benchmark. The third criterion is that they are worse than the 65th percentile of their peers. They failed on these last two criteria.

By roll call vote, the motion was unanimously approved.

MR. BADER stated the Board approved a cash equitization program at its March 2006 meeting. There has been concern in the past that when managers are holding cash, they are defeating the asset allocation and it is invested at short-term rates. The Board authorized equitizing the cash by buying futures in the S&P 500, EAFE Index, and Russell 2000. For the three months ended September 30, 2006 the cash overlay program has returned $3.5 million, $2.1 million in excess of the funds that would have been earned if the cash had been in overnight instruments. There is a desire to not leverage, so the amount of futures being purchased has been scaled back.

5. Update: 2006 Valuation Report

CHARLENE MORRISON, Chief Financial Officer, Division of Retirement & Benefits (DR&B), explained that the DR&B wanted to share with the Board the fact that the Governmental Accounting Standards Board (GASB) issued a technical bulletin at the end of June that will have an impact on what employers need to report in their financial statements. The retiree health fund administered by the DR&B does qualify for the retiree drug subsidy program, so this technical bulletin will be applied in the 2006 valuations and going forward. The actuaries have indicated that the effect of removing the retiree drug subsidy from the valuations will result in accounting based actuarial contribution rates being about 2.3% higher for both PERS and TRS going forward. The recommendations from the actuary and supported by the DR&B is to continue to use the retiree drug subsidy for valuation and funding purposes and then calculate the accounting disclosures not taking into account the retiree drug subsidy program.

MR. WILLIAMS stated that the Financial Accounting Standards Board (FASB) rules allow the employers to use the retiree drug subsidy in their valuations. He asked whether there are any movements to reconcile the two seemingly conflicting positions from otherwise equivalent accounting regulators. MS. MORRISON was not aware of any such efforts. She noted that this was a major concern expressed during the comment period on this regulation. She was aware of a position paper issued by GASB in July indicating that they will look at FASB's practice regarding recording full liabilities.

MR. SEMMENS asked whether, if the employer contribution rate is rounded at 40%, the rate would be 42.3% for PERS under this rule. MS. MORRISON replied that it would be 42.3% in total for accounting purposes, but not for funding purposes. She explained that the subsidy is 28% of qualifying prescription drug costs. MR. SEMMENS questioned why, if this is being received as revenue from the government, it cannot be counted as revenue. MS. MORRISON indicated that the technical bulletin discusses this question. COMMISSIONER NORDSTRAND agreed with Trustee Semmens' remarks. He explained that he thought it might have something to do with the nature of federal subsidies being uncertain into the future.

MS. MORRISON next reported on new employees coming into the retirement system after July 2006. The number of new Defined Benefit plan (DB) members returning to a participating employer is shown in the materials she had provided to the Board, as well as the new Defined Contribution (DC) members for PERS and TRS. She has processed seven conversions from the DB to the DC plan and there is one more in process. If the assumption is made that this amount of membership will continue monthly going forward, there will be 5,200 members, which is more than the 4,400 anticipated one year ago. Also, teachers are just now starting to come onto the payroll, so the effect of TRS is not yet clear.

MR. SEMMENS asked how many of the six members who have converted are still employed by the State. MS. MORRISON believed four members were still employed by the State.

MS. MORRISON stated she has included a listing of FY07 estimated PERS and TRS contributions rates adopted by the Board and the actuarially required rates to calculate the funding shortfall related to FY07. The funding shortfall as a result of the rates for FY07 is about $209 million for all of the PRS and TRS participants. MR. PIHL asked if the $209 million is calculated on the same basis as the $505 million that is needed for FY08. MS. MORRISON replied in the affirmative. MR. PIHL <u>moved that the ARMB renew its request to the legislature to approve a supplemental appropriation to fund the $209 million shortfall for FY07</u>. MS. HARBO <u>seconded</u>.

MR. SEMMENS asked whether the Legislative Committee should review the ARMB's report to the Legislature last year in order to determine if there are other recommendations the ARMB wishes to forward to the Legislature. MR. PIHL thought the $209 million could be a part of the Governor's $500 million supplemental request. He felt that the application of those funds to members' accounts should be done equitably, not on the basis of the schedules Ms. Morrison had provided. These schedules would reward municipalities that have not funded and have not applied the 5%.

COMMISSIONER NORDSTRAND suspected that adding a $209 million supplemental would have a dramatically negative effect on the FY07 budget. He noted that supplemental budget requests tend to get passed at the same time as the capital and the operating budget, so it is unlikely that this money would be deposited into the system any earlier than the remainder of the budget in any case. He felt that dealing with this at a later time would not be detrimental and not have the effect of negatively affecting the FY07 budget.

MR. SEMMENS remarked that when the retiree reserve discussion occurs, there would likely be a question about the appropriateness of the rate that any municipality is paying. He was hesitant to lock in how funds will be distributed. He generally agreed with Trustee Pihl to encourage the Legislature to fairly distribute the State's resources. MS. MORRISON noted that budgets are prepared using salaries as a base, not the unfunded liability.

MR. WILLIAMS asked if the motion could refer the matter to the Legislative Committee for review and return to the Board. MR. PIHL remarked that the ARMB issued a final report to the Legislature, the House passed it, and the Senate did not. As a board, he felt the ARMB should continue to focus on what must be done to address the situation of unfunded liability, and the earlier it is done, the better. He felt that there should be research on why various municipalities are either over or under funded. He noted that when Ketchikan entered the system they did past service credits.

MR. WILLIAMS <u>moved to refer the issue of the $209 million FY07 shortfall to Legislative Committee</u>. MS. HARBO <u>seconded</u>.

MR. TRIVETTE supported the motion for a supplemental appropriation. He only hesitated to refer it to the Legislative Committee because sometimes the earlier a supplemental is submitted, the easier it is to get through. MR. PIHL asked whether the outgoing governor leaves a list of supplemental requests for the incoming governor. COMMISSIONER NORDSTRAND believed this could be done. He noted that this current Administration has attempted to avoid supplemental budget requests, but this could be a special situation.

MS. HARBO was concerned that the Legislative Committee must meet soon in order to address this, if the matter is referred to them. She thought much of the problem with unfunded liabilities stems from school board, city council, and borough assembly people being able to join PERS and TRS and pay little into the system in terms of salary and then be eligible for a $10,000 annual healthcare benefit when they are vested. There are over 8000 PERS retirees that have a less than $10,000 per year benefit but have a $10,000 per year healthcare benefit.

COMMISSIONER NORDSTRAND felt the Board should also see this from the point of view of the political subdivisions' funding efforts. Political subdivisions funded a 5% increase last year and another 5% was covered by the Legislature. He asked if it is fair to say that $209 million, which is the difference between the actuarially calculated rate and what the ARMB approved, is entirely the State's problem or should some part be the responsibility of local governments. He was concerned that the ARMB has been turning only to the State to address the shortfall and he thought perhaps there should be some contribution from local governments who ultimately have the responsibility for their own liabilities.

By roll call vote, the motion to refer to the Legislative Committee was unanimously approved.

MS. MORRISON next reported on REAA contributions. A schedule of FY06 employee and employer contributions by members of the REAA and the Department of Education was included in the materials provided to the Board, as was FY07 and FY08 rate information.

MR. PIHL remarked that the State totally funds REAAs in an amount of $66 million in the PERS. Their share of TRS would be $356 million. He arrived at these figures by interpolating their portion of the $170 billion for TRS against the total TRS liability. He had totaled State employees, University of Alaska, REAAs and State funding for schools. If the assumption is made that the State funds 80% of school budgets, about 71% of the $6.9 billion liability lies with the State. If the assumption is made that the State funds 100% of schools, the figure rises to 78%. This is why he persists in his point of view.

CHAIR SCHUBERT announced that the airplane carrying Trustee Corbus and staff members just left Juneau. Trustee Corbus indicated he would not object to the Retiree Reserve discussion occurring without him.

4. Retiree Reserve Fund

TRACI CARPENTER, Director, Division of Retirement and Benefits (DR&B), Department of Administration (DOA), noted that, as opposed to a true agent multiple employer plan, the PERS is a hybrid in that the normal cost for PERS employees is calculated on a consolidated basis so that every PERS employer shares the same cost rate for their employees rather than a rate based on their actual employee experience. Past service costs are based on the actual experience of the employers and its employees. It appears that employers are sharing retiree liabilities of all employers. The Retiree Reserve is a pool that is 100% funding the liabilities for all retirees.

MS. CARPENTER reviewed AS 39.35.100(b), the authority for the Retiree Reserve, which requires that the amount actuarially determined as necessary to fully fund the benefits to be received by retirees shall be transferred from the employee contribution account and the employer contribution account into the retirement reserve.

COMMISSIONER NORDSTRAND stated that there are essentially two accounts. The active employees are in the first account and when they retire, the money necessary to fund all of their benefits must be transferred. The unfunded liability rests in the active account because it is not always fully funded. If every active employee retired today, the retirement reserve account would be $6.9 billion short. Placing 100% of a retiree’s money into a reserve account results in harming the employer if they are less than 100% funded.

MR. PIHL did not see that the retiree liabilities are shared; when a person retires, the money is just transferred from the employer’s active account to the retiree account. COMMISSIONER NORDSTRAND explained that some of the actuary’s assumptions were changed in recent years because of different assumptions regarding healthcare and because of market activity. This resulted in funding being changed to less than 100%. This happens in the Retiree Reserve Fund as well. In order for each retiree to be 100% funded in the Retiree Reserve Fund, each year every employer has to be sure the reserve is 100%; this means money must typically be put into that account each year.

MR. WILLIAMS asked whether, in establishing a retiree reserve, is the liability for an employee who had multiple employers over the years pro rated back to all of the employers or only to the most recent employer. MS. CARPENTER replied that liabilities are supposed to be assigned to an employer based on the amount of service credits per employer, but the DR&B does not currently track the benefit payments by employer. MS. MORRISON stated the liabilities are associated to the employer based on the service that the employee had with that employer. The problem is how assets by employer in the retiree reserve are created.

MR. PIHL understood current contributions go into the employer account and they rest there until they are transferred to the retiree reserve account, so each contribution is attributed to an employer. MS. MORRISON replied that this is the case until they reach the retiree account, which is a commingled account. COMMISSIONER NORDSTRAND explained that if the retiree reserve is 95% funded rather than 100%, 5% is needed. One option is to ask each employer to contribute the appropriate amount, but instead at the end of the year the total shortage is taken from the active fund; the question is how much should be taken from whom. To date, the total capital call is multiplied by the employer's percentage of the total liabilities in order to determine that employer's liability, rather than basing it on the employer's individual liability. MS. MORRISON further explained that the capital call is based on the employer's retiree reserve liability as a percentage of the total liability. COMMISSIONER NORDSTRAND explained that this practice has resulted in inequities among employers.

MS. HARBO asked who is liable for past service costs when a PERS employee moves from one employer to another. She asked if a new past service account is started with each employer. MS. MORRISON explained that each employer is responsible for the percentage of liability based on the service to that employer. MR. SEMMENS noted that this percentage is calculated without regard to salary the employee earned at each employer.

MR. BADER asked, if the system were over funded, would there be a rebate from the retiree reserve back to the active fund or would the retiree be shown with a surplus. MS. MORRISON explained that the surplus is shown only on the active side. If the retiree reserve is over funded, that over funding goes back to the active account. MR. TRIVETTE asked whether a refund of this type is pro rated back to specific employers who had achieved over funding. MS. MORRISON replied that the refund to a specific employer would be their percentage of the total retiree liability. MR. TRIVETTE asked what would happen if one employer was over funded and another was under funded. MS. MORRISON replied that would not change this process.

COMMISSIONER NORDSTRAND suggested that Ms. Carpenter proceed with her presentation of historical information.

MS. HARBO asked if the reference in AS 39.35.100(b)(3) to "all employer accounts" means 'all employer contribution accounts." MS. CARPENTER replied in the affirmative.

MS. CARPENTER returned to her presentation. She stated that slides 4-7 explain the legislative history of the retiree reserve fund. COMMISSIONER NORDSTRAND noted that this information also explains when the retiree reserve was established. MS. HARBO asked when the 5% cap was instituted. MS. CARPENTER replied that the 5% cap on PERS is a regulation established in 1991 by the PERS Board. MR. PIHL asked if the PERS Board had the power to establish regulation. MS. CARPENTER replied that the PERS Board had the regulatory authority. MR. PIHL understood that the Commissioner of Administration had the final say. MR. JOHNSON explained that the PERS Board could not initiate regulations; regulations were presented by the Administration and the Board could say yes or no. He has heard anecdotally that the focus of that regulation was to avoid decreases in excess of 5%. MR. PIHL stated that simply because a 5% cap was adopted does not mean it should be followed forever.

MS. CARPENTER stated that between 1960 and 1973 the PERS plan was a true agent multiple employer plan. All activity was recorded within one account for each employer. In 1974, legislation was passed using the language “uniform contribution rate” and the retirement reserve was added by amending AS 39.35.100. At that time, investment income was only allocated to active employer accounts; in 1984 language was added to include an apportionment of the investment income to the retirement reserve. The consolidated normal cost rate was intended to smooth out fluctuations in individual employer rates. The next major change to normal cost contribution was in 2005 when the “floor” was instituted, which has the result of not allowing an employer to recognize surplus assets in the development of their contribution rate.

MS. CARPENTER stated the individual employer contribution rate is calculated after all liabilities in the retiree reserve are determined and are 100% funded. Factors involved in the employer contribution rates include consolidated normal cost rate, normal cost floor, and past service cost.

MR. SEMMENS stated an employer has a certain amount of liability, as does the system, and he found it odd that money is moved from one account to another, which does not change the total amount of money or the total liability. MS. CARPENTER indicated that Ms. Morrison had prepared an example to explain this practice.

MR. PIHL asked if the retirement reserve account is funded actuarially; the money in the account is assumed to earn 8.25% until the benefit is paid. MS. CARPENTER replied that liabilities are calculated using all of the same actuarial assumptions. MR. PIHL asked how, if an 8.25% earning is assumed, could there be no credit to the retiree account from 1977 to 1984. MS. CARPENTER explained the statute was not written that way. MR. PIHL noted that this would cause the retiree account to worsen automatically. MS. MORRISON stated that theoretically, if the retiree reserve is fully funded, all employers are in the same position; all of the assets were being allocated to the active account. All assets were allocated to an employer and then the transfer was made. COMMISSIONER NORDSTRAND explained that the situation was not that employers did not earn interest; it was just on the active side as opposed to the retiree reserve.

MR. SEMMENS asked whether an employer such as Kenai, which entered the program in the 1960s and had a number of retirees and perhaps therefore a lower amount of assets on the active side had lower interest, would be hurt by this process. He explained he wished to understand whether or not employers are being properly charged or if there is really no basis for calculating a 46% rate for the City of Kenai other than historical practice. He thought that some employers pay more than they should, others pay less, and it is not possible to identify which is which. MS. CARPENTER stated this is the kind of problem she sees. The extent of the impact of this practice cannot be assessed based on one year of information, but the DR&B is bringing this forward because it appears that larger employers are supplementing the cost liabilities of smaller employers. The liabilities attributable to employers for their employees are accurate. The asset number in the retiree reserve or the active account may not be accurate. MS. HARBO asked if the DR&B is working on a solution to this problem. MS. CARPENTER stated she would discuss this at the end of her presentation.

MS. CARPENTER asked whether the ARMB would rather hear the way the calculation is done in the retiree reserve or hear Ms. Morrison's example. COMMISSIONER NORDSTRAND suggested that page 7 of the presentation, Retirement Reserve Mechanics, might be helpful in understanding how to move forward. MS. CARPENTER stated page 7 explains what the DR&B believes should happen according to statute. That is, when an employee retires, their contribution account is transferred and the difference between the total liabilities projected for that employee and what was transferred is then transferred out of the active assets of the employer. DR&B believes that retiree reserve accounts should be maintained by employers and the retiree payments should be recorded. At the end of the year, allocation of expenses and investment income would be done based on the ratio of employer assets to total plan assets.

COMMISSIONER NORDSTRAND stated when retiree liabilities are determined by employer that is compared to 100% funding and there is then essentially a "capital call" just for the assets for the deficit for that particular employer. This could reduce the employer's active account and could result in an increased contribution rate. MS. CARPENTER remarked that liabilities for all retirees in the system go up each year and that must also be funded. COMMISSIONER NORDSTRAND thought that the reason behind the current requirement is to ensure that there is adequate money to pay the benefits for all retirees.

MR. PIHL felt this effort should be coupled with analyzing the funding ratios of individual employers and identifying the cause for the increase in that funding ratio. If the individual employer does not cause the increase, that employer should be made whole for unintended effects in the retiree reserve account.

MR. TRIVETTE asked how this issue was discovered and why is it brought to everyone's attention now rather than five years ago. MS. CARPENTER explained she was reviewing the actuary's Supplemental Report and the changes in contribution rates. A particular employer's contribution rate went from 26% to 0%, which she thought was an error and prompted her investigation. That employer had retirees for the first time in 2005. MR. TRIVETTE asked if there has been examination of legislative history on this issue, particularly of discussions at committee hearings in 1977 when the change occurred. MS. CARPENTER replied that there has not been a thorough analysis of the legislative history, but that could be done. MR. TRIVETTE asked if anyone in the DR&B has historical knowledge to contribute to this issue. MS. CARPENTER was not aware of anyone.

MS. HARBO noted that these reserve accounts are audited, but she would assume an audit would not pick this up if the procedures were properly followed. MS. CARPENTER replied that this would not be picked up in a financial audit. It is possible it would be noted in the valuation audit, but she was not aware that it had been. In 1994 some discussion occurred within the DR&B and there was documentation of the process and potential solutions proposed at that time. This was at the time that computer systems were being changed. She was unaware whether steps were taken to address the problem, however, it appears it has not been addressed.

MR. TRIVETTE asked when this issue was discovered. MS. CARPENTER replied that her investigation began in late June. MR. TRIVETTE noted there are often informal Attorney General (AG) opinions on matters and asked whether there were any on this issue. MS. CARPENTER was not aware of any; Ms. Morrison conducted a search of her files where she found several memorandums from 1994. COMMISSIONER NORDSTRAND noted that there is a memorandum that discusses the problem, but it was low level. MS. CARPENTER explained that the memorandum was from an accountant to the accounting supervisor; it began with the discussion that contributions were being transferred in the middle of the fiscal year from the employer active account into the retiree account, which was complicated. The recommendation was to cease mid-year transfers and do transfers at the end of the valuation year; that was implemented. MS. MILLHORN noted that this memorandum was copied to the Chief Financial Officer.

MR. PIHL asked whether historically the actuary determined the PERS rate by employer. MS. CARPENTER replied in the affirmative. MR. PIHL noted that in 1992 the actuarial calculation of Ketchikan’s rate reversed the adjustment and the rate was under stated for one year; the next year the rate took a large leap.

MR. TRIVETTE asked if there is any type of communication between the agency and attorneys on this issue. MS. CARPENTER was not aware of any correspondence with the Department of Law. MR. TRIVETTE asked if the interpretation referred to in Ms. Carpenter’s presentation is by the DR&B. MS. CARPENTER replied in the affirmative. MR. TRIVETTE asked if this has been vetted with the actuaries, KPMG, or others. MS. CARPENTER replied that there have been discussions with Buck Consultants to get ideas how the issue can be resolved.

MR. SEMMENS noted that in the DR&B’s suggestion of how this process should work he did not see how a situation would be dealt with where an employer has negative assets on the active side. This will occur and may occur more often if this process continues. MS. MORRISON explained that statute outlines how employers are charged. There were discussions during the legislative session last year of how employers could contribute a different level when there are peculiar situations. Other employers would only cover the liabilities of employers who are no longer in the system. There are employers in the system that have negative assets on the active side and other employers are not covering for them. When an employer terminates, the employer contributes their calculated terminated liability. If that terminated liability is lower at some point in time than the plan liability, then other active participants are affected.

COMMISSIONER NORDSTRAND asked whether, if an active employer has a negative active balance and no additional funds, but has a retiree, there is a capital call. MS. MORRISON explained that their negative active assets become larger. COMMISSIONER NORDSTRAND understood that the collective active fund fronts the money. This creates a situation where negative balances have to pay interest.

MR. TRIVETTE asked if former directors of the Department of Administration have been contacted to give an historical perspective. MS. CARPENTER replied that this has not yet been done. MR. TRIVETTE suggested that this be done. MS. CARPENTER noted that she has discussed this issue with the Department of Law. She did not request a search for an AG's opinion, and she would be surprised to find one exists.

COMMISSIONER NORDSTRAND stated that the reality is that this practice is not right. The greatest challenge is to figure out how to change the practice. He thought perhaps there would have to be an analysis of each year back to 1974 to identify the contribution rates for all participants that year and what happened to the reserve account. At the end of this analysis, the actual contribution of each employer could be determined.

MR. BADER asked if, when the money is in the retiree reserve and there is a determination that a call on the reserve is needed, that call is done only for one employer, not all employers the employee might have had. COMMISSIONER NORDSTRAND explained that the call is based on the total liability in the system. For example, if the State represents 70% of the total liabilities in the reserve account and there is a $100 million shortage, the State would receive a bill for $70 million. MR. BADER explained that the DR&B only asks the State for the contribution, although an employee may have worked for several State employers. COMMISSIONER NORDSTRAND further explained that the amount requested from a particular employer represents their percentage of the total liability. An employer might be 100% funded, but because the employer has a percentage of total liabilities, they will get a capital call. MS. CARPENTER emphasized that employers allocate retired liabilities correctly. MR. BADER understood that if all of the retiree accounts are, in aggregate, under funded then that under funded amount is allocated back to each employer on a pro rata basis.

BREAK 11:45 a.m. to 11:52 a.m.

MS. CARPENTER explained that during the year benefits are paid out of the retirement reserve, as are employee refunds. At this point, the payments out are not attributed to any particular employer. Plan expenses and investment income are allocated at the end of the year based on the reserve account balance. The year-end balance is then reported to the actuary. After the year-end retiree account balance is reported to the actuary, the actuary determines the retired liability by employer and in total. Then the actuary allocates the assets back to the employers in the retiree reserve based on the employer's ratio of retired liabilities to total liabilities in the plan. This is a redistribution of assets in the retiree reserve. What remains are the liabilities, new assets, and the difference that is required to fund the retiree account 100%. MR. PIHL noted that the reallocation is affected by the fact that benefit payments are done as a total, not by employer. COMMISSIONER NORDSTRAND explained that this is treated like TRS.

MS. MORRISON next reviewed an example developed to depict the current practice of funding the retirement reserve fund, using a single employer, Bering Straits CRSA. She explained that the activity from financial records shown in this example is as of June 30, 2005, which is the date of the last valuation. A total of $67,162,412 was paid out of the retiree reserve. The retiree reserve at June 30, 2004 was $6.2 billion, $67 million was paid, and the actuary calculated a need for $936 million from active assets to fully fund the retiree liabilities of $7.1 billion. She reviewed how the amount to be transferred was allocated back to employers. Specifically for Employer 232, Bering Straights CRSA, the retiree liability was $453,429 during this first year that they had retirees. That $453,428 is .006% of the total $7.1 billion retiree reserve; because of that they were allocated $59,546 of the unfunded retiree reserve. The $393,883 they received is the reallocation of what was in the retiree reserve prior to the transfer; it is allocated in the same way as the transfer. They received .006% of the retiree asset balance prior to the transfer. MR. SEMMENS understood that this employer had $0 in the retiree reserve and suddenly acquired $393,883. He asked if it is fair to say that this employer should have contributed $453,428 because that was their liability. MS. MORRISON agreed with this statement and noted that, if they had retirees they would have had benefits paid out, so the amount would have been even higher.

CHAIR SCHUBERT asked what is meant by CRSA. MS. CARPENTER replied that it is Coastal Resource Service Area.

MS. MORRISON explained that the accrued liability for Bering Straits CRSA as of June 30, 2005 from the Supplemental Report for the PERS was $18,107 for active employees. Because they did not have to fully fund their retiree reserve, they have $210,535 in assets in the active employer account, so they are over funded. That over funding results in their contribution rate being 0%. In the Supplemental Report she reviewed their contribution was (30%). COMMISSIONER NORDSTRAND noted that they have to pay the floor of 14.48%.

MR. SEMMENS commended the DR&B for seeing these transactions and recognizing the problem. He was surprised this had not been seen before. He noted that the City of Kenai was paying 0% on the PERS rate when he was hired and now he understands why that was the case.

MS. HARBO thanked Ms. Carpenter for giving her presentation at this meeting rather than at the September meeting.

MR. PIHL asked how long Bering Straits CRSA has been in the system. MS. MORRISON guessed they had been in the system only a few years based on their employer number. MR. PIHL noted that if past service had been given to the employees when this employer entered, this situation could have been aggravated. MS. CARPENTER noted that it is the practice of many employers to give a past service rate to existing employees when the employer enters the system.

CHAIR SCHUBERT thought this is the only CRSA in the system. She asked how many employees work for this entity. MS. MORRISON replied that she could find this information. She noted that this same situation would exist for any employer with first year retirees. MS. CARPENTER noted that Aleutian West is also a CRSA.

MR. SEMMENS stated the City of Anderson has a surplus; they have one employee and an approximately $200,000 surplus. MS. MORRISON stated she is aware of this, but has not fully examined the problem. She did not believe Anderson has had a retiree.

MR. BADER asked if it is possible, since this employer gained $393,883 from other employers, that during times when there was over funding, the larger employers received far more gains. MS. MORRISON replied that the same allocation would take place if the retiree reserve were over funded. She had not determined who would gain or lose. If the percentage of employer liability to total liability increases, that employer is gaining assets from employers whose percentages decrease; the reverse would occur if the retiree reserve were over funded.

MR. TRIVETTE understood that if an employer contributes funds to the retiree reserve, they would not receive full credit for that. MS. MORRISON stated that if an employer contributes excess assets, it would affect their unfunded liability, but not their gross liability. MR. SEMMENS understood that if an employer contributes an amount to pay down its liability it might not end up with that allocation because of the way this is calculated. COMMISSIONER NORDSTRAND stated that an additional amount could be added to the active account, but the capital call is based on the liabilities in the retiree account. The funds to pay the “bill” to the employer will come out of the active account, regardless of contribution to the active account. An additional contribution would affect the employer’s contribution rate for the following year, however.

MR. PIHL asked if Mercer did the allocation calculations. MS. MORRISON replied in the affirmative. MR. PIHL assumed that they felt this was a fair practice. MS. MORRISON stated she had not discussed this with them. The DR&B gave the actuary the figure of $6.194 billion in the retiree reserve as of June 30, 2005. The actuary said that full funding of the retiree reserve was $7.130 billion, so $936 million was needed. A calculation is then done of the amount owed by each employer. All of this is based on the gross liability not the unfunded liability. COMMISSIONER NORDSTRAND asked if this is done because the State told them to or because they recommended it. MS. CARPENTER thought the answer to that question would be difficult to ascertain, but felt the most relevant question is how to fix the situation.

MS. CARPENTER stated there is benefit payment data back to February or March of 1996. DR&B is proposing to go back 10 years into the system and assume that the asset balances in the retiree reserve as of June 30, 1996 are correct. It is not possible to reconstruct the process for the past 30 years. 1996-1997 represents several years where the system as a whole was over 100% funded. Individual rates have differed during that time. DR&B proposes to start reconciling benefit payments, refunds, indebtedness, and contributions from employees by employer for the past 10 years. Investment income will be reallocated for each year. A determination can then be made how much an employer has paid for their retired liabilities at the end of that 10-year period. It will take 6 to 9 months to accomplish this analysis. When the analysis is finished, DR&B will ask the ARMB what should be done with that information. One possibility is to forward a proposal to consolidate active and retiree activity.

MR. BADER asked if there were large employer outliers in 1996. MS. CARPENTER replied that she has not yet begun her analysis, but that will be determined. MR. BADER thought perhaps there could be a legislatively palatable solution to this problem.

MR. PIHL agreed with the proposed process and that it would be helpful to identify outliers in 1996.

MR. SEMMENS understood it is not the plan to immediately change this to a cash in/cash out plan. COMMISSIONER NORDSTRAND asked when the next valuation is. MS. CARPENTER replied that Buck Consultants has begun the next valuation of June 30, 2006. That valuation will be before the Board as a draft in March 2007. COMMISSIONER NORDSTRAND asked when the next reconciliation for the retiree reserve is. MS. MORRISON replied that it is being done now so the actuaries working on the June 30, 2006 valuation can have that information. MS. CARPENTER stated there has been no discussion of accounting for benefit payments by employer as of July 1, 2006. MS. MORRISON noted that the computer system does not track benefit payments by employer, so that would need to be changed.

MR. TRIVETTE was not sure whether the DR&B should be working with KPMG or the actuaries, but he again recommended there be discussion with those involved in the past in order to gain historical perspective. He felt that broad-based ideas should be considered before a course of action is recommended; he suggested that perhaps there are other systems that have had similar problems. MS. CARPENTER stated that Buck Consultants has been asked whether there are other systems with similar problems and they indicate they have no other clients who have this type of accounting. They thought that five years was a reasonable review period, but because there are 10 years of data, DR&B chose to do that. She was happy to also talk with GRS.

MS. HARBO asked whether employers might be involved in developing a plan that is fairer to all employers. MS. CARPENTER anticipated that at the end of the process this would be brought to the ARMB. The only real question is if a legislative change should be sought.

COMMISSIONER NORDSTRAND commented that the Department of Administration is committed to changing this as soon as possible in order to make it as accurate as possible by employer. It will take six to nine months to assemble historical data and he felt it would not be prudent to make a change now without that basis. He hoped the Legislature and Governor would continue to believe that the difference between the employer contribution and the unfunded liability should be funded by the State. The issue of using a cost-sharing system, such as TRS, is another question. He was pleased with Ms. Carpenter and her staff for identifying this problem.

MR. PIHL felt the ARMB's strategy should be to allocate the $505 million State appropriation on an equitable basis and seek the additional $500 million recommended by the Governor and hold it in an interest-bearing account. When this effort is completed, the money should be used to true up the inequities and the rest of the $500 million could be distributed on an equitable basis.

CHAIR SCHUBERT echoed the remarks of Commissioner Nordstrand regarding his staff's work.

6. Director's Update

TRACI CARPENTER, Director, D&RB, stated that the new Deferred Compensation (DC) plan is underway. Legislation is being prepared to address the needs of the new plans. Among these are funding authority to charge employers for TRS occupational death and disability benefits, funding authority to charge employers for the monthly pension that may be elected by peace officers/firefighters, changing the formula for survivor benefit, and changing the employer contribution rate to allow application of the past service rate to employer's entire payroll base, regardless of tier. These items will be included in the draft legislation proposed to the Governor-elect.

Corrected applications have been filed with the IRS for plan determination and the same reviewer has been assigned. MS. CARPENTER was hopeful that a determination would be issued prior to the next legislative session. She noted that a 401(a) plan survey was conducted. As Plan Administrator, she is responsible to ensure that all 415(c) limitations are met, meaning that no one contributes more into the DC account than is allowable under the Internal Revenue Code. Six other employers had other types of 401 contribution plans. The number of school districts that offer a 403(b) plan will be identified next year.

MR. PIHL asked if the six employees match employee contributions. MS. CARPENTER was uncertain the DR&B has that information. MR. SEMMENS stated the City of Kenai contributes 4% of the first $37,000, or $1,500 maximum, in addition to its PERS contribution. MR. WILLIAMS asked if these are the systems that have opted out of Social Security. MS. MORRISON replied that is not necessarily the case.

MS. CARPENTER stated that last week two public hearings on the regulations for same sex partner benefits were concluded and public comment closed September 30th. Approximately 70 written comments were received. The DR&B will be notifying the court at the end of this week of any proposed changes to the final regulations.

MS. CARPENTER stated that the Retiree Dependent Eligibility Verification (RDEV) Project is not completed, but it is hoped to be by the end of 2006. Documentation is still being received from retirees. MR. PIHL asked if recovery is sought if claimants are not properly covered and, if not, why not. MS. CARPENTER responded that the data is not in a format to analyze which types of dependents are not tracked. She presumed that these are children that have turned 19 and are not enrolled in university. MR. PIHL noted that the Division of Insurance has created a position to do this type of analysis.

MR. TRIVETTE asked for a ballpark number of dependents that have been removed. MS. CARPENTER did not have that information. COMMISSIONER NORDSTRAND stated the active plan history shows a 10% drop. MS. CARPENTER stated there are 30,000 total dependents, so that number would be 3,000. COMMISSIONER NORDSTRAND noted that he has not seen instances of intentional misconduct.

MS. HARBO asked whether, once this analysis is completed, it would be done on a regular basis. MS. CARPENTER replied that an eligibility audit would be done every five years.

MS. CARPENTER noted that Trustee Harbo had inquired about Medicare doctors. Unfortunately there is not a list of Medicare doctors, however, she visited the Medicare website and printed a comprehensive list. MS. HARBO noted that when someone contacts her with a problem, she is referring them to DR&B. MS. CARPENTER stated the DR&B could not help with Medicare problems. MS. HARBO explained the problem is that if the individual cannot find a doctor to accept them as a Medicare patient, they are responsible for the Premera cost because Premera is a secondary provider. She asked whether costs would be paid for these individuals to travel to a community where Medicare is accepted. She thought if these individuals are having a problem finding a doctor, someone at the DR&B should be able to give advice. MS. CARPENTER stated she would have to examine whether there is coverage for travel to a locale where a Medicare doctor is located. She stated the Medicare list has over 290 participating doctors in various locations.

MS. HARBO noted that some of the doctors require that senior citizens pay a retainer, which is not reimbursable under insurance. MS. CARPENTER stated this is not a requirement of any program, but she acknowledged it is a problem. COMMISSIONER NORDSTRAND asked whether the names of doctors doing this could be obtained.

MS. CARPENTER reported that all of the SBS and DC participants now have access to managed accounts and other advice available from Great West, effective October 1, 2006. MR. TRIVETTE asked who the Advised Assets Group is. MS. CARPENTER explained that Advised Assets Group is a subcontractor to Great West, the recordkeeper.

MS. CARPENTER reported that the statement processing for PERS and TRS has been brought back in-house, resulting in a savings of $80,000 per year. She also reported that the newsletter will be semi-annual rather than quarterly. It will provide information to retirees and active participants alike.

MS. HARBO moved to go into Executive Session to discuss a legal matter involving the ARM Board. MR. TRIVETTE seconded.

Without objection, the motion passed unanimously.

EXECUTIVE SESSION 12:47 p.m. to 12:58 p.m.

RECESS 1:00 p.m.

ALASKA RETIREMENT MANAGEMENT BOARD
MEETING

Location of Meeting
Kenai/Denali Room
Anchorage Marriott Hotel
820 West 7th Avenue
Anchorage, Alaska

MINUTES OF
October 2-4, 2006

Tuesday, October 3, 2006

I. CALL TO ORDER

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

II. ROLL CALL

ARM Board Members Present
Martin Pihl
Sam Trivette
Gayle Harbo
Larry Semmens
Scott Nordstrand
Mike Williams
Bill Corbus

ARM Board Members Absent
Gail Schubert

Consultants Present
Rob Johnson, Legal Counsel

IAC Members Present
Jerry Mitchell
Bill 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

Steve Sikes, State Investment Officer, Department of Revenue
Clay Cummins, State Investment Officer, Department of Revenue
Zach Hanna, State Investment Officer, Department of Revenue
Judy Hall, ARMB Liaison Officer, Department of Revenue

Department of Administration Staff
Melanie Millhorn, Deputy Commissioner, Department of Administration
Traci Carpenter, Director, Division of Retirement and Benefits, Department of Administration
Charlene Morrison, Chief Financial Officer, Division of Retirement & Benefits, Department of Administration

Others Present

7. Fund Financial Presentation

For more information on this presentation, please refer to the document entitled "Alaska Retirement Management Board, Financial Report, As of August 31, 2006" kept on file at the ARMB offices.

SUSAN TAYLOR, State Comptroller, reported that the PERS Defined Benefit (DB) Plan has a total of $9.6 billion, while the PERS Defined Contribution (DC) Plan has $135,923 in participant directed funds. The structure is mirrored by TRS. She noted that the Schedule of Investment Income and Changes to Invested Assets by Fund now shows the DC retirement-retiree medical plan and DC retirement-health reimbursement arrangement figures.

The Military Retirement Trust Fund invested assets shows an increase as of July 2006. The DR&B worked with the Department of Military and Veterans Affairs to get the money appropriated by the Legislature deposited at the beginning of the fiscal year. This was a concern last year because the transfer did not happen until mid fiscal year.

MS. TAYLOR next reviewed the manager reports. The relationship with BlackRock was terminated so no fund balance is shown for that manager. That change occurred at the end of FY06. The fixed income managed internally now totals $3 billion. Other additions in the manager reports are the State Street Global Advisors TIPS and State Street Global Advisors futures.

MS. TAYLOR concluded her report with a review of the DC retirement-participant directed PERS Schedule of Investment Income and Changes to Invested Assets. The balance for PERS is $135,923. The TRS participant directed plan has a smaller balance of $6,546.

MS. HARBO asked if those contributing under DC are putting their money in the money market account. MS. TAYLOR replied that this is the case. She stated that although the Department of Revenue selects the asset options, DR&B is counseling the participants on how to direct their asset allocation. MS. HARBO asked what the interest rate on the money market is. MR. O'LEARY replied that it is approximately 5%.

FY08 Budget Review

MS. TAYLOR stated the Budget Committee has met twice to finalize the FY08 budget. The Committee is recommending reallocating the existing allocation for ARMB operation and ARMB custody and management fees. The total appropriated budget in FY07 would be $43,961,900; the money will be reallocated to pay for salary increases, additional custody and management fees, and to take into account increased employer contribution rates that will add $1 billion in assets under management in FY08. The Committee is recommending additional financial network services for fixed income and equity investment.

MS. TAYLOR indicated that KPMG would report to the Board tomorrow on the audit. There is a management letter related to alternative investments. An additional $29,000 is being recommended in Travel for due diligence trips. At yesterday's Budget Committee meeting there was also a request to add $50,000 for actuarial services.

MS. HARBO moved to approve the ARMB Budget for FY08. COMMISSIONER CORBUS seconded.

COMMISSIONER NORDSTRAND asked if the Committee discussed increased compensation for ARMB staff. VICE CHAIR TRIVETTE replied in the affirmative. COMMISSIONER NORDSTRAND asked if that compensation is in addition to this budget. COMMISSIONER CORBUS stated that some money has been included in the budget for increased compensation for key investment staff. MR. BOUTIN noted that the increment is entirely for exempt personnel.

By roll call vote, the motion passed unanimously.

8. Performance Measurement – 2nd Quarter

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

MICHAEL O'LEARY with Callan Associates, Inc. (CAI) stated good performance for the fiscal year can be partly attributed to the Board's decision over the last several years to commit to absolute return and diversification into high yield bonds. These asset allocations were funded from the investment grade bond component. Real estate was the largest contributor to positive returns for this fiscal year, as well as international equities.

At the end of June the 10-year bond yield was 5% and now it is 4.69%, so there has been a huge decline in interest rates since the end of June. That should support good bond market returns. But during the June quarter, yields rose across the entire curve, so there was a negative bond market environment.

The one-year return figure for the Russell 3000 was 9.6% versus (.8%) for the bond market. During the June quarter the EAFE was up .7%, but measured in local currency terms, it was down more than US stocks. Currency was the reason that international stocks did better than domestic stocks for the quarter. There was a huge reversal during the last six months. In the fourth quarter Japan had been exceedingly strong, but subsequent to that, Japan has under performed Europe. In local currency terms, Japan was down (7.5%) in the June quarter, and down (4.65%) measured in dollar terms. For the year, Japan is up nearly 36%. Managers with heavy weightings to Japan had strong results for the full year, but may have under performed in the June quarter. Europe was up 2.5% in dollar terms, but was at only 24.75% for the full year. Emerging markets were down (4.27%) for the quarter measured in dollar terms, but up 35.9% for the full year.

During the June quarter, energy prices continued to escalate and the debate was whether the Federal Reserve would stop raising rates. In the first quarter of the year, small cap stocks did exceedingly well. During the June quarter small cap stocks did poorly. Over the full year, small cap performance was strong relative to large cap; the S&P 500 was up 8.6% and the Russell 2000 was up 14.6%. Growth under performed value during the June quarter.

MR. SEMMENS asked if it is correct to say that over the past 10 years an investor in small cap stocks would have earned 9%. MR. O'LEARY explained that all of the figures are annualized returns.

MR. O'LEARY reviewed the asset allocation for PERS as of the end of the fiscal year 2006. There is an over allocation to some areas and under allocation to others. Those where there is under allocation tend to be less liquid investments. In terms of comparison to other public funds, MR. O'LEARY noted that the approaches the ARMB's peers are taking are more varied than has historically been the norm. This is important to understanding relative performance. Some of the major funds have very significant exposures to illiquid markets, particularly in the form of big buy out funds, and significant exposures to real estate. Those funds have not been able to meaningfully invest in hedge funds. Some of the smaller plans use less esoteric investment vehicles. The funds that had poor results at the end of the year were those with meaningful fixed income exposure.

PERS and TRS had strong results for the quarter, although they were down slightly and below target. For the full year, PERS had an 11.74% return versus the target of 10.38% and TRS had a return of 11.78% versus the target of 10.38%. MR. O'LEARY noted that high yield returned 5.55%, but the Lehman Aggregate was (.81%). Absolute return was 10.56%, ahead of (.81%) for bonds, which was the funding source. He noted that the ARMB has no exposure to the hedge fund that experienced severe under performance in the recent quarter, Amaranth. He cautioned that because fund-of-fund managers invest in hedge funds, the ARMB is likely at some point to be invested in a fund that experiences poor performance. He noted that the diversification among hedge fund-of-fund managers makes this less of a concern. He suggested that the ARMB ask its fund-of-fund managers how they monitor hedge funds and how they would have been aware of something like the Amaranth situation.

MR. SEMMENS asked if it is typical that a hedge fund would be concentrated in a particular area, as was Amaranth. MR. O'LEARY replied that it is not atypical for global macro funds to have a significant exposure, but he did think it is typical for the exposure to be as significant as was Amaranth's vis-à-vis the size of that fund. He noted that one of the ARMB's managers has a fund that does only shorting; as a component of the overall approach, this can be useful in balancing.

MR. O'LEARY next reviewed cumulative total fund returns for the quarter, 1-, 2-, 3- and 5-year periods. The 5-year number is now at median and the trailing 1-, 2- and 3-year numbers are competitive. He reiterated that the variations in policies are contributing to the spread in returns among funds. For the first six months of 2006, the PERS and TRS portfolios rank in the 14th percentile relative to CAI's public fund database.

MR. O'LEARY focused on the ARMB's international investments. The total international exposure has contributed to positive returns. During the year the total fund international equity returned 28.73%, ranking in the 27th percentile compared to the public fund international database. The total fund return was better than the EAFE Index and slightly better than the MSCI ACW ex US Free Index. Compared to the CAI Non-US Equity Style pool excluding emerging markets, the total international pool has had good relative performance.

Two of the ARMB's absolute return managers, Mariner and Crestline, are compared against the absolute return hedge fund-of-fund style group, while Cadogan is compared to the long-short hedge fund-of-fund style group. Mariner had a return of 9.53%, better than the target of 8.98% for the year. Crestline's return was 10.31%, better than the target of 8.98%; neither had a very good June quarter. Cadogan was up 7.91% for the year, below the target, but it had the strongest performance in the June quarter.

The total fixed income pool included BlackRock through most of the year, as well as the in-house portfolio. Returns are compared against CAI's public fund fixed income database. During the fiscal year, while performance was low in absolute terms, it was significantly better than the benchmark. This performance was aided by the inclusion of the Worldcom litigation proceeds. In earlier periods, performance had been hurt by the performance of Worldcom securities. MR. BADER added that the incremental return for Worldcom was 6 basis points (bp).

COMMISSIONER CORBUS asked for comment on the top quartile performance of domestic fixed income for the 14-3/4 years. MR. O'LEARY responded that the in-house staff has done a competitive job for a long time. BlackRock also helped while they managed for the ARMB. In the early part of this 14-3/4-year period, the fund was managed against the Lehman G/C Index. There was a change in index to the Lehman Aggregate. Good performance from both components of the portfolio and not participating in large losses contributed to this long-term good performance. MR. PIHL asked if these returns are gross or net of fees. MR. O'LEARY replied that they are before fees. There is also an analysis of the returns net of the manager's fee schedule. MR. BADER referred to the analysis "Calendar Periods, Total Investment Grade" and noted that there were only two times when the fund was top quartile since inception, but over the longest-term the fund's return is in the top quartile. MR. O'LEARY noted that in 1999 there were poor returns in the bond market and the fund was near benchmark during that year.

MR. O'LEARY reviewed the in-house fixed income portfolio compared to the CAI fixed income database, noting that performance has been good.

MR. SEMMENS remarked that the custom index returns are low; it was unusual to him that in this view most of the investors are beating that index. MR. O'LEARY commented that the custom index is a combination of two indices that were widely used to measure the investment grade bond market. The Alaska fund used the Lehman G/C Index longer than the industry. The spread in returns is very narrow over the 14-3/4-year period; the 75th percentile return is 6.55% and the 25th percentile return is 6.96%. He noted that most of this background is pre-fee and management of $3 billion internally at a cost that is much less than an outside manager means the returns for domestic fixed income are good.

MR. O'LEARY reviewed performance of ING and MacKay Shields. The latter is on the Watch List because of personnel changes. Both managers have been with the ARMB for one year and both have returns that are above median and above the benchmark. He noted that the high yield market has changed with the downgrade of big oil companies. As a result, the indices are being dominated by them. CAI has reviewed a series of alternative indices and will report at the ARMB's November meeting on the differences in performance and composition between an index that caps the size of an issuer at 2% and the uncapped index. He explained that if a manager wants to invest in a particular stock above the index weighting, it is viewed as speculative.

MR. O'LEARY continued with his presentation. Mondrian manages a non-US fixed income portfolio on behalf of ARMB. There is significant volatility in this portfolio due to currency. The Lehman Aggregate returned (0.81%) for the year, 2.05% for 2 years, and 4.97% for 5 years. He explained these returns show that the international portfolio helps by providing diversification and, over time, producing a return that has been fully competitive with domestic fixed income. MR. BADER noted that the international fixed income portfolio does not use currency hedging. MR. O'LEARY commented that those managers do have the authority to hedge, however. He noted that the international index return was 1.99% for three years and 3.68% for five years in local currency terms. The hedged equivalent index was lower for five years than the US bond market. For five years, the unhedged index was up 9.61%. He noted that this portfolio will have twice the volatility of a US bond portfolio.

MR. O'LEARY reported that the aggregate of domestic equity had a return of 9.23% for the full year, better than the S&P 500, but slightly worse than the Russell 3000. Compared with other public funds, the performance was not good. The large cap pool did not beat the S&P 500. He attributed this under performance to the lack of a true value manager. The energy sector was up 24% for the year and accounted for just less than 10% of the index. Without a value manager, there would be an under weight to energy; this was the case for the ARMB. This under weighting should help performance in the current quarter.

The small cap component of the domestic equity pool has been problematic for some time. Action was taken in the last two years to more greatly diversify the small cap pool and several managers were added. These managers have been in place for a year. The December quarter was the second full quarter for small cap managers. For the full year, their returns were slightly ahead of the benchmark.

The large cap pool has a slight growth bias. The under weight to energy was despite the fact that a large portion of the pool is an index portfolio. The portfolio has an over weight to technology, financials, and healthcare relative to the S&P 500. All of this together creates a growth bias.

The small cap pool has an over weight to IT, which is driven in large measure by one manager, TCW, who is on the Watch List; their weighting is nearly 40% in IT. The REIT portfolio has under performed the index since inception, but had near the index performance for the quarter. In January the approach used by staff to manage this portfolio was changed; there was a positive return relative to the benchmark in the January period.

The majority of options for the SBS and DC portfolios either met or slightly exceeded targets. The T. Rowe Price small cap piece under performed the benchmark, so the Target Maturity Funds with a heavier equity orientation tended to under perform slightly. MR. O'LEARY reviewed the SBS asset allocation and recent results of the various options under SBS. He noted that the small cap component earned 11.89%, but that was less than the Russell 2500. International performance was very attractive relative to the index. The Balanced Fund returned 3.29% for the year. The Long-Term Balanced Fund returned 5.88% for the year. The 2010 Fund did better than target, the 2015 Fund was just below target, and the 2020 Fund was more substantially behind but still close to the target. The State Street Index Fund and State Street Bond Fund were fine. The BGI Tactical Asset Allocation returned 1.87%, slightly less than the target. Brandeis returned 25.7%, which is an attractive absolute return; on a pre-fee basis that returns are in line with the index. The Capital Guardian Global Balanced fund did well. Citizen Core, which had been doing well, had a difficult quarter that impacted the full year return. They are on the Watch List because of a corporate combination. He thought the market environment explains their weakness in the quarter. T. Rowe Price's Trust did well for the year. Nine of the options did better than the target.

MR. O'LEARY briefly reviewed the DC Plan asset allocation.

MR. O'LEARY stated that the Capital Guardian Large Cap portfolio is on the Watch List, but they would not be considered for placement on the Watch List today for performance reasons. McKinley's long-term performance has been very competitive. RCM's Large Cap portfolio is on the Watch List. Their performance has been below the broad market benchmark, 3-year performance is below median, and the long-run results are at or close to the top quartile. He thought it might be reasonable to remove them from the Watch List. Relational has only been managing on behalf of the ARMB for a year; it has not been helping performance. Tukman is on the Watch List. Since inception they have done much better than the S&P 500, but in the interim periods their performance has not been good. In the most recent quarter they out performed the index and that has continued in the September quarter. This manager invests in 16 mega cap companies that are high quality, typically globally leading, and financially productive. They did very well when first hired and during the market recovery their performance has been poor. The current market environment and the environment in the June quarter is such that he would expect them to out perform.

The TCW small cap portfolio is on the Watch List. They have very volatile performance. In the March quarter they out performed; they participated in the recent small cap performance surge. They fell more than the index in the June quarter. For the 6 months ending June, they were up 7.45% and the median small cap manager was up 6.89%. This manager has 41.8% of its portfolio in IT. It is largely because of this manager that the small cap pool is over weight to IT.

The three new small cap managers have been around for a year. Jennison and Luther King have been doing well, but Lord Abbett has not yet. The aggregate performance of all small cap managers was better than benchmark for the year.

Brandes' international portfolio is in the DB plan. They have had strong long-term performance and while in the DB plan, their performance has been better than the benchmark. In the SBS plan, their performance has been slightly behind the index on a net of fee basis. Capital Guardian's international portfolio is ahead of the benchmark for the year; they were over weight Japan. There are two new international managers, McKinley and SSGA, both of which contributed to strong results. Lazard Global should arguably be added to the Watch List; for the year they had a decent result. MR. BADER informed Mr. O'Leary that yesterday the ARMB removed RCM from the Watch List and Lazard Freres was added.

MR. O'LEARY stated Capital Guardian's emerging market portfolio did better than the index for the year and the long-term record is better than the index. J.P. Morgan did not do well relative to the benchmark for the year, but they have superior returns for most other periods.

MS. MILLHORN asked for referral to the schedule that is net of fees. MR. O'LEARY referred to page 65 of the large book prepared by CAI, which shows returns both pre-fee and net of fee. Page 72 shows net of fee returns for PERS and TRS, which are calculated with the Division of Treasury providing expense numbers to CAI. He noted that the finalized expense numbers for FY06 are not yet in receipt.

MR. SEMMENS congratulated Mr. Bader and staff for the excellent returns for the year.

BREAK 10:15 a.m. to 10:30 a.m.

MR. BADER stated that the next three presenters are the ARMB's absolute return managers. These managers are expected to produce returns regardless of the direction of the market. Typically these managers use hedge strategies to offset one position with another. Both the absolute return and private equity managers are generally fund-of-fund managers. Although they may operate strategies in-house, they also select other funds and partnerships to invest in on the ARMB's behalf. They must perform due diligence on these hedge funds, be familiar with who is operating them, give confidence in the returns those companies are reporting, and to diversify the ARMB's investments. Each manager was asked to select a strategy to discuss during their presentation.

8. Cadogan Management, LLC

For more information on this presentation, please refer to the document entitled "Alaska Retirement Management Board" dated October 3, 2006 and kept on file at the ARMB offices.

STUART LEAF and RICHARD COLLIER presented to the Board. MR. LEAF explained Cadogan's goal is to locate the best hedge strategies available. The firm has been specialized in long/short, but is not confined to that strategy. The firm does not invest directly in securities, but rather in hedge funds. The firm has an in-house hedge fund, but it is not in any portfolio the firm manages. The firm was founded in 1994 and has 36 employees, 26 of whom are professionals and 16 of those are investment professionals, with nearly all located in the New York headquarters. The firm surpassed $2 billion of assets under management this year and has 90% institutional clients.

MR. LEAF stated that 61% of the funds in the ARMB's portfolio are long/short, there is some exposure to event and distressed debt, one convertible fund and one relative value fund, and five short funds. MR. O'LEARY noted that the ARMB portfolio is customized. MR. LEAF replied that it is structured within parameters established by the ARMB. MR. O'LEARY asked if the portfolio is a limited partnership. MR. COLLIER replied that it is an offshore corporation. MR. O'LEARY confirmed that the risk exposure to the ARMB is limited the amount invested in that entity. MR. LEAF stated that legally the ARMB could not lose more than it invested.

MR. LEAF stated the firm has interviewed approximately 3,500 hedge funds in the 12 years it has been in business. There are 8,000 to 9,000 hedge funds and there is a 20% mortality rate per year. The firm does a great deal of due diligence that involves qualitative analysis, that is, interviewing managers and reviewing portfolios. The firm only invests in strategies where senior management has been actively investing over the life of their career. Cadogan determines if it can trust a manager and then verifies. The operational due diligence is also extremely important and this aspect has been enhanced in recent years. Cadogan creates a portfolio based on client parameters by looking at the underlying pool of managers, narrowing the pool on an individual manager basis, and then compiling the portfolio. Equally important in this process is monitoring. Keeping a manager in the portfolio is the same as investing in a new manager. An active investment decision is made monthly; communication with clients is also very important.

MR. LEAF noted that the firm is a research and investment shop, rather than an allocator or asset gatherer.

MR. LEAF stated the objective for the ARMB account was protection of capital. He indicated that Cadogan has investment experience and a proven process, invests in smaller and undiscovered managers, and uses short selling hedges to achieve market neutrality. MR. MITCHELL asked that Mr. Leaf define "smaller." MR. LEAF replied that manager size has been $250 to $500 million; Cadogan often invests with managers when they are smaller than that. Today the firm has a small fund-of-fund along with other managers who use it as a "farm team." Cadogan puts money in very early stage managers, which allows monitoring of them early on with very little risk. To the extent Cadogan likes them; they can be migrated into portfolios such as the ARMB's. That fund has been in place just over two years and 14-15 managers have been migrated into other portfolios.

MR. BADER noted that frequently when a fund is failing, there are rumors and news wires. He asked whether when this occurs, Cadogan is spurred to any action whether or not it owns any of that fund. MR. LEAF stated that he sent out a note the day that Amaranth's losses were announced. Whether or not the firm is involved in something, if it is in the spotlight, clients should be aware of the risks. He was also contacted by members of the press. He called all of the energy managers to understand the possible issues and he got interesting feedback that was disseminated on the same day. The feedback was that it seemed unlikely to be fraud. Amaranth had been very valuable to the energy industry because they provided liquidity where there was none before. If one is the sole provider of liquidity, there is huge risk. Amaranth had disclosed to clients that they were taking large risks in the energy area and that much of their returns had come from there. Cadogan checked other energy managers to see if they were invested in other long dated derivatives and they were not.

MR. LEAF continued his presentation. The firm's belief is that in very bad markets things correlate more than they would otherwise; inverse correlation is what helps, rather than non-correlation. This is why the firm uses short sellers in its portfolio. Other objectives of the ARMB's portfolio are to generate a long-term return of 90-day T-Bills + 5%, control risk with volatility of 4-6%, provide portfolio diversification with a correlation of no more than 0.4 to stocks and bonds, and to serve as a bond alternative.

Over the period Cadogan has managed for the ARMB, it has achieved a 7% return with a much lower volatility profile than the index. Over the last 6-9 months the number of slightly volatile managers in the portfolio has been increased. The returns have been much higher and the volatility has been lower than bonds. The returns are somewhat lower than the equity market with one-third the risk. The period being analyzed, however, is not meaningful statistically.

MR. LEAF stated that when other markets are down, Cadogan is generally flat to up. Given that there is long exposure in the ARMB portfolio, something that can be up during down months is a good balancing factor.

MR. LEAF explained that the overall hedge fund universe has 9,000 managers and long/short equity represents 43% of that total. Cadogan specializes in long/short equity. A traditional equity manager makes money when stocks rise and an institutional long only manager does just that. Hedge fund managers can make money whether stocks rise or fall. For example, if long-only manager researching the auto industry determines that Ford is doing better than GM, that manager would buy Ford. A long/short manager could go long Ford, but also sell short GM. "Selling short" means that the manager is betting that the stock goes down. The manager goes to a broker, borrows $1 million in GM stock from the broker, then sells the stock and owes the broker that number of stocks when the transaction is done. If the price of GM goes down and it is worth $700,000, the manager can go into the open market, buy the same number of shares for $700,000, give them back to the broker, and take the profit. If the price goes up, however, the manager still has to buy those shares in the market and can experience a loss. A traditional investor can only buy Ford. A long-only manager has the risk of the security itself and the hedge fund manager has the same risk. The long-only manager also has the risk that the sector moves, while the hedge manager that is long Ford and short GM has taken the sector out of the equation. The same is true for the market itself.

MR. O'LEARY noted that in this illustration the manager has the opportunity to be wrong in longing Ford and in shorting GM. MR. LEAF agreed, but noted that to the extent that capital is being invested, the amount lost is limited to that capital. Hedge funds can use borrowing, or leverage, to put more capital to work; this is monitored closely by Cadogan. Transparency is demanded from all of the managers in which Cadogan invests. MR. O'LEARY noted that Cadogan does not routinely get feeds from prime brokers showing the managers' portfolios, but instead goes to the managers themselves to review their portfolios. MR. LEAF agreed. Managers are sensitive to the area of small cap stocks because they are hard to acquire and hard to get out of; they are also sensitive to shorting. The vast majority of top quality managers will not send portfolios from prime brokers; they will use a third party or allow for review on a more personalized basis. Given that the liquidity on hedge funds is typically 90 days, receiving information from a broker is not value added.

MR. LEAF explained that Cadogan divides long/short equity into 16-17 areas. There are generalists, sector specific, those who specialize in cap size, style specific, short only, international, and special situations activists. Cadogan knows where its exposures are, as determined through qualitative and quantitative analyses. Cadogan has been loath to invest in emerging markets because of liquidity problems and it is difficult to short in those markets; international exposure has been primarily in Japan and Europe. Activists have been played down over time because Cadogan is not sure that the value added is sufficient.

Over time, Cadogan is looking for a return based not on how the markets move, but on manager skill. The biggest component to reach this goal is superior fundamental research. He communicated an example of a manager who looked at the loading dock of a company before investing; the key is dedicating numerous hours to a single investment idea. Macro analysis can also be a factor, although not as large a factor in Cadogan's investments. Trading can also add value, but it is difficult to keep on top of. Special situations are other potential value added events; hedge funds devote more time to understanding these ideas. Lastly, portfolio management adds value. Negative compounding kills portfolios. Great returns are not made by significantly high returns in a single year, but steady returns over the long-term.

Cadogan looks for the following in managers: integrity, insight, self-confidence but not hubris, self-awareness, sustainable investment edge and repeatable process, and ability to successfully manage their business. The most important factor is trust of the manager. Managers must have insight in order to skew the portfolio to out perform. Self-confidence is necessary as hedge managers are buying when others are selling and selling when others are buying, but they must be aware whether or not an investment is prudent. Judgment and experience enables Cadogan to determine whether managers have the ability to know this. Managers need to be aware of the mistakes they make. Not all hedge fund managers have a sustainable investment edge. Track records in this area are relatively short and, in terms of experience, 75% of the hedge funds were not in existence when the market fell in 1998. Many hedge fund managers have given little to no thought of the management of their own businesses, yet they are responsible for determining whether the companies in which they invest are well managed.

MR. SEMMENS remarked that if he had the resources to invest in hedge funds, he would expect much better than bond-like returns. He asked why the ARMB target is T-bill +5% and why that target has not been met. MR. LEAF explained that the key is risk-adjusted returns. Since inception the firm's goals have been 10% returns with 5% risk and no correlation to the market; the actual return has been 10%, volatility has been 4%, and there has been no correlation to the market. The S&P 500 has had 10% return and 16% volatility; NASDQ has had a 10-11% return and 32% volatility. The question is the risks being taken in order to achieve return. The key is protecting the downside, not what is achieved on the upside. On a pure mathematical basis, many of the firm's investors are banks, insurance companies for their own accounts. They can borrow money and lever their investment with Cadogan. The ultimate decision is how much risk is comfortable for the returns achieved. To the extent that the investor wants something with the same risk as the equity market and a higher return, a portfolio can be created. However, Cadogan was asked to create something for the ARMB as a bond alternative, so the risk factors were not changed. The firm is selling a process, not specific returns for a specific risk. The return profile has been somewhat lower since inception of this portfolio but the risk has been much lower. Stock market volatility collapsed over the last two-year period. The firm does not like to over reach; if it pushes too hard, bets are taken where risk/return is against the client. To the extent the ARMB decides it does not want this, Cadogan can create a different solution. MR. COLLIER stated that one of the benefits of a separate account is the possibility to modify the account to the parameters the ARMB desires.

COMMISSIONER CORBUS commented that he read in the press that a number of hedge funds have taken positions in small and medium sized companies and tried to influence what the companies are doing in order to address what is good for the hedge fund in the short-term rather than what is good for the company in the long-term. MR. LEAF stated that long-term equilibrium is desirable. There were times when hedge funds viewed smaller companies as their own. That view is at one end of the spectrum. The US market is the most efficient in the world because there is the ability to trade more actively. A small hedge fund manager can affect management of companies. Hedge funds, together with private equity, are still trying to create value. Even in bull markets, more than half of stocks generally go down each year. Although there will be excess in some small categories, holding management accountable for the companies they run is generally a good idea. Cadogan fired a manager that continues to do very well because he wrote a disparaging letter to the CEO of a company. MR. COLLIER explained that activist managers can play either a constructive or a destructive role. MR. LEAF noted that activists have helped the Japanese markets.

8. Crestline Investors, Inc.

For more information on this presentation, please refer to the document entitled "Crestline Investors, Inc., Presentation for: Alaska Retirement Management Board" dated October 3, 2006 and kept on file at the ARMB offices.

After introduction by MR. BADER, DOUG BRATTON and THERESA MOZZOCCI presented to the Board. MR. BRATTON stated the firm is uniquely experienced with partners who have previously managed hedge fund strategies. Partners were senior professionals at one of the largest multi-strategy trading firms during the 1980s and 1990s. He and Caroline Cooley are the portfolio managers responsible for the entire track record of Crestline's funds. Crestline is a proprietary asset manager to an institutional fund-of-funds organization; it is an internal asset management group of the Bass family. The fund was launched in 1997 and opened to outside investors in 2002. Today 71% of the firm's assets are from public funds. The firm has an 8 year track record and has assets under management of $2.4 billion. The organization is stable and is 100% employee owned. There has been no senior professional turnover since inception. The client base is 80% institutional and the firm has a strong culture of compliance. The three principals have over 20 years of industry experience and have been together since 1998. The firm employs six senior analysts with an average of 12 years of industry experience.

MR. BRATTON reviewed the organizational structure of the firm; managers are involved in specific strategies rather than sectors. The majority of the firm's assets are in the low volatility product (Crestline Partners) and the remainder is in high return event-driven products. There is also an opportunity fund seeded by a pension plan that is focused on less liquid strategies. The client base is primarily institutional.

MR. BRATTON reviewed the merger arbitrage strategy used by the firm. Merger arbitrage captures the spread between the price an acquirer agrees to pay for a target and the price the target trades after the deal is announced. The attractive attributes of this strategy are a clear alpha, non-correlation to the markets, low market risk, minimal leverage, and transparency. Sources of risk are both deal-specific and market risk. Favorable environments for this strategy are stable/rising equity markets, when there is available credit, and when there is stable/improving economic activity. Unfavorable environments for this strategy are declining equity markets, tight credit, recession, or shock environments.

The current markets are favorable for this strategy, which was out of favor in 2002 and 2003. Over 10 years the strategy has out performed the S&P 500 by 300 bp with 25% of the risk.

The opportunity for this strategy is corporate change as the result of a merger, leveraged buy out, tender offer, or proxy contest. It could also be a special situation like a new management team, liquidation of an underperforming unit, recapitalizations, etc. There remains the risk of uncertainty, but the reward is premium payment.

MR. BRATTON compared merger arbitrage to the insurance business. The insurance company gets a premium, while the merger arbitrageur gets a spread. An insurance company achieves diversification by writing many policies, while the merger arbitrageur achieves diversification by investing in many deals. An insurance company considers geographic diversification, while the merger arbitrageur considers industry, strategy, and regulatory diversification. The biggest difference is that an insurance company does not mark its book to the market, but the merger arbitrageur does. Historically, merger arbitrage has been investing in merger/acquisition candidates. Time frames are generally very short, 3-4 months for a standard transaction. Performance is uncorrelated to the stock market. Investors buy at a discount to an anticipated future price. The merger arbitrageur buys at a discount to an announced future price.

In order to manage risk, the merger arbitrageur analyzes various risk factors. Each deal must be analyzed both individually and at the portfolio level. On the individual level, factors include the deal type, social issues, financing and material adverse clause, operations, and regulatory issues. At the portfolio level covariant risk must be evaluated and adjusted for industry, financing, regulatory, tax law, accounting, and stock market.

MR. BRATTON reviewed an example of Ford buying GM. The target share price is $110. The post-announcement price is $100 per share and GM is trading at $80, creating a spread of $20 to $30. The institutional investor earns 20 points in their portfolio and leaves the other 10 points on the table of the merger arbitrageur. There is a transfer of risk in such an event. The $10 spread is a return on investment. Therefore, if $100 is paid and $10 is received, there is a 10% return. If that happens over 6 months, the return on investment rises to 20%. The downside is if the price returns to its original level; this would mean the merger arbitrageur loses $20 instead of earning $10. The factors that influence the spread are the time-value of money, the risk premium, operational issues relative to the buyer and seller, the probability of success versus failure, the regulatory environment, and the supply and demand of capital in the market.

MR. O'LEARY noted that there are many mergers that do not involve cash, but rather stock. He asked for an explanation of how that works. MR. BRATTON explained that if GM was being acquired by Ford and one share of Ford was worth $110, it would be sold short to lock in the price and buy GM. MR. O'LEARY noted there have been healthcare company acquisitions in the news; he asked whether people back out of the transaction if, after the arbitrageur has established a position and the acquisition is not yet complete, there is news that causes concern. MR. BRATTON explained that the transaction is reviewed in terms of the legal basis for the transaction, it is important to understand the contracts involved in the merger. There are often a variety of out clauses in the contracts. He noted that when 9/11 happened, his firm issued redemption notes to all of its merger arbitrage managers. Many of those have since been rescinded.

DR. MITCHELL asked what happened in 2002 and 2003 when there were no transactions, did managers return money to their investors or did they over-concentrate. MR. BRATTON replied that managers have a self-interest, so it is incumbent on fund-of-funds managers to understand what is happening in that strategy make a decision to exit the strategy. The firm fires managers for three reasons: integrity, strategy, or poor performance relative to a pre-established peer group of similar managers.

MR. O'LEARY referred to page 12 of Crestline's presentation, which discusses share class discrepancies. He asked for discussion of this type of risk. MR. BRATTON explained that in the 1980s there were share class trades and there were always differences between the share classes. The spread between those fluctuates and it is easy to set up a trade to be long one and short the other. Over time, a number of those share classes became smaller and leverage had to be used in order to get the same return. There are also soft trades that are not finalized because, for instance, a transaction does not occur, which results in investors who are trying to get out of the trade at the same time. These softer situations carry more risk.

MR. BRATTON continued his presentation with a review of the ARMB portfolio performance. The Blue Glacier Fund portfolio is diversified significantly by geography with 63% in North America, 18% Europe, 5% Asia, and 14% global. It is diversified with 14 strategies and 45 funds. There is significant distribution of fund size and manager size. The majority of the allocation is to multi-arbitrage at 17%, commodity relative value at 13%, origination at 13% and other event-drive strategy at 10%, distressed at 8%, equity market neutral at 8%, and long-short at 7%. Average returns for this portfolio have been good when the S&P 500 is up and flat when it is down. When the Lehman Aggregate Index is up, the portfolio is up, and when the index is down, the portfolio is up. The benchmark of T-bill +5% has been exceeded from inception and year-to-date.

MR. WILSON asked how the increasing amount of capital available for hedge funds impacts this firm's business. MR. BRATTON replied that it makes the anomalies go away faster and a manager reaches capacity sooner, which forces the firm to be proactive and negotiate capacity agreements with managers. MR. WILSON asked how this impacts returns. MR. BRATTON replied that the firm has to work harder in order to achieve the desired returns. He noted that the only under valued asset classes in the world today are cash and volatility. The price of being long volatility in any market is as cheap as it has ever been. There is currently a significant opportunity in distress that is caused by a slower economic situation exacerbating leveraged companies.

MR. BADER asked what happens when the stock of a company that is targeted for acquisition has a large short interest. MR. BRATTON explained that if everyone is short that security there is no capacity to do the trade and therefore the spread widens substantially.

VICE CHAIR TRIVETTE asked how much the firm spends on attorneys. MR. BRATTON stated that merger arbitrage groups spend millions a year on anti-trust and other attorneys that specialize in regulatory issues.

COMMISSIONER CORBUS asked for a description of the firm's due diligence process. MR. BRATTON stated that risk management begins with due diligence. The firm invests in a subset of the hedge fund market. When Crestline finds an interesting manager, there is focus on the manager's integrity, their investment process, and whether they have adequate infrastructure for the strategy. Due diligence begins with idea generation, followed by research, and ultimately a full due diligence report. The due diligence process includes one front office visit or several, and a back office visit, as well as separate due diligence involving the administrators and service providers for the hedge fund. Crestline looks for reasons to not do the investment. The firm uses an outside relationship to do background checks and reviews legal situations in which the managers may be involved.

MR. PIHL asked for discussion of longer-term performance figures for the firm and the range of performance in the other funds it manages. MR. BRATTON stated the firm has managed money since 1991 and in the fund-of-funds format since 1997. In the fund-of-funds format the firm has not had any down years. Consistent compounding is the key to long-term performance. The firm's goal is to consistently produce LIBOR 400 returns. MR. O'LEARY noted that Crestline has a variant of the ARMB portfolio that is levered. MR. BRATTON stated the firm manages such a portfolio, as well as another focused specifically on event transactions.

LUNCH BREAK 12:00 p.m. to 1:15 p.m.

9. Mariner Investment Group, Inc.

For more information on this presentation, please refer to the document entitled "Mariner, Alaska Retirement Management Board" dated October 3-4, 2006 and kept on file at the ARMB offices.

After introduction by MR. BADER, ELLEN RACHLIN and WILLIAM TURCHYN presented to the Board. MR. TURCHYN explained Ms. Rachlin co-heads the fund-of-funds product in which the ARMB is invested. He stated he has been at Mariner for less than five years, prior to which he was Chair of a $22 billion investment management firm, and before that he headed alternative investment at another firm. Ms. Rachlin has been in the business for over 20 years, beginning as a proprietary trader. She managed the fixed income book for another firm during the 1998 market "meltdown."

Mariner was formed in 1992. The firm is a senior group of people; these individuals meet with and work with managers. The partners of the firm come from credit and fixed income proprietary trading desks. The firm has a culture of risk management. Risk management means position level transparency, so over 90% of the firm's managers send Mariner their positions on a regular basis. Mariner feels it is qualified to review those positions and understand what is happening. The firm is 100% employee owned.

Mariner has over 85% institutional clients and has been a registered investment advisor for over four years. The firm has 125 employees with four offices. The governance and organization of the firm is similar to that of a traditional investment management firm. The firm has eight full time attorneys and a compliance office headed by an individual who began his career in the enforcement division of the SEC. The firm was audited by the SEC about one year ago with what the firm feels is a good result. The SEC asked Mariner to join the International Organization of Security Compliance Officers (OSCO) to help them discuss the issues of portfolio pricing. MR. TURCHYN reviewed a listing of Mariner's Investment Committee members.

Distinguishing characteristics of the firm are a focus on not losing money, a good understanding of small funds (average $300 million), an ability to conduct in-depth trade construction, emphasis on fixed income and credit related investing, and reactive/opportunistic capital allocation.

The ARMB portfolio is modeled after the firm's core portfolio, Mariner Select. During the 10 worst drawdown periods of the Lehman Aggregate and of the S&P 500 since inception, Mariner has had superior returns. The firm manages a customized fund on behalf of the ARMB. The cumulative net return for that fund is 14.87% and 7.84% annualized net return, which is slightly under the benchmark for the 22-month period the ARMB portfolio has been in existence.

MS. RACHLIN explained that fixed income investing in the alternative asset class is dominated by fixed income arbitrage. Fixed income securities are loans that are the debt obligations of the issuer. Debt holders are not equity or shareholders of the issuer. Creditors only receive the principal and interest in return for their loan. Loans may or may not be collateralized; when they are collateralized, they are backed by tangible assets. Unsecured loans are backed by the implied creditworthiness of the lender. The components of a bond's yield include the risk free rate, inflation expectations, time to maturity, and the credit risk premium. Borrowers with the higher quality will have the smallest risk premium and lesser quality credits have a larger risk premium. Currently, the US bond market value is $26 trillion, which is larger than the US equity market. Within each type of bond issue there are many issuers and there are many issues that fall under each issuer. MR. TURCHYN noted that globally and in the US the fixed income markets dwarf the equity markets. In the hedge fund area, there is a preponderance of long/short equity managers over fixed income strategists. Fixed income hedge fund managers are operating in a specialized area and the things they do are niche. Tremendous research and experience is needed in order to understand the value of fixed income instruments.

MS. RACHLIN noted that most of the fixed income elements of the ARMB portfolio capital allocation are arbitrage oriented. The only non-arbitrage fixed income strategy is distressed securities. Fixed income arbitrage investing encompasses many strategies, but the heart of all fixed income investing is that the arbitrageur will seek to find over valued and under valued securities. The challenge is to find a hedge to insulate from market movements. MR. TURCHYN stated that generally the securities that fixed income hedge managers trade in are related, unlike long/short equity managers in the equity world.

MS. RACHLIN explained that fixed income arbitrage investing is roughly divided into interest rate investing and credit arbitrage. The latter is focused on debt issued by corporations and the former is focused on the debt issued by governments and mortgage-backed securities. MS. RACHLIN reviewed an example of government bond arbitrage using four issues, two of which have very different yields compared to the other two. The arbitrageur may buy the bonds that have high yields and sell the bonds with low yields, hoping they converge in the middle. Typically in these disciplines these convergences occur over a one- to three-month time horizon. The process of capital flows coming into the market will cause the issues to converge.

MR. O'LEARY noted that in the final analysis the difference in yields between the issues is only a couple of basis points. He presumed that managers probably buy many bonds and sell many bonds and use leverage to make the spread worthwhile. MS. RACHLIN noted that the government bond arbitrageur will have a portfolio of many positions with a similar profile. MR. O'LEARY asked if it is common to see leverage of six times the underlying equity in a hedge fund. MS. RACHLIN replied in the affirmative. She explained that the collateral for the extender of leverage is government bonds, which is considered to be a cash-like substitute. MR. TURCHYN noted that there are not many investors of this type.

MS. RACHLIN next reviewed an example of corporate bond arbitrage. The corporate bond arbitrageur will identify over and under valued securities. On a particular date, the arbitrageur notices a bond in the media sector trading at a yield of 8.05. The arbitrageur is aware that for many months that company had been looking for buyout candidates; for a bondholder, buyouts are not an attractive corporate action because more debt can be issued, compromising the holder's payment priority. Perhaps the arbitrageur decides that the media company cannot continue seeking buyout candidates, so they can expect that when the buyout effort is called off, the bonds would recover rapidly. Because the arbitrageur wants to be insulated from market risk, they would look for a bond to sell against it. In this case, the arbitrageur would notice another media business that is fully priced. When the first media bond recovers and the market goes up, so the arbitrageur captures a good profit.

MS. RACHLIN next reviewed an example of capital structure arbitrage. This discipline focuses on companies experiencing financial difficulty. The arbitrageur will look at all of the issues outstanding with a given company and how it is trading in the market. In very troubled companies, the price of the bond reflects the recovery value of that debt. The arbitrageur reviews the capital structure of the company, which from highest to lowest payment priority are senior secured bank debt, senior unsecured bonds, subordinated unsecured bonds, preferred stock, and common stock. The arbitrageur attempts to estimate what each debt holder would be paid. In this example the senior unsecured bonds are trading at $.70 on the dollar. The capital structure arbitrageur feels that the value of those assets will allow the senior unsecured bonds to recover all of their money. However, the subordinated unsecured bonds are trading at $.55 and the arbitrageur does not think there would be enough capital to pay them out. The capital structure arbitrageur would buy the senior unsecured bonds assuming that the price would appreciate from $.70 to par and that the subordinated unsecured bonds would only rise slightly. MR. TURCHYN indicated that the firm is often asked how opportunities are identified. When there is increased volatility in a company, mispricings begin to occur. There are managers in the portfolio that spend the bulk of their research on no more than 10 or 15 companies or sectors they know well. To understand the capital structure of a particular company, such as GM, is a full-time job. Companies that are having trouble give rise to opportunities. MS. RACHLIN stated this is a style of investing that is uniquely dominant in the alternative class.

MR. O'LEARY noted that long-term capital had Nobel Prize winners and his sense was that they were not getting into individual bonds, but they were dealing with the bulk area. He asked how Mariner feels about model-driven fixed income investing. MS. RACHLIN stated that when Mariner looks at managers and assesses what they are doing, part of that assessment is a matter of judgment. Judgment is what makes one manager far superior to the rest. MR. TURCHYN stated there are quantitative people at Mariner, but much of what is done are people making judgments. He noted that the firm tries to avoid short volatility. Managers are divided into short volatility and long categories. An example of a short volatility strategy is to buy a high yield bond and short Treasuries. Money is made by longing the junior security and shorting the senior security. Money can be made on this until there is a problem in the capital markets. When there is such a problem, the money leaves the junior security and finds its way into US Treasuries. Making money by being long the senior security and short the junior security is not easy, but it is less risky.

DR. MITCHELL asked how Mariner measures the performance of the funds in which it invests. MS. RACHLIN replied that measurement is relative; Mariner is cognizant of the total return market and members of the same asset class. Managers are tagged with a style, such as corporate bond arbitrage. Mariner then measures alpha and risk-adjusted returns. MR. TURCHYN stated that knowing the positions in a portfolio, one approach is understanding what the best of class ought to be providing over a period of time; when there is deviance from that, it will prompt a conversation or perhaps a visit. MS. RACHLIN noted that the firm might tolerate a long/short equity manager who is performing adequately in a good market, but that will perform best in a down market.

MR. O'LEARY noted that accounting for funds like the ARMB is being made difficult in terms of valuations for hedge funds and absolute funds. He asked how Mariner becomes comfortable with the valuations that the underlying hedge funds are using to drive their calculations of rates of return. MS. RACHLIN stated that the firm looks at the manager's practices prior to investment, avoids illiquid investment styles for this reason, gets multiple broker quotes, and watches trades. MR. O'LEARY asked if there is a checklist that could be shared with staff. MS. RACHLIN replied that the operations team has a full auditing process that can be provided to the ARMB's staff. Portfolio managers do a complete assessment as well and visit managers before investing in a fund. The firm also receives 75% quarterly full position files from managers that are spot checked in terms of prices. For most of the balance, the firm goes on site and looks at the securities. MR. TURCHYN stated that four of the six SEC branch chiefs in the nation visited Mariner when the SEC audited the firm. They asked the firm to help them delineate the pricing process.

10. Certification Letter: Experience Analysis

For more information on this presentation, please refer to the document entitled "Actuarial Review of Experience Study 2001-2005" prepared by Gabriel Roeder Smith & Company dated September 20, 2006 and kept on file at the ARMB offices.

After introduction by MR. BADER, WILLIAM FORNIA and LESLIE THOMPSON with Gabriel Roeder Smith (GRS) presented to the Board. GRS has reviewed the work done by Buck Consultants, as per the statute. MR. FORNIA introduced Ms. Thompson, who joined the firm last month with a specialty in healthcare. The purpose of the firm's Experience Analysis review is to review the study done by Buck Consultants for PERS and TRS. The Experience Analysis looked at demographic assumptions, economic assumptions, post-employment healthcare assumptions, and funding method. Based on these assumptions, Buck determined the liabilities and the actuarial valuations. The Experience Analysis looked at the experience between July 2001 and June 2005 and compared it against assumptions set as of July 2001 by Mercer. When GRS first reviewed the Analysis, a variety of comments were made on the Mercer assumptions, which Buck considered. Buck took Mercer's assumptions and the experience and developed their own assumptions. GRS reviewed all of this, as well as assumptions of peers and what GRS would have done. MR. FORNIA noted that actuaries are different and view things differently. The bottom line of the review is that the assumptions Buck used are reasonable, as is their methodology. GRS particularly supports their proposal to remove payroll growth. They proposed changing the funding method to Entry Age Normal (EAN), which GRS also supports. GRS suggests that when they again do this study in five years they should consider retirement by age and service, lower inflation from 3.5%, and view salary increases in the context of experienced low inflation.

Buck currently assumes inflation at 3.5% and they propose keeping it at that. Current experience is that inflation is less than 3.5%. MR. FORNIA explained that he looks at current inflation and the yields on TIPS, both of which are less than 3%. He encourages his clients to use an inflation figure of 3%. However, inflation affects both nominal investment returns and nominal salary growth, so they tend to cancel each other out.

Buck currently assumes an 8.25% return net of investment expenses and does not propose changing that. With 3.5% inflation, the real return is 4.75%, which is higher than most systems are using; an 8% net return is the most common rate used by large public retirement systems. MR. FORNIA was comfortable with this, noting that Buck did a rigorous analysis that showed a real return of more than 4.75%. Because the plan will be closed in the long-term, the cash flow profiles will be very different.

The salary increase rate base assumption is 4.0% for TRS, PERS and Other and 4.5% for Peace Officer/Firefighters (PF). Buck studied TRS, PERS, Others and PF separately. Buck proposes reducing the productivity component to 0.5% - 4.0% base assumption. MR. FORNIA stated he would have broken this out differently, but their proposal is reasonable.

Buck analyzed the various components of salary: merit, promotion and longevity. GRS supports Bucks' proposal that PERS Others be 5-year select and ultimate and PF and TRS as service based.

Payroll growth is the growth of the payroll of the whole system, while salary growth is each individual's salary. Buck proposes eliminating the 4.25% payroll growth assumption given that this is a closed plan. Buck is proposing that the unfunded liability be amortized as level dollar. GRS strongly supports this proposal as it reflects the diminishing nature of the plan.

GRS agrees with Buck's work in terms of mortality. The prior assumptions were not as rigorously separated, but Buck has separated them by group. MR. FORNIA stated the most important thing in terms of mortality is mortality after retirement because that determines how long a benefit is paid. GRS suggests that this be looked at more carefully for PF.

Buck developed retirement rates based on age. They split the group male/female and whether the employee is eligible for a non-reduced benefit or a reduced benefit for retiring early. MR. FORNIA suggested that Buck look at years of service because that tends to be more accurate in predicting retirement rates.

Current rates for turnover, which is withdrawal or termination, are based on age and gender. GRS suggested doing gender distinct analysis and Buck agreed. GRS agrees with the proposed changes in turnover rates. Buck is doing select and ultimate groups. The select period is the first period of a job when people are more likely to quit, and the ultimate period is longer-term. Buck is using 8 years for the TRS select period and 5 years for PF and Other select period. GRS suggests that these terms be examined when the next Experience Study is prepared.

MR. FORNIA had no concerns with the disability analysis conducted by Buck.

MS. THOMPSON stated the largest and most general recommendation regarding healthcare is to move toward using actual data. The uniqueness of Alaska's healthcare system makes use of actual data more important. The State will have to work with providers to get data monthly. GRS recommends that the incurred but not reported figure be based on actual data rather than using the three-month average figure. GRS also recommends that the State obtain Medicare status in order to further refine the age-graded data because costs of healthcare tend to go up as people age. The State wants greater claims and enrollment data so that claim costs can be developed based on Alaska's experience. Currently healthcare inflation is reset each year to 9.5% and Buck has agreed to not reset it each year.

Building from an historical claims base gives credibility weighting to each year, but it could be that the most recent year is the most credible. Therefore, credibility weightings are needed in projecting claims costs. Buck is changing their "blend and trend" method of projecting claims to using credibility weightings. GRS recommended using credibility weighting and changing the "blend and trend" method. MS. THOMPSON encouraged that when an assumption is changed, such as the resetting of healthcare inflation, there is an explanation. She was uncertain whether it is realistic for retiree contributions to go up to 10.2% and then down again and then fluctuate year by year, and suggested there also be an explanation for this because it is critical to valuating the employer liability. She recommended that the dental, visual and audio (DVA) liabilities need to be removed or the contributions included.

The plan currently uses the Projected Unit Credit (PUC) actuarial cost method. Buck is proposing to change to Entry Age Normal (EAN); GRS supports this suggestion because EAN is the most stable of all funding methods. The concern is that as average age increases in a population, so does the cost under this funding method. She reviewed a comparison of costs as a percentage of pay using the PUC method versus the EAN method; the EAN method is more stable.

MS. THOMPSON stated that GRS is in concurrence with the Buck Experience Study. They found that it is reasonable and that the proposed assumptions are reasonable and appropriate, and they support Buck's proposal to remove payroll growth and to change the funding method to EAN. She reiterated that no two actuaries will choose precisely the same assumptions.

MR. BADER asked if the move to EAN will mean another 2% increase in costs in the first year. MR. FORNIA explained this is the average age of the entire group. MR. BADER asked if this would cause a contribution rate increase. MR. FORNIA thought it might, but indicated that Buck would address that in their presentation.

MR. SEMMENS asked, if GRS were engaged to explain how to reduce the unfunded liability over time, what areas would be most susceptible to achieving that result. MR. FORNIA replied that the plan cost depends on what benefits are provided; what actuaries do is essentially timing. He summarized that there is not much to do to reduce costs without reducing benefits. MS. THOMPSON noted that the first step toward addressing unfunded liability has been taken by bringing the assumptions up to date.

MS. HARBO asked if the DVA liabilities have been included with medical in the past. MS. THOMPSON replied that they were included with medical in the most recent valuation, but she could not comment on previous valuations. In the Experience Study, Buck noticed that DVAs were included. MS. HARBO asked if Buck and GRS received copies of the renewal report from Deloitte & Touche that analyzes the healthcare program. MS. CARPENTER stated that this year's report is not yet finalized. MR. FORNIA stated that GRS did not review those reports.

MR. SEMMENS noted that in 2002 the actuary said that the rate would be 6.77% for the next 20 years. Time after time there is more and more bad news. He views this Study as bad news even if in hindsight the ARMB did a good job raising rates. He asked how other entities deal with the problem of unfunded liability. MR. FORNIA responded that the most significant bad news in the last few months is that the nature of the plan being closed requires more rapid funding of the unfunded liability. Level dollar amount is required if there is not an increasing payroll, which is the case with a closed plan. When a plan is ongoing, it is reasonable policy to continue to pay off unfunded liability over the future. When a plan is closed, there is less of a future. He stated that not much could be done to address unfunded liability other than measuring what has happened versus what was projected and make adjustments; Buck has done that. MR. SEMMENS stated that the bad news is that the unfunded liability would have gone up substantially had these assumptions been adopted June 30, 2005. MR. FORNIA remarked that the total contribution goes up slightly, but not substantially. He explained that the unfunded liability is the amount that the plan is "off target." There is no true measured liability. The amount of the liability is a result of the actuarial method. Different funding methods that target the same benefits will create different unfunded liability figures. The total contribution is the true measure of how much the plan costs.

MS. HARBO noted that, when Buck replicated Mercer's 2004 valuation and presented theirs, they did not present Mercer's non-medical benefit funding ratio. Her concern is how Mercer calculated that non-medical benefit funding ratio. She noted that she compares TRS to other states that do not pre-fund healthcare. When she looked at Mercer's 2004 valuation, they had a TRS funding ratio of 91% without health care and 119% for PERS. In March, Buck's TRS funding ratio for non-medical was 74% and for PERS was 85%. She spoke with Buck on September 18th and asked how Mercer made their calculation and she was shown that Mercer calculated the non-medical benefits by adding the healthcare assets and pension assets and dividing only by the pension liability. She asked if this method was wrong and produced false numbers. She noted that the unfunded liability for CalSTRS is $20 billion but their funding ratio is 86% and they do not pre-fund healthcare. She thought the biggest part of Alaska's unfunded liability problem is healthcare. She noted that the total unfunded liability for PERS and TRS is $2.2 billion for pension, so the rest of the $6.9 billion is healthcare. She remained concerned that misinformation has existed for years. MR. FORNIA was uncertain how healthcare has been calculated. He asked if healthcare assets are only available for healthcare benefits.

COMMISSIONER NORDSTRAND understood the assets are not separate; the liabilities are collective and the states that have not been looking at it collectively are going to have to begin doing so. He thought it might be just as appropriate to determine the funding ratios of healthcare liabilities by removing pension costs from past service cost. It could be that healthcare is 98% and pension is 45%, for example. MS. THOMPSON stated that the underlying structure and data and how people behave in healthcare is different than pension, so the decision-making process will be different. For that reason alone, those numbers should be seen differently. COMMISSIONER NORDSTRAND stated that healthcare is the only expenditure component that can truly be managed. MS. HARBO noted that when California has to start booking the Other Employment Benefits as a liability it will not affect CalSTRS funding ratio because there will be two separate accounts. She wondered whether Buck's March and June presentations regarding healthcare were right, if the DVA liabilities were included. MR. FORNIA agreed with

Trustee Harbo's basic premise that what makes Alaska's system look worse than other states is healthcare. He stated that most states deal with healthcare liabilities separately from pension.

MS. HARBO asked if healthcare assets should be included with the pension assets, which neither Buck nor Mercer did. COMMISSIONER NORDSTRAND noted that there is no separate account for healthcare, which is paid out of premiums. MS. CARPENTER stated that assets are both pension and healthcare and the thing to do is look at the percentage that is attributed to healthcare. When Buck took over the actuary function, they initially thought there were two asset bases, for healthcare and pension, and they were told to remove that ratio from the valuation. MS. HARBO asked if TRS would be 91% funded if non-medical benefits are not included. MS. CARPENTER stated this has not been analyzed because the assets cannot be separated. COMMISSIONER NORDSTRAND commented that healthcare benefits cannot be reduced, just as pension benefits cannot be reduced. MS. HARBO explained she wanted this analysis in order to compare the Alaska system to other state systems. COMMISSIONER NORDSTRAND stated that the pensions in the two systems could be determined, but that would not address the total unfunded liability. The State will always have the obligation for Tier 1, Tier 2, and Tier 3 in PERS. MR. WILLIAMS noted that for purposes of comparison it would be most realistic to convert other state's systems to Alaska's by including their medical liabilities.

COMMISSIONER NORDSTRAND <u>moved to accept the Actuarial Review of Experience Study 2001-2005 prepared by Gabriel Roeder Smith & Company</u>. MS. HARBO <u>seconded</u>.

Without objection, the motion passed unanimously.

11. Experience Analysis Report

For more information on this presentation, please refer to the document entitled "State of Alaska Retirement Systems, Presentation to the Alaska Retirement Management Board, 2005 Actuarial Experience Analysis Results" prepared by Buck Consultants and kept on file at the ARMB offices.

DAVE SLISHINSKY and MICHELLE DeLANGE with Buck Consultants presented to the Board. MR. SLISHINSKY stated that Alaska is ahead of many other states in that it includes its medical liabilities, as well as by having two independent actuaries review its valuations. He explained that the purpose of an experience analysis is to compare actual plan experience with the actuarial assumptions used in the valuation. The assumptions are used to predict the amount of future benefit payments and the value of those payments. From year to year, the experience study is to compare the actual plan experience with the actuarial assumptions used in the valuation. Changes are recommended if there is sufficient data to show a difference between expected and actual experience, or if future experience is likely to be different given recent trends.

MR. SLISHINSKY explained these assumptions are used to forecast the amount of future benefit payments (demographic assumptions) and the value of those future benefit payments (economic assumptions). Assumptions should be "best guess" and conservative based on the Board's fiduciary responsibility. Buck uses a conservative approach that sets mortality rates 5-15% more conservative than actual experience and 10% conservatism in withdrawal rates to counteract losses that can be measured from year-to-year due to individuals who rejoin employment and pay back contributions. All assumptions should be explicit and individually reasonable.

PERS and TRS last performed an experience analysis of assumptions in October 2000. Based on statute, the ARMB must perform this analysis a minimum of every four years. Most systems perform this analysis every 3-6 years; MR. SLISHINSKY favored a 5-year period because a longer period lends more credibility.

MR. SLISHINSKY reviewed the proposed economic adjustments. Inflation is consistently applied to all areas of the valuation where it is appropriate, including investment return, salary increases, and COLA. Real returns should reflect the asset mix, given that the majority of the return is attributable to asset allocation. Assumptions should reflect the benefit payment period, consider recent trends, and consider future expectations.

MR. SLISHINSKY explained that the real rate of return is the investment return rate, less the inflation rate. The real rate of return is the reason to pre-fund benefit payments. He noted that inflation has fluctuated in the five 10-year periods going back to 1957 so the actual annual rate of inflation was 1.78% in 1996, 5.8% in 1976, 6.77% in 1986, 3.52% in 1996 and 2.60% in 2006. Over the entire 50-year period the mean rate was 4.11%. The assumed rate Buck is using is 3.5%. No change is being recommended to this rate. The company's policy is to set inflation rates between 3% and 4%.

MR. O'LEARY noted that a closed group is different than an open group. With an ongoing group, it can be reasoned that if inflation is higher, liabilities can grow faster, but on the investment side there would be a higher nominal return, creating some offset. In a closed group, if inflation estimates are wrong, the consequences could be greater. MR. SLISHINSKY stated that in a closed group the system matures more rapidly; that is, the extent of the liability to the retiree group grows. Any actuarial gains or losses on investments will have a greater impact on the unfunded liability.

MR. SLISHINSKY explained that Buck utilizes a building block method in developing the investment return assumption, based on individual asset class allocation and expected real rates of return. In the end, the total real rate of return is 5.15%, to which 3.5% inflation is added, to yield a gross return rate of 8.65%. DR. MITCHELL asked if standard deviation is looked at for each asset class. MR. SLISHINSKY replied that would be done in an asset liability modeling study. He stated that Buck could run statistical analysis on the ARMB's asset allocation to provide additional information. This would be the expected rate of return as opposed to an analysis of how much risk there is in the portfolio. DR. JENNINGS asked where this return would lie in the actuarial range. MR. SLISHINSKY stated that the range varies by asset class; it would be less for fixed income, short-term investments than for riskier investments. MR. O'LEARY presumed that the expected real rates of returns are very long-term in nature and not arithmetic average real rates of return. MR. SLISHINSKY stated this is correct.

MR. SLISHINSKY stated there are investment expenses typically paid by the assets. Those active expenses are viewed as being paid by the additional expected return. MR. O'LEARY believed it is the norm in the industry to look at absolute return and private equity as net of those expenses; otherwise it is a function of the size of the plan. He asked if these real return estimates are net of reasonable expenses. MR. SLISHINSKY replied that they are net of reasonable investment expenses. Recent administrative expenses are also viewed vis-à-vis the plan and those are netted out of the gross return. Added to this is conservatism at (0.34%), which produces an assumed rate of return of 8.25%. MR. O'LEARY understood that if the Board concluded that the fees associated with assets like private equity, real estate, and absolute return were reasonable, but for large cap equity and small cap equity they had to take some investment expense off to be comfortable with the number, so long as that was less than (0.34%), it would comport with Buck's analysis. MR. SLISHINSKY stated that this analysis supports the 8.25% long-term rate of return assumption. MR. O'LEARY noted that CAI's expected rate of return is 8.05% as opposed to 8.65%, which he attributed to the difference in the expectation of future inflation between CAI and Buck. MR. SLISHINSKY stated it is not surprising that Buck's real rates of return are comparable to real rate of return expectations of investment consultant firms, and the difference tends to be the inflation rate.

MR. SLISHINSKY stated that all of the economic assumptions are the same for TRS, PERS Others, and PERS Peace Officer/Firefighter except for productivity for the latter; Buck is recommending that the productivity rate be 0.50% for all groups. The combination of the inflation and productivity produce an economic portion of salary scale of 4.0%.

MS. HARBO stated it would be helpful to have a table showing the change in the funding ratio and employer contribution rate as a result of the new assumptions.

MR. SLISHINSKY reviewed an historical summary of investment returns from 1991 to 2005 for TRS in comparison with the expected 8.25% rate of return. During that period there is nine times that the rate was above the 8.25% and five years when it was below. The mean rate was 8.66% after investment expenses.

MR. PIHL asked what the return was for FY06. MR. BADER replied that it was around 9%. MR. SLISHINSKY noted that this analysis looked at what would be the normal long-term rate of return under the current policy of 8.65%. MR. O'LEARY noted that the interest rate environment at the beginning of that period was closer to 7% on bonds.

MR. WILSON noted that the 10-Year Treasury bill is 4.60% today. MR. O'LEARY thought this gets to the issue of what is future inflation. If future inflation is comparable to what has been experienced, it is reasonable to expect that bond rates will be higher in the future than they are currently. MR. SLISHINSKY noted that actual CPI has been 2.8% over the last year, fueled mostly by higher energy prices.

MR. SLISHINSKY stated PERS has a similar pattern. There is data back to 1993; in 7 years the return was higher tan the 8.25% assumed rate and 4 years were lower than the expected rate of return. The mean for PERS was 8.52%.

MS. DeLANGE next reviewed decremental assumptions. She explained these assumptions are used to quantify the amount of expected future benefit payments. Buck generally follows the experience, but includes a margin to make the assumption conservative. Buck considers the previous experience analysis to see if there are continuing trends. MS. DeLANGE stated there is no one right set of assumptions. Special events that occurred during the study period are factored in. She noted that while actuarial math is a science, its application in the real world is an art.

MS. DeLANGE began with a review of pre-retirement healthy mortality assumptions. This assumption looks at deaths prior to retirement. Generally the assumption should have a 10% cushion to allow for mortality improvement. TRS uses the 1984 GAM table; however, the actual male and female deaths were much lower than expected, indicating that the mortality rates were too high. There are several ways to adjust the mortality rates to reflect the experience. One is to apply a factor to the current table, which was done. For male TRS members, rates were decreased by 40% and for female members rates were decreased by 45%. MS. HARBO thought the decrease was 39% for males and 34% for females, but the rate of 40% decrease for males does not comport to the tables in the back of the Study. MS. DeLANGE explained that the rates are decreased by taking 60% of the table. MS. HARBO thought the male and female rates were reversed. She thought that each was decreasing by less than 40% in any case. MS. DeLANGE explained that the tables in the Experience Study are current, so the presentation is incorrect. A 55% factor was applied to the male table for a 45% decrease, and a 60% factor to the female for a 40% decrease.

MR. O'LEARY asked if there is a best practice for adjusting mortality; is there a newer mortality table that is more commonly used. MS. DeLANGE replied that mortality can be adjusted by updating the table, using a new table, or adjusting the table using a set back or set forward. MR. O'LEARY asked if there is an advantage to one approach versus another. MR. SLISHINSKY replied it depends on the differences in the tables and the data used to develop the tables. The RP2000 table is primarily based on data collected from corporate pension plans. MR. SEMMENS noted that the press will often note that the 1994 mortality tables are being used, so from that standpoint using later data or putting a different label on the table used would be more credible. He felt it would be useful to clarify that the tables have been adjusted to 2005 experience so the public knows. MS. HARBO noted that when Mercer did the last experience study in 2000, they changed from the 1984 table to the 1994 table and it impacted the employer contribution rate by 7.26%. MR. SLISHINSKY noted that the pattern of mortality in all of the tables remains the same. Those patterns do not tend to change much from one table to another. The difference in life expectancy for males versus females has reduced. MS. HARBO asked if the RP2000 table is used for retirement plans. MR. SLISHINSKY thought this is the case. MS. HARBO asked why that table is not used for the Alaska system. MR. SLISHINSKY replied that the suggested approach fits the actual data. There is no pro or con with regard to using the new table. VICE CHAIR TRIVETTE recalled that in the first meeting with Buck last October Buck said it would adjust the 1994 table. MR. SLISHINSKY stated that Buck is using that table and increasing the set back on the post-retirement mortality table, which increases life expectancy in the assumptions. VICE CHAIR TRIVETTE asked if this method is more statistically accurate. MR. SLISHINSKY replied that it fits the experience very well.

MS. DeLANGE noted that for PERS and Others the male and female mortality rates were decreased by 58%. For the PERS Peace Officer/Firefighter there were 4 deaths while 17 were expected. Because there is insufficient experience, no change is recommended. MR. SLISHINSKY noted that the number of people participating in this group is much lower.

MS. DeLANGE next reviewed postretirement healthy mortality. For TRS the actual number of deaths was lower than expected, so the mortality table will be adjusted with a setback of 3 years for males and 1 year for females. This will significantly impact TRS rates. MS. HARBO noted that there were more female deaths, but there is still a setback. MS. DeLANGE explained that Buck wanted a greater cushion in that group to avoid surprises in the future.

MS. DeLANGE stated for PERS Others the actual mortality was greater than expected, but it was close, so no change is recommended. No change is recommended to the Peace Officer/Firefighter group, although actual deaths were lower for males and higher for females. No changes are recommended to postretirement disability mortality either.

MS. DeLANGE reviewed select withdrawal assumption. The select period is 8 years for TRS and 5 years for PERS. This is to capture higher rates of turnover during the first years of employment. To be conservative, a 10% cushion is desired. For TRS the actual number was much higher, so the rates for males will increase by 50% and for females will increase by 35%. Increasing turnover rates will decrease costs because it stops members from accruing more benefits or retiring at an early age. For PERS Others no changes are recommended to the male rates, but both pre and post age 35 female rates will be increased by 5%. For the PERS Peace Officer/Firefighter group, the actual numbers were higher than expected so male rates will decrease by 5% and female rates will increase by 5%.

MS. DeLANGE next reviewed the ultimate withdrawal assumption. For TRS the actual rates were higher than expected, so those will be increased 25% for males and 10% for females. For PERS Other the rates will increase by 10% for males and 25% for females. For Peace Officer/ Firefighter rates are increased 60% for males and 100% for females.

Disability assumptions were near actual numbers for TRS; no change is recommended for males and a 10% decrease is recommended for females. For PERS Others the actual number of employees becoming disabled was higher than expected, so those rates will increase 15% for males and 5% for females. For PERS Peace Officer/Firefighter no changes are recommended.

MS. DeLANGE next reviewed retirement rate assumptions. The current rate assumption was based only on age. Buck looked at splitting these between male and female and between reduced and unreduced retirement. The actual experience for TRS was much higher than expected for both males and females; these rates are being raised on both a reduced and unreduced basis. VICE CHAIR TRIVETTE asked what is the impact of this change. MS. DeLANGE replied that it is one of the more significant factors that will increase the contribution rate. MR. SEMMENS thought there may be differences between Tier 1, 2 and 3 employees. MS. DeLANGE explained that looking at reduced and unreduced implicitly looks at tiers. VICE CHAIR TRIVETTE asked how this could be explained to an employer. MS. DeLANGE explained that Tier 1 is eligible for unreduced at age 55 and Tier 2 is not eligible for unreduced.

MS. DeLANGE stated PERS Other had more retirements than expected, so an increase is proposed for both reduced and unreduced rates. VICE CHAIR TRIVETTE asked why the rates for retirement were so inaccurate. MR. SLISHINSKY replied that the answer to this question is beyond the data analysis. There would need to be an investigation into why people are retiring.

MS. DeLANGE noted that PERS Peace Officer/Firefighters have more actual retirees than expected, so rates are to be increased.

MS. DeLANGE lastly reviewed the salary scale assumption, which is comprised of merit and productivity. The actual salaries for TRS were higher during the first 15 years than anticipated. Buck proposes to increase those rates for the first 15 years. For PERS Others the actual rates were slightly lower before age 40 and after age 55 and higher during the select period. The select period rate will be increased and the ultimate rate will be decreased for before age 40 and after age 55. For Peace Officer/Firefighter a slight increase in rates for the select period. The fact that this was a low inflation period was taken into account implicitly.

BREAK 3:55 p.m. to 4:05 p.m.

MR. SLISHINSKY began with a review of other demographic assumptions. He explained that there is a code that indicates whether or not an employee is married, which determines whether or not there is a death benefit payable to a surviving spouse. Buck typically uses an assumption for the percentage of those expected to be married at death. Buck proposes changing this assumption to a flat percentage married assumption of 85% male and 75% female for TRS and 80% male and 70% for PERS Other and for Peace Officer/Firefighter.

MR. BADER asked for an explanation of the assumption of marital status. MR. SLISHINSKY explained that an employee who is not married today could marry and die before the end of their employment and the benefit could be payable to the surviving spouse. Buck prefers using a flat percentage to assume the extent to which today’s members will or will not be married at their expected time of death. MR. BADER noted that if they are married at retirement, even if they are unmarried at the time of death, the assumption would be that there is a surviving spouse benefit. MS. DeLANGE explained that this assumption is used for active employees only; for retirees, actual data is used.

MR. SLISHINSKY stated a four-year age difference was used in setting the ages of spouses and Buck proposes going to a three-year age difference.

There is also an assumption for residency, in other words how many retirees will retain residency and receive an additional COLA after retirement. In reviewing the data, the recommendation is changing TRS from 65% to 60%, PERS Others from 68% to 60%, PERS Peace Officer/ Firefighter from 68% to 60%. MR. WILLIAMS thought residency statistics were higher than that. MS. DeLANGE stated that this is based on actual retiree data. MR. WILLIAMS asked how closely the assumption relates to the current actual. MR. SLISHINSKY replied that the actual rates are 56% for TRS, 58% for PERS Other, and 58% for PERS Peace Officer/Firefighter. Buck is proposing to reduce the rate to 60%. MR. TRIVETTE suggested that for future presentations, there also be a column showing the actual rate.

MR. SLISHINKSKY stated that part-time employees are valued differently, using service credit each year to project their benefit. Currently the assumption is that the annual service credit for TRS part-time employees is 0.55 years, for PERS Others 0.60 years, and for PERS Peace Officer/Firefighter .60 years. In looking at the credit service data for part-time, no change is proposed for TRS, a slight increase is proposed for PERS Others to .65, and for Peace Officer/Firefighter an increase to 1.00.

Changes are recommended for PERS but not TRS for occupational versus non-occupational death and disability benefits. PERS Others is currently 35% occupational and the recommendation is 50%. For PERS Peace Officer/Firefighter, the recommended change is from 85% to 75%.

There is currently an assumption that all married employees have a dependent child and that the child is dependent forever. Buck is proposing that all married employees be assumed to have 2 dependent children from age 25 through 45. The number of unused sick days is assumed at 4.7 days for TRS, an increase in liability of 2.73%. There is insufficient data to determine whether this assumption is reasonable, so no change is recommended. MS. TAYLOR asked why this assumption is for TRS only. MS. DeLANGE explained that TRS grants past service for sick days and PERS does not.

VICE CHAIR TRIVETTE asked if the areas where there is no data to analyze would be corrected in the future. MS. DeLANGE noted that some data is available, but it was not collected. Buck will collect that data now so that in four years there will be more data for a recommendation. She stated that this data is very clean compared to other states she works with.

MR. SLISHINSKY stated that the current actuarial cost method is the PUC method and Buck is recommending EAN. Under the PUC, benefits are funded as they accrue, resulting in an increasing normal cost. The EAN allows a more level contribution as a percentage of pay. This results in a more stable funding pattern for the active members. This is particularly important in a closed group where the normal cost rate is based on the entry age of employees, not necessarily their current age. Under the EAN, the unfunded liability is adjusted by actuarial gains/losses each year and it is amortized, in this case, over 25 years. No payroll increase is recommended in this closed group.

VICE CHAIR TRIVETTE noted that the ARMB received data about how many people were hired since July 1, 2006 under the new as opposed to the old plan. He asked if Buck would use that data. MR. SLISHINSKY stated that data could be collected, but the question is what impact that is likely to have long-term on total payroll.

MR. O'LEARY asked if the 25-year amortization is a rolling period. MR. SLISHINSKY replied that is rolling on the new gains/losses experienced in any particular year. Any previous gains/losses are being amortized over the remaining period.

EAN is the most common method used for public pension plans because most public systems pay for pension benefits using percentage of pay contribution. The EAN method is recommended for all plans.

MS. DeLANGE next reviewed post-employment healthcare cost adjustments. These factors are used to quantify the amount, not the expected value, of the healthcare cost. Trends of increases in healthcare costs cause attention to be paid to the future, not only what has been experienced in the past. Buck analyzed medical and prescription costs separately. It is also important to consider the impact of Medicare and the costs of retirees who are and are not eligible for Medicare, those eligible for Medicare Parts A and B, and consider that Medicare Part D will impact prescription drug costs after age 65. The analysis considers the impact of aging, adjusting the expected benefit payments up as the population ages. Medical inflation is higher than general inflation. Buck is requesting more information from Premera than was received in the past from Aetna. Buck has requested that Aetna provide better splits for past data.

MS. HARBO asked what figure is used for prescription inflation. MR. SLISHINSKY replied that a figure of 14% is used for the first year and then it trends down. MS. HARBO asked if that is realistic. MR. SLISHINSKY explained that there is a general expectation of what percentage of GDP is represented by healthcare. If prescription costs were calculated to rise at the rate currently being experienced, it would be unreasonable.

MS. DeLANGE reviewed the current and the proposed base cost. The medical cost for pre-65 increased by 2%. She noted that the ADV claims were included in the Aetna figures; those will be removed from liabilities going forward through Premera. This had the impact on healthcare liabilities of a 2% increase. The proposed rates consider Medicare eligibility and a weighting of four years of claims data as opposed to three. The Medicare Part B only group costs increase 15%, but the Part A and B group decrease by 43%. Going forward this number will be more accurate. Drug costs increased by 9.1%. No changes are being made to the lag factors, aging factors, trend rates, or contribution rates. Contribution rates will be refined as Buck works with the DR&B as its health and welfare consultant.

VICE CHAIR TRIVETTE asked if there is an expense to having Medicare D; he thought that was a rebate so it should be shown a negative number. MS. DeLANGE agreed that this is the value of the subsidy, which is a positive number.

MR. SLISHINSKY explained that the change in assumptions, change from PUC to EAN, change in amortization method, and change to level dollar affect the plan costs. The increase to PERS is $14 billion from $12.8 billion and for TRS to $7 billion from $6.5 billion. The unfunded liability for PERS is $5.5 billion and for TRS is $3.1 billion. The funded ratio for PERS declines from 66% to 60% and for TRS from 61% to 56%. The employer cost rate changes from 14.48% to 15.13% for PERS and from 12.56% to 9.98% for TRS. The past service cost rate changes from 18.03% to 31.51% for PERS and from 29.70% to 49.58% for TRS. The total employer contribution rate for PERS goes from 32.51% to 46.64% and for TRS from 42.26% to 59.56%.

VICE CHAIR TRIVETTE recalled that 7% in PERS and 12% in TRS is a result of this being a closed fund. MR. SLISHINSKY agreed that changing the amortization rate to a level dollar amount and eliminating the payroll growth assumption resulted in these rate changes. VICE CHAIR TRIVETTE asked if the 7% and 12% were subtracted from the employer contribution rate, as well as the current assumption, the impact of the changes in assumptions will be what remains. MR. SLISHINSKY stated the letter from Buck was based on the change from the current rate. The impact will depend on when the changes are implemented.

MR. SEMMENS asked if the change in the unfunded liability of $1.1 billion has nothing to do with the change in the amortization method; that only affects the rate. MR. SLISHINSKY indicated this is correct. The change in assumptions and change in the cost benefit is what results in the change to the unfunded liability.

MR. SLISHINSKY reviewed the cost impact of the proposed changes in actuarial assumptions between PERS Other and PERS Peace Officer/Firefighter. The PERS total from current to proposed assumptions is from 32.51% to 36.29%, the change to EAN from PUC goes from 36.29% to 37.49%, and the change in the amortization method goes from 37.49% to 46.64%. The latter change is over 9%. When a larger unfunded liability is amortized, due to the fact that the assumptions and cost method are already changed, the amount of the change in employer contribution is more as a percentage of pay. If the amortization method had been changed first, the rate would be different. VICE CHAIR TRIVETTE asked if the change is from 9.2% to 14.3%. MR. SLISHINSKY replied that the beginning and ending numbers would be unchanged, but there would be different intermediate changes in the employer contribution rate. For TRS the change is 42.26% and the assumptions go up to 46.45%; the change from PUC to EAN goes down to 45.32%; the amortization method change increased to 59.56%. The change in the payroll growth assumption is the most dramatic in terms of impacting the employer contribution rate; the ARMB has already adopted that change.

MR. PIHL noted that at the September 11, 2006 meeting the ARMB was given a schedule indicating that TRS would go to 54.03% primarily as a result of level funding. The changes to assumptions and the change to EAN resulted in a contribution rate change from 54.03% to 59.56%. MR. SLISHINSKY indicated this is correct, and noted that it had already been increased from 42.26% to 54.03% because of the change in the amortization method by removing the payroll growth assumption.

COMMISSIONER NORDSTRAND noted that the contribution rate was increased from 39% to 54%. He understood these assumptions would impact the FY09 rates and that this analysis is of the impact on the FY08 rates; this is a forewarning of the future. MR. SLISHINSKY stated the expectation is that these rates would be applied to FY09; these changes would be effective for the June 30, 2006 valuations, not the June 30, 2005 valuations. COMMISSIONER NORDSTRAND understood that these calculations were demonstrative of what might be expected. MR. SLISHINSKY noted that the applications of these changes on new results would be slightly different.

MR. BADER asked if earnings are being averaged over five years. MS. DeLANGE replied that the five-year smoothing method is retained. MR. BADER noted that the recent good years of performance are not fully recognized in this analysis. MR. SLISHINSKY replied that the years used in this analysis include losses. MR. BADER noted that the inclusion of more recent years would temper this rate a bit.

MS. MILLHORN noted that in 2000 Mercer only looked at a two-year period. She asked if that is a credible period. She also asked what would be the implications of the fact that some of the assumptions did not occur in 2000. MR. SLISHINSKY replied that he has never done an experience analysis based on only two years. For larger systems he would want to wait four years or more. The fact that the assumption changes in 2000 were based on a two-year period could explain why there are greater changes now after a longer period of time.

COMMISSIONER NORDSTRAND noted that one of the greatest challenges of the ARMB is to convince policy makers of the need to support the full actuarially calculated rate. There has been discussion in the media about the actuaries and the accuracy of the process. He is frustrated because while concerns are voiced in the media, none of the media representatives are at the meeting to understand what has been done. He asked if Buck feels that Alaska should be confident that its system is more likely to create accurate results, given that there is first an actuary to do the valuation work and then a second actuary to review assumptions and valuations. MR. SLISHINSKY stated this process is more rigorous than other states. Most states have an audit of their actuary once every five years. That was done for Alaska in 2002 when Milliman was hired to look at Mercer's results. Most states also do a full replication of the results every five years. COMMISSIONER NORDSTRAND stated there has been a suggestion that the ARMB hire yet another actuary. MR. SLISHINSKY felt that if there is disagreement between the two actuaries, another actuary could be hired to "break the tie." Buck and GRS are mostly in agreement. MS. THOMPSON noted that the process is self-correcting each year so assumptions can be corrected over time.

MR. PIHL referred to page 38 of Buck's presentation and noted that the TRS current assumption is 42.26% and the proposed is 45.32%. If that increase is added to the 54.03%, the rate is 57.09%, which is 2.5% short of the 59.56% that is being recommended by Buck. MR. SLISHINSKY explained the difference is the increase in the unfunded liability based on assumption changes, which does not take into account the amortization method change. Because the analysis starts with higher unfunded liability, the amortization of that amount is more and it is, therefore, more as a percentage of pay. The previous figure was based on amortizing a smaller unfunded amount.

VICE CHAIR TRIVETTE noted that there is a cushion of 5-10% in many areas. He asked what would be the contribution rate if the cushions were not included. MR. SLISHINSKY stated that withdrawal rates could be higher than are proposed; the changes in mortality are intended to correct those rates; and the investment return inflation figure of 3.5% could be debated. Taking these out would reduce the costs shown. VICE CHAIR TRIVETTE asked what magnitude of reduction might result. MR. SLISHINSKY estimated there could be a reduction of 4.7% for PERS. He noted that there could be a statutory change to amortize over total payroll. There are questions as to whether or not that would be used for purposes of disclosure under GASB. But if the statute requires it be calculated that way, leaving in the payroll growth assumption would mean the cost starts out lower, but it increases over time. COMMISSIONER NORDSTRAND noted that, although the rate might go down it is applied to a larger number, so the amount owed by employers is the same. MR. SLISHINSKY stated that it would make a difference. He reiterated that using a smaller rate today results in more being paid tomorrow and since there is interest on what is paid tomorrow, the end total is higher. He again noted that the plan costs what it costs.

COMMISSIONER NORDSTRAND noted that given the relatively low amount of payroll that will be in the DC plan for several years, it is not going to generate much money in the short-term, but over time there is assumed growth and the percentage is taken off of the new DC plan payroll, it will generate more money. MR. SLISHINSKY stated that is correct. This is the methodology previously used when the plan was not closed because it was being amortized assuming that the payroll base would increase.

MR. SLISHINSKY lastly reviewed the total normal cost rates, which is down from 21.25% to 18.67% for TRS, up from 21.33% to 22.15% for PERS Others, and down from 21.29% to 20.57% for Peace Officer/Firefighter.

COMMISSIONER NORDSTRAND noted that there is often discussion of the $6.9 billion unfunded liability that is based upon June 30, 2005. Even without considering what happened in FY06, if these assumptions are adopted, the ARMB is stipulating that the unfunded liability should be $8.5 billion for the end of FY05. For this year, the system has not contributed the actuarially calculated rate. For the sake of the public dialogue, he would like some reasonable estimate of what the end of FY06 looks like. He felt there is some value in recognizing that the system is not funding at the actuarially calculated rate. He noted that the unfunded liability could be much higher for the end of FY06. MR. SLISHINSKY agreed that there would be growth in the unfunded liability at the next valuation. He offered to develop estimates of the FY06 number or provide a more accurate figure after the results of the valuation are available. COMMISSIONER NORDSTRAND felt this information would be helpful entering the January legislative session.

MR. WILLIAMS moved to approve Resolution 2006-30 to formally accept the experience study conducted by Buck Consultants as well as the recommendations for assumption changes to be used in the June 30, 2006 valuation. MS. HARBO seconded.

VICE CHAIR TRIVETTE noted there are suggestions by GRS to modify some of the assumptions. MR. PIHL heard GRS say that on an overall basis, the Buck study is good.

MR. SEMMENS commented that he does not like raising rates to these levels, but clearly the biggest complaint about the prior boards and past actuary is inaccurate information leading to lower than required contribution rates. He thought that to do anything other than support the rate increase is irresponsible.

By roll call vote, the motion passed unanimously.

19. Investment Actions

Large Cap Value Manager

MR. BADER stated the ARMB's portfolio is tilted to growth and a value manager is needed.

MR. SEMMENS moved to direct Callan Associates and staff to conduct a search for a large cap value manager and bring at least three candidates to the board for possible selection. MS. HARBO seconded.

Without objection, the motion passed unanimously.

TCW Energy Fund Approval

MR. BADER stated the ARMB participates in TCW's Energy Fund X. Presentations have been given by TCW on this fund. They have been doing this work for 24 years, have raised 13 funds totaling over $6.8 billion in capital commitments, and have made 180 energy-related investments in 22 countries. This manager has a very seasoned team. The previous board made an $80 million capital commitment to Energy Fund X. Energy Fund XIV has essentially the same mandate as Energy Fund X and staff feels it is important to act on this in an expeditious manner. The annualized performance since the ARMB's investment in Energy Fund X has been 10.3% net of fees.

COMMISSIONER NORDSTRAND moved to delegate authority to the CIO to commit up to $100 million to TCW Energy Fund XIV subject to due diligence and negotiation. MS. HARBO seconded.

MR. O'LEARY explained that TCW is one of the few entities that has this capability. It is important for the ARMB to understand that the nature of this investment is that money is called down periodically, as in most private investment programs. Investments are also liquidated and money is returned, so the ARMB is not adding $100 million to $80 million; the average invested with this manager is significantly less.

DR. MITCHELL favored this action.

By roll call vote, the motion passed unanimously.

Long/Short Equity Manager

MR. BADER stated at the education conference in New York there was a presentation on long/short investing, and this was also discussed in manager presentations at this meeting. There are a number of firms that have successful programs of this type.

COMMISSIONER NORDSTRAND moved to direct Callan Associates and staff to conduct a search for long/short equity investment managers and bring at least three long/short investment managers to the board for final selection. MS. HARBO seconded.

MR. O'LEARY stated that this manager will, on balance, have 100% of the portfolio committed to long equities, but will be investing something more than that in long equities and, to the extent there is an excess of 10% in long equities, will have a corresponding amount short. There will be some administrative complexity with this because it involves the need for a prime broker, but it is an opportunity to, while not radically improving return, to provide a slightly greater active management premium. MR. O'LEARY reviewed the process by which candidates will become finalists to appear before the Board for selection.

MR. BADER noted that Mr. O'Leary has a daughter working for one of the firms that offers this product. MR. O'LEARY explained that his daughter is a partner in Goldman Sachs. Her responsibility is client service for US institutional clients. While he is the chair of the Search Committee at CAI, whenever there is discussion of Goldman Sachs, he does not participate.

Without objection, the motion passed unanimously.

Asset Allocation Adjustment

MR. BADER noted that at its last meeting the ARMB set the contribution rate for next year and anticipated that there would be some effort to have an additional $500 million appropriated to the system next year. The ARMB could have over $1 billion more in assets to manage. The highest real return comes from returns in alternative areas, such as real estate, absolute return, and private equity. These strategies take a long time to deploy money. Rather than waiting for a new asset allocation in March 2007, the ARMB is being asked to change the upper band of the asset allocation so that if investments are identified, managers can be engaged.

MS. HARBO moved to adopt Resolution 2006-31, increasing the proposed investment ranges for real estate and absolute return from +/-3% to +/-4% and for private equity from +/-4% to +/-5% for the PERS and TRS retirement systems. MR. PIHL seconded.

Without objection, the motion passed unanimously.

MR. BADER noted that the Judicial System has a slightly different asset allocation, but this resolution addresses the same request.

COMMISSIONER NORDSTRAND moved to adopt Resolution 2006-32, increasing the proposed investment ranges for real estate and absolute return from+/-3% to +/-4% for the Judicial Retirement System. MS. HARBO seconded.

Without objection, the motion passed unanimously.

COMMISSIONER NORDSTRAND suggested that, given the assumptions adopted today and the thinking about the unfunded liability, perhaps there should be a press release from the ARMB that the new assumptions are adopted, describing what they are and why they are being adopted, and describing what that does to the unfunded liability. MR. BADER stated staff would work with the Chair on this request. COMMISSIONER NORSTRAND suggested that the release also point out that there are two actuaries.

RECESS 5:25 p.m.

ALASKA RETIREMENT MANAGEMENT BOARD
MEETING

Location of Meeting
Kenai/Denali Room
Anchorage Marriott Hotel
820 West 7th Avenue
Anchorage, Alaska

MINUTES OF
October 2-4, 2006

Wednesday, October 4, 2006

I. CALL TO ORDER

CHAIR SCHUBERT called the meeting of the Alaska Retirement Management Board to order at 9:02 a.m.

II. ROLL CALL

ARM Board Members Present
Martin Pihl
Sam Trivette
Gayle Harbo
Gail Schubert
Larry Semmens
Scott Nordstrand
Mike Williams
Bill Corbus

Consultants Present
Rob Johnson, Legal Counsel

IAC Members Present
Jerry Mitchell
Bill 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
Steve Sikes, State Investment Officer, Department of Revenue
Clay Cummins, State Investment Officer, Department of Revenue

Judy Hall, ARMB Liaison Officer, Department of Revenue

Department of Administration Staff
Melanie Millhorn, Deputy Commissioner, Department of Administration
Traci Carpenter, Director, Division of Retirement and Benefits, Department of Administration
Charlene Morrison, Chief Financial Officer, Division of Retirement & Benefits, Department of Administration

Others Present

14. Denali Advisors, LLC

For more information on this presentation, please refer to the document entitled "Presentation for Alaska Retirement Management Board" from Denali Advisors LLC, kept on file at the ARMB offices.

MR. BADER noted that the previous board wished to be aware of investment advisors in Alaska. Bob Snigaroff represents Denali Advisors, which is owned by Huna Totem Corporation, which is based in Juneau and Hoonah. Denali Advisors LLC established an office in Juneau in March 2005. Mr. Snigaroff grew up in Kenai and is an Alaska Native. The firm has over $1 billion in assets under management and is the largest Alaska Native and Native American owned asset management firm in the country. Bob Storer, long-time Alaska resident and former Executive Director of the Alaska Permanent Fund Corporation (APFC), serves on the board of the firm. Mr. Snigaroff is a former intern and employee of the APFC.

ROBERT SNIGAROFF, President and CIO of Denali LLC, stated the firm has deep Alaskan connections and is proud to have the name Denali Advisors. The firm is majority employee owned and has two backers. The firm uses quantitative techniques to build portfolios. At the end of September, the firm has a 10-year GIPS compliant track record. The company formed 5.5 years ago, after leaving an organization through a lift-out. The firm has a large roster of clients, the largest of which is the New Mexico State Investment Council with $250 million.

The firm's investment philosophy is heavily dependent on behavior. Investments are analyzed in terms of both quantitative characteristics and behavior. The firm looks for opportunities available as the result of mistakes and misbehavior of other investors. Asset management is viewed as information processing done more effectively. MR. SNIGAROFF remarked on the use of quantitative techniques in other industries. Denali Advisors LLC uses quantitative techniques to find under valued securities. Insight and judgment are also important to assess market prices and risk. The firm's approach is focused and the teams work closely with each other.

MR. SNIGAROFF reviewed a chart depicting the growth of value stocks, growth stocks, and small cap stocks from 1926-2005 to explain that value has out performed both growth and small cap over time. He noted that this analysis also depicts how investors have behaved/misbehaved and the opportunities available by the biased behavior of investors. He next reviewed trailing one-year earnings yield, noting that stocks with high earnings yield tend to out perform and those with low earnings yield tend to under perform. Low earnings companies did very well in the late

1990s. He emphasized that these premiums are dynamic. Denali Advisors tries to identify themes about which investors care and own those stocks.

MR. SNIGAROFF reviewed an analysis of the stocks in which the firm has invested. The analysis indicates that the stocks the firm liked best out performed the most. Denali takes some moderate sector bets. The firm's style is relative value done correctly, but not deep value. He noted that the firm has achieved higher returns with lower risk than the S&P 500. The firm has beaten the benchmark in seven of the nine calendar years it has been operating. Over a long period of time, Denali Advisors has good peer ranks, in the top quartile.

MR. WILLIAMS asked if there are industries where the firm is over weighted in sectors or industries compared to the market. MR. SNIGAROFF replied that as a value manager, the firm is over weighted in energy and financials. Denali owns securities that are typically in the value spectrum.

MR. SNIGAROFF noted that in the 1990s there was significant volatility even between stocks within the same sector. Denali Advisors had flat relative risk during these difficult markets, lower than the CAI median manager. During that period most managers unintentionally grew their risk while Denali Advisors maintained its risk level.

The firm is in the processing of hiring as it grows. MS. HARBO noted that Mr. Snigaroff and Vice President Mike Munson worked for San Diego County and San Diego has not done well in their pension investments. MR. SNIGAROFF stated he was the CIO at San Diego after leaving the APFC. MR. O'LEARY clarified there are two funds, San Diego County, which has not been in the news until the failures in the Amaranth hedge fund, and the City of San Diego. The City of San Diego has had issues with accounting. MR. SNIGAROFF felt that the investment side of the city's pension fund has been somewhat unfairly maligned. The troubles were more on the liability side. MR. O'LEARY remarked that some ARMB members might remember Dr. Bob Haugen, a former IAC member. He asked for an explanation of Dr. Haugen's involvement when Mr. Snigaroff was first developing the investment approach at the County of San Diego. MR. SNIGAROFF stated that he had a close affiliation with Dr. Haugen, who assisted in the formulation of the investment strategy used by the firm. A director of research was brought in from First Quadrant, which was a large asset management firm. Denali Advisors now has an Academic Advisory Board.

MR. BADER asked for additional discussion on Denali Advisor's association with CalPERS. MR. SNIGAROFF stated his background was with public pension funds when he formed Denali Advisors and he needed capital assistance to grow the firm. An investment was received from a private equity firm working for CalPERS. MR. O'LEARY clarified that the length of the record shown in Mr. Snigaroff's presentation is longer than the firm has existed; Mr. Snigaroff was managing a portfolio for San Diego County in this product and when this firm was formed, the County allowed him to continue managing it.

CHAIR SCHUBERT asked if the ARMB is further under weight value. MR. BADER replied that this is the case and yesterday the Board authorized staff and CAI to do a value manager search.

MR. SNIGAROFF stated there is no business his firm enjoys more than Alaskan business.

15. KPMG Audit Report

For more information on this presentation, please refer to the document entitled, "Public Employees' Retirement System, Invested Assets, June 30, 2006 an 2005 (With Independent Auditors' Report Thereon)," kept on file at the ARMB offices.

After introduction by SUSAN TAYLOR, KATHY PORTERFIELD with KPMG addressed the Board. MS. TAYLOR asked that there be clarification of how KPMG assures that the assets exist. MS. PORTERFIELD began by explaining that the audit is substantially complete with completion pending receipt of information on the alternative investment portfolio. Treasury staff is conducting final reconciliations at this time. She did not expect any audit adjustments would result from this process.

MS. PORTERFIELD explained there are four reports in the materials being distributed that depict the asset side only. There is an opinion from KPMG in draft; an unqualified opinion is expected. She alerted the Board to a new paragraph in the opinion that informs the reader that there are alternative investments in the financial statements and that they are estimated by managers and reviewed by management; because they are estimates they are not readily obtainable market values and they may be subject to more fluctuation or volatility than other estimates in the financial statements. This statement is required by a new audit standard.

MS. PORTERFIELD stated that no new accounting policies were adopted in 2006. KPMG did not find it necessary to propose any audit adjustments. There is a one-quarter lag on the information reported with regard to real estate, although a 12-month period is reported ending March 31. She noted there is a draft management letter in the materials that is the result of an evolution in audit standards. As alternative investments proliferate and grow more complex, more reviews are required of auditors. In the audit standard are recommended internal controls that audit firms feel their clients should have. The letter recommends that the Treasury Division examine existing policies and procedures with regard to the oversight and valuation of alternative investments. They could include more rigorous review of audit reports of these investments, ensuring that the audited financial statements are in accordance with generally accepted accounting principles, and reconciling from audited valuations to their own records. The Division and the Audit Committee were provided with example due diligence and oversight policies and procedures for their consideration.

TRUSTEE PIHL noted that Mr. Bader assured the Audit Committee that at its February meeting it would be presented with a plan to implement these recommendations on valuation assurances.

MR. TRIVETTE asked if the standards are clearly set out. MS. PORTERFIELD replied that she felt the standards are fairly clear and doable. She was aware that Ms. Taylor has had conversations with the Alaska Permanent Fund Corporation regarding this process. MS. TAYLOR added that KPMG is available to help and she appreciated the feedback they have provided on this issue.

MR. O'LEARY noted that this change has created a stir. The primary reason for the change is to develop greater confidence in the valuation of the assets. He noted that Dr. Mitchell has had recent experience with this and asked that he describe it. DR. MITCHELL explained that Boston Community Foundation was given these guidelines just before its audit was completed and there was an extraordinary effort to get this work done in time. The Foundation had to rebuild its files to show it had visited the managers and inspected what was possible to inspect. If actual names of investments of hedge funds were not available, descriptions of those investments were required, and the Foundation had to sign off on the correctness of these documents. MR. O'LEARY noted that, given the nature of the investments, making a determination of whether the valuation is reasonable requires extensive investigation. DR. MITCHELL agreed with this statement. He also noted that investment background and investment knowledge is needed in order to judge the value of the investments. MS. TAYLOR noted that the Board approved an additional $29,000 for due diligence travel for investment staff.

MR. TRIVETTE asked if there is sufficient staff to oversee this requirement. MR. BADER believed there is sufficient staff.

COMMISSIONER NORDSTRAND arrived at 9:40 a.m.

COMMISSIONER CORBUS asked for a description of the process undertaken to verify that all of the stocks and bonds in the portfolios are in fact owned, as well as the alternative investments, hedge funds, and real estate. MS. PORTERFIELD replied that prior to the new audit standard, KPMG confirmed everything directly with State Street, the custodian, and reviewed their audit report and internal controls. With the new audit standard the verification procedure is expanded to confirm ownership and ownership percentage with managers, holders, and mangers of private equity funds and to review written agreements that confirm what the State owns. The bulk of the assets are under custody with State Street and their auditors produce a report on the operating effectiveness of internal controls. There were no concerns with their operations, particularly with regard to custody or their ability to identify the assets as the State's.

MR. JOHNSON understood that the audit relies upon reports from others, in large measure. He asked how deep KPMG goes with respect to alternative investments, given that KPMG is reliant upon reports. MS. PORTERFIELD stated that if it is possible to confirm directly with the other party that the State owns a share of the fund, that third party verification is considered adequate with regard to ownership, combined with review of legal documents. With regard to valuation, more is required.

COMMISSIONER CORBUS asked regarding the income statement, what is done to verify that the State has received the income and dividends that are presented on the financial statements. MS. PORTERFIELD replied that State Street's auditors look at specific controls that are in place regarding dividends and when they are picked up on the customer's behalf. There is testing of the reconciliation process in Treasury and KPMG does analytical reviews as well. COMMISSIONER CORBUS asked if there is anything else the ARMB should know. MS. PORTERFIELD replied in the negative. She noted that there is open communication between KMPG, the Audit Committee, and staff. Staff has been very cooperative and they want to do the right thing. The investment staff has been vital in helping KPMG understand the investment issues.

MR. TRIVETTE asked if KPMG is involved in auditing funds from real estate. MS. PORTERFIELD stated the firm reviews audit reports from managers and ensures that the amounts are reflected in the State's reports as well. KPMG also ensures that the auditor is reputable and follows the correct accounting principles.

16. Real Estate FY07 Annual Plan

For more information on this presentation, please refer to the document entitled "Alaska Retirement Management Board, Real Estate FY2007 Investment Plan" dated August 2, 2006 and kept on file at the ARMB offices.

STEVE SIKES, State Investment Officer, and CLAY CUMMINS, State Investment Officer, reported to the Board. MR. SIKES began with a review of the value of assets. Referring to page 16 of the presentation, he explained that the core separate accounts are invested by four advisors that directly invest in properties for the ARMB. This portfolio totals 26 properties valued at $753 million. These investments are in high quality, well leased assets in good locations. This portfolio is not leveraged. The next segment of the portfolio is core open end commingled funds, which are high quality, well leased assets in good locations using the vehicle of institutional mutual funds; investment is done by JPMorgan Strategic Property Fund and UBS Real Estate Separate Account (RESA). These are very large funds. The next segment of the portfolio is Real Estate Investment Trusts (REITs), which is a portfolio of public stocks of real estate companies. This portfolio is internally managed and is valued at $102 million. The last segment of the portfolio is the non-core closed end commingled funds. The ARMB is invested in eight strategies and has committed $535 million, $194 million of which has been called for funding. He explained that open end funds are expected to continue in perpetuity. The closed end funds return capital to the ARMB for reinvestment.

MR. SIKES stated core separate accounts are unleveraged, core open end commingled use between 10-30% leverage, and non-core commingled funds use 65-80% leverage. He noted that investment in the Cornerstone Apartment Venture has been approved up to $55 million, but due diligence is still underway.

MR. SIKES next reviewed the attributes of the sub-portfolios and where they are on the risk and return spectrum. Core separate portfolios have the lowest risk, while non-core closed end commingled portfolios have the highest risk.

COMMISSIONER CORBUS asked for an explanation of the difference between core and non-core. MR. SIKES replied that core holdings are in good locations, typically leased, and has no leverage. Non-core is various value added strategies. Cornerstone is a cyclical market recovery strategy, Coventry is retail that is repositioned, ING does development, and Lehman looks at value added opportunities on a global basis.

MR. SEMMENS asked how risk is quantified in real estate and can it be compared to the S&P 500. MR. SIKES explained that core assets are investments in which the ARMB is directly invested and they are very liquid. Open end funds are a vehicle in which other investors are invested and there are rules about when investments can be made and when money can come out. MR. O'LEARY suggested that core real estate has a 7.6% return, and more aggressive strategies have the potential of a 10-15% return. Within the "plus" category, some of the more aggressive strategies are somewhat analogous to private equity. MR. SIKES agreed on both points. MS. YALONIS noted that generally speaking, the more dependence there is on growth to achieve return, the higher the risk; the more return that comes from cash flow coming from leases, the less risk is associated with that property strategy. From a stock perspective, core would be likened to value stocks and non-core would be likened to growth stocks.

MR. SIKES reviewed the current investment allocation within the real estate portfolio. The target is 70% core/30% non-core and the current mix is 84%/16%; adding REITs brings the overall real estate investment to 10% of the overall pension system assets. He reviewed a table containing estimates of what would be the real estate allocations over time if no new commitments or allocations are made over time. Total real estate as a percentage of the pension fund is expected to be roughly 10% at the end of FY07 and then begin to decline in FY08 due to the return of capital from non-core closed end commingled funds and growing pension fund assets. The core/non-core mix will be near the target in FY07 and then begin to drift to a higher core allocation in the out years. In the past, the invested level in real estate was below the target and now it is closer to target.

MR. SIKES stated that it is difficult for core managers to find opportunities that meet the ARMB's investment guidelines and criteria. At the portfolio level, the guidelines target a minimum 5% net real return over rolling 5-year periods. While this is not applied to the advisors directly, it is applied to the cumulative return. Given the forecast of core returns of 6-8%, unless inflation is low, the 5% net return will be difficult to achieve over a 5-year period. It is also difficult for managers to achieve a yield exceeding the 10-year Treasury yield by 150 bps. Staff is not recommending that the ARMB relax investment criteria because the ARMB is over its target investment level in core real estate at 84%. With the remaining allocations, staff recommends managers focus on higher quality assets in markets with higher barriers to entry and not pursue lower quality assets in order to achieve return targets. Staff also recommends that advisors continue to take advantage of the market conditions to sell non-strategic assets.

MR. SIKES stated that Cornerstone, LaSalle and UBS have broad mandates that allow them to invest at their discretion in the four main property types. Staff recommends that no new allocations be made to these managers and that with the remaining funds they focus on high quality assets in markets with high barriers to entry, and prioritize assets in the office sector. Sentinel has an apartment mandate; no new allocation would be made to this manager, but with the remaining allocation of $55 million they will focus on high quality assets in markets with high barriers to entry.

Non-core is an area where the market is attractive and staff recommends the ARMB continue to make commitments to that area. Investments that add expected return or improve diversification should be done. If sufficient opportunities exist, ARMB should push commitments to the higher end of the 10% ± 4% target. Staff suggests changing the ARMB target private real estate mix from 70% core/30% non-core to 60%/40%, and to raise the maximum core/non-core diversification constraint from 35% to 50% to permit increased investment in non-core assets.

JPMorgan is an open end advisor for the ARMB. Staff asked that this advisor perform an optimization analysis on this portfolio and, given the set of investments in which the ARMB is invested, they determined that the portfolio is close to being efficient in terms of risk and return, but if the investment set is broadened to new investments, the portfolio can achieve a better risk and return mix.

In order to facilitate the investment process, staff is recommending that the ARMB delegate limited investment authority to the CIO. Specifically, to allow the CIO to make investments with existing managers and former managers in good standing up to $100 million without additional Real Estate Committee or ARMB approval; to allow the CIO to take advantage of co-investment opportunities up to $100 million with existing managers without Real Estate Committee or ARMB approval; and to allow the CIO, with the concurrence of the ARMB's real estate consultant, to make investments with new managers up to $50 million without additional Real Estate Committee or ARMB approval. The ARMB Chair and Real Estate Committee Chair would be given notification of any commitment under this authority seven days before the commitment. MR. SIKES explained that granting this authority would permit the CIO to engage the ARMB's real estate consultant to perform due diligence on prospective funds, which would incur fees beyond the consultant's retainer fee. MR. SIKES explained that with the very high interest in real estate, the marketing time for some of the best funds has been dramatically compressed. This authority would allow the ARMB an opportunity to be involved in the best real estate funds. To a lesser extent this recommendation is responding to some comments by ARMB members that were made when the LaSalle Medical Office Fund was brought regarding the best use of the ARMB's time for smaller investments.

MR. SIKES reviewed the specific recommendations from staff regarding core, non-core, REITs, and delegation of authority.

MR. TRIVETTE asked who would assist staff with the global securities. MR. SIKES replied that The Townsend Group would assist staff.

CHAIR SCHUBERT asked if the core allocation would be covered under delegation of authority MR. SIKES stated that is the same authority that was referenced on page 24 of his presentation. CHAIR SCHUBERT asked if a discretionary allocation of $50 million is sufficient. MR. BADER explained this additional recommendation is the result of a discussion between consultants and the Real Estate Committee. In most cases, that would be used for non-core commitments. It is the vision for the fund to diversify in non-core commitments because of their risky nature. He felt he would rarely use higher authority, but perhaps $75 million might be more appropriate. MR. WILLIAMS observed that the $100 million is to existing managers and $50 million is to new managers, and it might not be desirable to put as much at risk with new managers. MR. BADER agreed in part, but noted that the staff would be familiar with the track record of new managers before investing. He felt that $75 million would be an appropriate amount. CHAIR SCHUBERT assumed that the track record of the firms would be examined. MR. PIHL recalled that the Real Estate Committee discussed this and recommended that one of the dollar amounts be increased. MR. BADER stated the last recommendation was not in the plan until the Real Estate Committee met. MS. YALONIS explained that the amount went from

$50 million to $100 million for existing managers and to $50 million for new managers. CHAIR SCHUBERT asked if there is concern with increasing the allocation to new managers to $75 million. MS. YALONIS replied that this is not a concern. MR. TRIVETTE asked whether the IAC members or Mr. O'Leary had concerns, to which they all responded in the negative.

MR. WILSON asked what involvement would there be with the consultant on the various delegations of authority. MR. BADER viewed this as a requirement for new engagements, but not for existing managers, but as a matter of practice staff would check with the consultant. MR. WILSON asked how this would work with co-investments. MR. BADER expected that co-investments would be rare; it was experienced in an energy fund and it could happen with some of the closed end managers in mall development, for instance.

MR. SEMMENS asked if the existing managers are aware of Mr. Bader's ability to commit existing resources. MR. BADER replied in the affirmative and added that there have been proposals he has rejected because he views this as special authority that exists to address barrier markets.

MR. TRIVETTE remarked that real estate is a large part of the ARMB's portfolio and an asset upon which the previous board spent time with consultants and it is well done.

DR. JENNINGS praised the fact that staff is receptive to investment in international real estate. He also liked the fact that it is embedded in a global approach. He felt this was an appropriate delegation to staff.

BREAK 10:25 a.m. to 10:48 a.m.

17. Consultant Evaluation of Real Estate Plan
Diversification, Compliance & Performance Measurement

For more information on this presentation, please refer to the document entitled "Alaska Retirement Management Board, Quarter Ending March 31, 2006" prepared by The Townsend Group and kept on file at the ARMB offices.

After introduction by MR. BADER, MICOLYN YALONIS and MATT JOHNSON with The Townsend Group presented to the Board. MS. YALONIS reviewed the information that would be presented. MR. JOHNSON stated a draft of the Real Estate Plan was received from Treasury staff, it was vetted at Townsend, and some recommendations were made, specifically that the staff be given authority to invest in new funds. This recommendation is based on the fact that the capital-raising environment for real estate is positive and the turnaround time for investing in these funds is tight. Often board processes eliminate some very attractive opportunities. Townsend is also in concurrence with the concept of investing in global real estate. He stated that Townsend concurs with all of the recommendations presented by Mr. Sikes.

MR. JOHNSON stated that the real estate portfolio is meeting most of its objectives and exceeding its return target of 5%. It has out performed the benchmark over the 1-, 3- and 5-year periods. It has provided competitive risk-adjusted returns relative to its peers for a low-leverage predominantly core portfolio. MS. YALONIS noted that the peer portfolios that are out performing the ARMB portfolio are much more risky.

MR. JOHNSON reviewed five strategic objectives for the FY06 period. First is a continued focus on the primary separate account core real estate strategy. Second is to continue to add to core on a selective basis with focus on high barrier to entry markets, particularly in coastal regions, and avoid secondary and tertiary markets. In FY06 the portfolio acquired two office properties outside of Boston and outside of Portland consistent with high barrier markets and coastal strategy. The third objective is that, because the plan has reached its full allocation, composition is a focus, specifically to add non-core. A non-core fund added in FY06 was LaSalle Medical Office Fund II. The fourth objective is to consider adding select non-core commingled funds as necessary to offset expected capital beginning in 2008-2009. The fifth recommendation is to explore ways to improve risk-adjusted returns in the REIT portfolio.

As of June 30, 2006 the ARMB portfolio has out performed the ARMB 90%/10% benchmark over the 1-, 3-, and 5-year periods. Non-core investments are in relatively early stages. For the one-year period, the core portfolio under performed the NCREIF Property Index, but has out performed for the 3- and 5-year periods. Several managers underperformed the index for the year. Of concern is the UBS RESA; Townsend will be meeting with the managers of that fund in the near future and will make a recommendation to the Real Estate Committee.

MR. JOHNSON reviewed the diversification of the portfolio. Townsend feels the portfolio is well diversified both by geography and property type. He reiterated that the core portfolio under performed the NCREIF Property Index for the one-year period, but has out performed for the 3- and 5-year periods. There are two open-end commingled funds in the core portfolio. The non-core portfolio was up nearly 35% for the year, led by Cornerstone's Rotational Fund. The REITs have under performed to date, but adjustments are being made to address that.

18. Roundtable: Real Estate Market Conditions and Investment Opportunities

Participants: Bill Ramseyer with Cornerstone, Jacques Gordon with LaSalle, Jeff Maguire with UBS, Doug Bowen with ING, Mike McNamara with Lehman and Fred McIntosh with Tishman
Moderator: Gary Bader

Question: Real estate performance has been exceptional for many years with the NCREIF Property Index most recently returning almost 19% for the twelve months ended June 30, 2006. What are your firm's return expectations going forward?

MR. BOWEN stated that for the core portfolio, returns are projected at 6-8%. There may be more appreciation going forward, but total return is anticipated to be 6-8%.

MR. MAGUIRE replied that in terms of the core separate account that deals are coming forward in the coastal market strategy. Underwritten returns are 6.5-7.5% on an IRR basis. Generally office properties meet the hurdle for this account.

Question: As a separate account manager, have there been many investments that meet the investment criteria?

MR. MAGUIRE stated that as 10-Year Treasuries rose in the second quarter, the 10-year + 150 basis points criteria began to be a significant impediment to certain transactions.

Question: Recognizing the sizeable gains in real estate in the past few years, are you concerned with large corrections in valuations?

MR. RAMSEYER replied that he is not concerned because real estate is priced relative to other asset classes. Until there are major moves in the bond or private equity market, he expected little shift in the value for real estate. There is significant capital coming into the market. He noted that a spike in the supply of property could create havoc, but he did not see happening because construction costs are high and rents do not support that.

Question: What keeps you up at night?

MR. GORDON replied that international real estate does create some worry. In terms of the US program, the troubling thing is the continued imbalances in the US fiscal account and trade account that has been building for 10 years. He stated that a long bond at 6-6.5% would kill value for real estate, but he did not see that happening.

Question: What are some of the defensive characteristics in today's real estate market? What gives comfort that current valuations are sustainable?

MR. McNAMARA stated his firm is opportunistic and takes risk on a global basis. The fundamentals for the industry are, for the most part, in line. Supply is in check and rents are moving at record paces in larger markets, but he agreed that the long bond going to 6-6.5% would be detrimental. Globally, capital is flowing into places like China, India and other Asian countries, as well as Eastern Europe.

Question: The Lehman fund is the only one with significant international exposure and the commitment is $150 million. What percentage of investments is international?

MR. McNAMARA replied that 60% of the fund has been spent to date; 40% of that 60% is in non-US investments. There is more deal flow in Asia than in Europe at this point in time.

Question: How does Lehman look at investments in China where there is no business law or contractual law? How there is assurance that someone in the government will not decide an investment is a government asset?

MR. McNAMARA stated that has happened and now Lehman is not in China and is leery about going into China.

Question: CHAIR SCHUBERT asked where Lehman is invested in Asia.

MR. McNAMARA replied that there are investments in Singapore, Tokyo, South Korea, and Taipei. Approximately 15% of the $2.6 billion fund is targeted in Asia.

Question: Are returns marked up yet?

MR. McNAMARA replied that this has been done and will be discussed in his presentation.

Question: From an institutional perspective, how has the real estate asset class changed over the last 5 years?

MR. McINTOSH responded that one theme in the last two years is cross-border flow, that is, US capital going to non-US investment. Non-US capital also comes into the US with big flows from Australia. This year there have been many public to private transactions. The speed and velocity of transactions is increased over what has been the experience in the past.

Question: Could you describe public to private transactions.

MR. McINTOSH explained that these are publicly traded REITs being acquired and made private.

Question: Tishman's specialty is offices. Can US contacts in the corporate world be leveraged to find deals overseas?

MR. McINTOSH replied that is done. Tishman leverages relationships with lenders and tenants. This leverage goes from US to Europe and Europe to US and other parts of the world.

Question: From an institutional perspective how has real estate changed over the last 5 years?

MR. BOWEN replied that there is an enormous amount of capital that wants to invest in US real estate. When his firm was acquired by ING in 1998 there was $7 or $8 billion under management and now that amount is $34 billion. ING was involved with Lehman Brothers in taking Gables private and there are no domestic pension fund investors in that; it is primarily endowments, life insurance companies, and offshore companies. ING is also seeing a shift away from core to value added and opportunistic. ING has some investment in Mexico, primarily industrial, but also looked at retail investment, so created a Mexico fund that raised $600 million over a short period of time. There is interest by pension funds in investing offshore.

Question: What are entitlements?

MR. BOWEN explained that entitlements are approvals that affect a development. These can include environmental permits, zoning, building department approvals, etc.

Question: One of the few areas that has out performed private real estate is public real estate, despite the fact that dividend yields are very low for an investment vehicle that historically has been purchased for its yield advantage. Why have the public REITs been out performing private real estate?

MR. MAGUIRE stated he does not manage REITs day-to-day, but some of the investor appetite for REITs has been migrating from dividend yield to total return. There is 50% or so leverage, so there is cap rate compression, and improving fundamentals has put that leverage to work. Some of the REITs have also included other kinds of ventures into their overall structure. Different income sources and different risks are then embedded.

MR. RAMSEYER stated that the private market value added funds are similar in nature to public REITs in terms of properties they own, the leverage they employ, and the pipeline of development. There is similar return pattern between those who are investing in REITs from a total return point of view and those that invest in value added funds. Going forward, he did not expect more multiple expansion; the returns will plateau. He felt that a 6% yield and 3% growth, for a 9% return, on public and private is plausible going forward.

Question: DR. MITCHELL noted that he has always viewed real estate as a diversifying asset that is not correlated to other assets in a portfolio. A number of panelists related their view of the future to US interest rate and bond market. He asked if real estate is a diversifier or will it move as bonds and stocks move?

MR. RAMSEYER stated that in his view real estate will always have a low correlation to private and public asset classes so long as it is characterized by high income. The market prices high income investments differently at different cycles in the market.

MR. GORDON concurred with Mr. Ramseyer's comments. The correlations run .4 with bonds and .2 with equities, but there are times when correlations can spike up. If there is a run with the long bond, as happened in 2004, this is not the case. Real estate does not have daily pricing in order to confirm these numbers. Over a 3- or 5-year time frame, correlations are low.

Question: MR. TRIVETTE asked what things the ARMB should be careful about in order to reduce risk in global investing.

MR. GORDON replied that transparency is of primary importance. In that vein, there must be clarity of title and what the state can/cannot do to cloud that. Other concerns are corruption and bribery. He suggested that managers have their own people on the ground to look after, manage and build the assets. He stated that the US and Australia have the most transparent real estate markets in the world. He reiterated that advisors should do extra due diligence and safeguards should be in place in the form of local teams. MR. McNAMARA added that it is important for an advisor to have their own people involved and also check out third parties.

Question: MS. YALONIS asked for discussion of the after-fee and after-tax implications of global strategies.

MR. GORDON stated 300 to 500 bp of drag can be experienced, depending on the tax treaty of the country. Korea went from 0 bp of drag to 600 bp of drag based on a change in government policy. Legal requirements are another drag because entities must be formed to transfer money; this has a cost of 100 bp. It is necessary that an investor be paid not only for the risk, but also for these extra costs. In general, pension funds have looked at first doing value added and opportunistic. As a result innovative and risky investments are made in international, so it is important to have a good team. MR. McINTOSH noted that there are few core investments internationally; many properties are sold by strata title where the developer has sold each floor to various owners, so purchase is very complicated. The spread from the gross to the net is 700 bp for taxes and fund level expenses.

Question: Do practices create opportunities for funds like Tishman's to own a property in its entirety?

MR. McINTOSH explained the opportunity is to build a building next to one with strata title and apply institutional ownership to that building and out perform. From Tishman's customer base of tenants, when multi-nationals move around the world and set up offices, they want their offices in emerging markets to be like their offices in developed markets.

Question: MR. PIHL noted that real estate performance for the year ending March 2006 was one-third income and two-thirds appreciation. He asked how assured are advisors that appreciation will continue and that they comment the normality of this kind of spread between income and appreciation.

MR. GORDON stated this is abnormal and it is not what core unleveraged real estate has done over 5-, 10- and 20-year periods and it should not be expected going forward. The 20-year returns are the reverse; they are one-third appreciation and two-thirds income. More appreciation going forward would come from value added and leasing/development strategies. The current spread was driven by cap rate compression and he thought that was over.

Question: MR. PIHL noted that the income was 6.5%, which he thought that was stable. An outlook of 6.5-7.5% would seem conservative.

MR. McINTOSH stated the 25-year history of NCREIF is 8-9% income with 1- 2% appreciation for a total return of 10-11%. MR. RAMSEYER suggested taking current income and adding expectations with regard to inflation because over time real estate income has tracked inflation. He noted that leverage magnified appreciation in recent times. He felt that was also gone; it is no longer as attractive to lever properties, particularly core properties. It is opportunistic to use good leverage.

MR. MAGUIRE stated that appreciation has been achieved and, to the extent there are concerns with value at risk, he believed that cap rate compression is over, long-term interest rates will migrate upward, and concerns with inflation will fuel that. He felt it is encouraging that there are broad sources of capital that continue to be interested in US real estate and there are improving fundamentals at the property level. The cost of replacing assets exceeds the value of properties. Rents can likely be increased and there will be the ability to ameliorate rises in tax rates.

Question: MR. PIHL asked for comment on what the ARMB's advisors do to verify that appreciation is real.

MR. GORDON stated the independent appraisal process employed by the ARMB is conservative in terms of valuing the real estate. That process may not fully reflect unsolicited offers that core managers receive. If anything, the appreciation on some of the assets, particularly take-over assets, have not fully reflected market pricing. Going forward, there will be an estimate of value that can be documented. He suggested the ARMB be aware that, because its portfolio is conservatively valued, it might be worth more on the open market today if it were to be sold.

MR. MAGUIRE stated in the RESA account every asset is independently appraised very 12 months. Every 6 months there is a review by an independent appraiser of the value that is used. As part of the audit process, the auditors review the appraisal results and attend the quarterly valuation committee meetings where the results of internal and external valuations are discussed. Consistently over the last 20 years the amount of proceeds from selling properties exceeds the last independent appraisal for the properties by 3-5%. MR. ANATHAN stated that it is possible to look at 28 years of history and over those years $1.9 billion has been sold out of the open end fund and the most recent appraisal on that is $1.7 million. He stated that the appraisal process is becoming more timely and accurate.

MR. RAMSEYER stated Cornerstone's clients have asked to distinguish between realized appreciation through sale of properties and unrealized appreciation through valuation.

Question: MR. SEMMENS understood that real estate valuations are at their peak.

MR. GORDON suggested that valuations have reached a plateau.

Question: MR. SEMMENS asked why the ARMB should not sell.

MR. GORDON questioned whether the ARMB wants to be a market timer. Transactions costs are high and income continues to be received from the investments. The other question is what the ARMB would do with the proceeds.

MR. McNAMARA suggested there be distinction between real estate value and cap rate compression. Cap rates have decreased to a level where they will be flat or even increasing, but income from properties is projected to rise. MR. GORDON stated fundamentals are very strong and have not reached a peak. If anything, in terms of valuation, the yield is at an all-time tight spread against the long-bond. In that sense, real estate looks fully valued. Real estate investments are more transparent than in the past and yield going forward is expected to be positive.

MS. YALONIS remarked that there is a distinct difference between the functions of core and non-core real estate investments. The intention of the core portion is to provide long-term stable income returns to cushion the 30% that will have a J-curve effect and not generate stable returns. Aggregated in a total portfolio, there is less volatility. Selling the core because it has peaked would result in loss of the income that could not be replaced to achieve the same effect.

Question: MS. HARBO asked whether, now that baby boomers are entering the 60 year age group, will they influence the market in terms of the kind of properties the advisors might buy? She noted she is seeing conversion of old office buildings into townhouses in larger cities and she expected that these would be bought by baby boomers.

MR. RAMSEYER stated that when a strategy is developed, it is either real estate related or market related. Baby boomers are such a significant factor that his firm is examining behavior patterns of people in that age group and making real estate investment decisions around them, including retirement housing, vacation homes, and condo/hotel development. He noted that demographics are known, but economic issues are not.

MR. BOWEN added that echo boomers will come after baby boomers and the type of property they will utilize will be different from what the baby boomers can afford.

Question: DR. MITCHELL asked, looking at recent core fund transactions, how many are advisor-to-advisor transactions and how many are sold to outside buyers?

MR. RAMSEYER replied that surprisingly few transactions are between managers. There are many large buyers in the market that are global, high worth individuals, foreign institutions, and insurance companies.

MR. MAGUIRE stated over the last 18 months his firm has rarely sold to other institutional managers. He explained that the high bidder that has emerged has not been another institutional advisor, but perhaps a condo converter or a 1031 exchange buyer that has a time constraint. He explained that Section 1031 of the Internal Revenue Code allows tax advantages such that the taxable gain on the sale on one property can be deferred if another asset is acquired within a certain time period. This imposes a time constraint and an economic incentive for 1031 investors. UBS has sold to many 1031 investors, as well as to local buyers, whether small groups or wealthy individuals.

MR. McINTOSH stated that 20-30% of the time sales are from advisor to advisor. One of the advantages is that the advisors have transacted among each other in the past so the speed of completing a transaction is faster than in the past. Everyone is trying to get the highest price when they sell an asset. Each seller and each buyer has individual reasons for their approach.

MR. McNAMARA noted that diversification is also a factor in that one fund might have an over weighting of office in the northeast and another may have an under weight.

Question: MR. WILSON remarked that the ARMB had a presentation yesterday on the collapse in the bond market. He asked for comment on how much more gain is achieved when more risk is taken. He asked if there has been a similar collapse in doing riskier things in real estate as has occurred in the bond market.

MR. RAMSEYER replied that this is modestly the case. Historically more has been paid per square foot for investments in major markets compared to those in secondary markets. The spreads between those markets have narrowed. MR. BOWEN stated that there is still a healthy appetite for buying real estate; he did not believe the markets are looking as closely at pricing from risk/return perspective than in the past. MR. GORDON added that some of that capital is not thinking about risk, but rather about rolling capital gains. One difference between real estate and narrowing of credit spreads is that real estate has an equity component. He explained that real estate risk premiums have essentially shrunk.

Question: MR. WILSON explained his point is that when riskier investments are made, the premiums are no longer as great. He asked if there has been risk compression internationally.

MR. GORDON replied that Japan has compressed substantially, but all international countries are earlier on in this process. MR. BOWEN stated that in Mexico risk is getting return; core asset returns are 10-12% and unleveraged returns are 17-19%, which far surpass domestic returns. The cost to borrow is also more expensive, however. He expected to see some compression, but it would occur over time. MR. GORDON stated there is more global capital seeking good spread. The opportunity in central Tokyo closed, so now investments are being sought in other Japanese cities. This is now happening in Mexico. MR. McNAMARA noted this is somewhat dangerous if discipline is not maintained.

Question: VICE CHAIR TRIVETTE asked for comment on South America in general.

MR. McNAMARA stated Lehman is spending time in Mexico and beginning to look in Brazil. In Mexico, homebuilding is a focus, as are resort opportunities.

MR. McINTOSH stated that Tishman has been invested in Brazil for over 10 years and is the largest office building developer in Brazil and the third largest residential developer. Prospects for Brazil are interesting going forward. The cost of capital is expensive, but he expected that cost to go down. Chile is transparent. That country has adopted Sarbanes-Oxley willingly, but it is a one-city market. MR. GORDON stated he likes Mexico more than Brazil; both have younger demographics and rapid urbanization, but there are negatives such as secure property title, title insurance, and speed of transaction. Brazil also has strata title, which does not lend itself to a well managed asset. There is a rising middle class in both countries, which will drive real estate investment.

LUNCH BREAK 12:00 p.m. to 1:17 p.m.

27. Board Discussion

Real Estate FY07 Annual Plan

MR. PIHL moved for approval of Resolution 2006-33, which adopts the Real Estate Annual Investment Plan for Fiscal Year 2007. MR. SEMMENS seconded.

CHAIR SCHUBERT noted there was discussion this morning about increasing the discretionary amount from $50 million to $75 million for new managers. MS. HARBO moved to amend the discretion for new managers to $75 million. MR. TRIVETTE seconded.

By roll call vote, the amendment was passed unanimously, with Commissioner Nordstrand absent.

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

Real Estate Policies and Procedures
MS. HARBO moved to adopt Resolution 2006-34, which adopts the revised Real Estate Policies, Procedures, and Guidelines. MR. SEMMENS seconded.

MS. HARBO moved to amend the guidelines on page 5 to replace $50 million with $75 million. MR. TRIVETTE seconded.

By roll call vote, the amendment was passed unanimously, with Commissioner Nordstrand absent.

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

20. UBS Realty Investors LLC
Separate Account and RESA
For more information on this presentation, please refer to the document entitled "Alaska Retirement Management Board" dated October 4, 2006 and kept on file at the ARMB offices.
TOM ANATHAN and JEFFREY MAGUIRE presented to the Board. MR. ANATHAN introduced Mr. Maguire and reviewed his background and expertise, as well as his own. He stated the firm began in 1978 managing a commingled open end fund. PERS and TRS invested in that fund in 1980. In 1991 the firm separated from the team that manages Aetna's assets. In 1996 management bought the company from Aetna and the firm was sold to UBS in 1999; neither involved changes in personnel or process.

MR. ANATHAN stated that UBS and the ARMB formed a relationship in 1980. He has been involved in the account since inception. From September 1980 to June 30, 2006 the portfolio has earned a 9.62% gross return. The separate account mandate began in 1997 with the first investment in 1998; total return for that account has been 11.57%. He noted that PM Realty began to get out of the investment advisor business in 2002. In February 2003 UBS was asked to take over the PM Realty 10-property portfolio on a temporary basis. If UBS had kept those properties, it would have exceeded the percentage it is allowed to represent in the ARMB real estate portfolio. In October 2003 UBS retained some of the properties and the balance were turned over to LaSalle.

UBS has been in business 28 years and manages $14 billion in real estate assets today. This size buys relationships, market knowledge, and off-market transactions. The Investment Committee is a very experienced group of people.

The RESA began in January 1978 and today totals $9.5 billion in assets. The vision for this account is to be a core account that is broadly diversified across geographic and property types. Of the ARMB's real estate portfolios, it is the most conservative. It has 11% leverage compared to 22% average in the open end index. Today the average size of investment is $65 million; this is good from the ARMB's perspective because its investments are typically $25-$30 million. The portfolio managers have begun to strategically add in the office sector. The portfolio has been a player in the apartment area, but this is shrinking because the opportunities are shrinking and apartment properties are selling well.

MR. ANATHAN stated that this portfolio is in the appropriate geographic markets and it is comprised of exceedingly high quality, well-leased properties. The five largest markets in this portfolio, in descending order, are New York, Washington DC, Boston, San Francisco, and Los Angeles; these markets represent 46.3% of the overall portfolio.

MR. ANATHAN reviewed a history of deposits and withdrawals from the open end fund. He next reviewed performance for the account. The 12-month return is 15.66%, which is strong but slightly lags some of the others. The 3-, 5-, 10-year, and since inception period returns are 15.75%, 11.78%, 13.93% and 10.00%, respectively, and income has been 84-85% of that.

MR. ANATHAN stated that in 2000, RESA was the top performing fund. In 2001, RESA had no properties in New York City, but the economy turned down and UBS's valuation process reflected that; tenants were not lost, but there was recognition that real estate values had dropped. In 2002, RESA was again the top performing fund; in 2003, it was in the top half, in 2004 it was in the top half, and in 2005 it was in the top quartile. He noted that the current environment in 2006 is one in which the RESA should under perform because it has low leverage. For the six-month period ended June 30, 2006, RESA is back in the top quartile of performers; for the 3-year period it is in the top half, for the 5-year period it is in the top quartile, and for the 10-year period it is tied for top with another open end fund.

MR. ANATHAN reviewed an office investment at 135 West 50th Street in New York, explaining that value will be created in this investment by increased leasing. He stated that value added strategies are being undertaken in this ARMB's core portfolio.

MR. MAGUIRE stated UBS began investing the ARMB's separate account in 1998. That portfolio has 12 investments totaling $320 million. The ARMB has allocated $305 million and there is $32 million remaining in the allocation. The portfolio contains all four core property types and is concentrated geographically on the two coasts. The objective is to generate a 5% real rate of return net of investment management fees over 5-year rolling periods. This has been achieved. The strategy is actively managed core with an emphasis on strong current income and cash flow. The portfolio has acquired fully leased office and industrial properties and new apartments with a focus on medium- and long-duration leases for office and industrial. Income growth is expected from apartments and rent escalation was included in long-term commercial leases. In 1993, the composition of the portfolio was changed as three of the former PM Realty properties were taken over; this added a retail component and the industrial weighting of the portfolio increased.

As of June 30, 2006 the gross total return was 16.14% and net total return was 15.45%. Through September 30, 2006 the one-year return is 19.8% and the since inception return is 12.2%. The market value of the portfolio increased. This portfolio consistently has a higher income return than the NCREIF. For the third quarter ending September 30, 2006, the portfolio was written up $18.3 million. Income is up about 7% during the third quarter because of leasing activity at commercial properties and some rent escalation provisions came into play, and there were much better operating performance in the quarter in the Washington DC area.

For fiscal year ended June 30, 2006 an 18% increase is projected in the organic growth of the NOI over the three-year period through FY09. The portfolio is healthy, it meets the ARMB's objectives, and there is good income at the property level.

MR. TRIVETTE asked what property is owned in the Washington DC metro. MR. MAGUIRE replied that it is an apartment community near Dulles Airport.

MR. BADER emphasized Mr. Anathan's remark that the previous board had properties with PM Realty amounting to $200 million. PM Realty announced it needed to divest the assets on short notice. One property had environmental issues. Because of the long relationship with UBS, they were asked to take over that portfolio. He attended a conference last week where there was emphasis on relationships in alternative asset classes and he concurred with the belief that these relationships benefit the investor. He stated he appreciates the relationship with UBS and their years of good returns.

21. Cornerstone Real Estate Advisors, LLC
Separate Account and Rotational Fund

For more information on this presentation, please refer to the document entitled "Presentation on Cornerstone Relational Venture, Cornerstone Individually Managed Account (IMA)" dated October, 2006 and kept on file at the ARMB offices.

BRIAN MURDY and WILLIAM RAMSEYER presented to the Board. MR. RAMSEYER began with a historical overview of the firm, which is a mid-sized manager with $8 billion under management through separate accounts and commingled funds. Cornerstone is headquartered in Hartford, Connecticut and also has offices in Los Angeles, and Chicago. The relationship began with ASPIB in September 2003 with an allocation of $165 million for an individually managed account (IMA). The IMA is fully invested. Last year $50 million was committed to the Cornerstone Rotational Venture and of that $44.2 million has been drawn. Another $50 million has been committed to Cornerstone Apartment Venture III, which is anticipated to close in October 2006. Current value of equity under management for the ARMB is $247 million. The team at Cornerstone has not changed since the beginning.

The strategy for the Rotational Venture was to locate properties in growth markets, buy properties when the market is soft, manage them aggressively, and sell them. The return on this fund has been 30.86%. Three properties were sold in 2006 and the fund should be closed and money returned to ARMB by June 2008. Through March 2006, returns on the fund are 32.73% gross and 27.07% net of fees.

Five properties are left in the fund for a gross value is $265 million. Without leverage, the net equity value is $154 million and the ARMB has a 30% interest in the fund. On a gross basis, the return to the ARMB will be far in excess of what was expected.

MR. RAMSEYER reviewed the three properties that have been sold out of the fund, which have returned $103 million and have generated returns from 31-65% at the property level. There are five remaining properties that will be sold by 2008. MR. RAMSEYER reviewed a summary of financing on these properties.

MR. BADER noted the incredible timing of the investments in this fund. He asked if there would be a successor to this fund and whether there are other markets similarly situated to this when it was formed. MR. RAMSEYER replied that this strategy is done. The economic environment allowed properties to be bought below replacement cost in growth markets at a time when there was substantial vacancy on the theory that in an economic upturn jobs are created at a faster rate in these markets than other markets.

MR. MURDY reviewed the ARMB's IMA. Three assets have been acquired for the portfolio to date and there is $8 million remaining so any future acquisitions, unless there is a sale, would be brought to the CIO. The ARMB is kept in the rotation for looking at new transactions.

The returns for the IMA have been strong for the last year at 19.67% gross, 99 bp ahead of the NPI Index and 20 bp ahead of the NPI since inception. The portfolio is not diversified and it was not intended to be diversified. The intent with this mandate is to look at these properties within the context of the overall fund and to complement the diversification of the overall fund. This portfolio will complement the ARMB overall portfolio and enhance returns. Leasing levels are high and there are little lease expirations in the next five years. One major tenant is expiring and that lease is being worked on actively. Today, the lease level is 93-94%.

MR. MURDY reviewed characteristics of the three properties held in the IMA, beginning with 330 North Brand Boulevard, an office property in Glendale, California.

MR. SEMMENS asked for the historical occupancy rate of this property. MR. MURDY replied that the property was acquired in December, at which time the leasing was in the mid 90%. There were two tenants who had vacated their space, but were paying rent through their lease term. The Glendale market has had substantial rent growth in the last year. There has also been a strong run up in value and Cornerstone believes there is more value in this property. Cornerstone is diligently reviewing the market to see if it is time to sell the asset. MR. SEMMENS asked what accounts for the difference between a 25% gross return last year and the 7% projected return in 2007. MR. MURDY explained that appreciation is shown from rent growth, not new tenants taking occupancy. Last year was historic in terms of the NCREIF Index.

MR. MURDY next reviewed Arden Hills I, II and III, an industrial property in Arden Hills, Minnesota. Negotiations are underway with the tenant on their lease. This is the best property in this market and Cornerstone continues to watch the market for new construction.

MR. MURDY lastly reviewed Cerritos Towne Center, a retail property in Cerritos, California. This property is in a good market and has 100% occupancy. The center of the building was unutilized and Cornerstone put in Borders and Linen N Things, which has improved and stabilized the property. There is no new construction in this market and no land available for new construction. There is a theater that might expand to an additional 6 screens at the end of their lease.

MR. RAMSEYER noted that some years ago $165 million was allocated to this mandate and $8 million remains in that allocation. This limits acquisitions in this market, but under the CIO discretion pool, properties are still being examined.

22. LaSALLE INVESTMENT MANAGEMENT

Separate Account and Medical Office Fund

For more information on this presentation, please refer to the document entitled "Presentation to Alaska Retirement Management Board, Portfolio Update and Investment Review" dated October 4, 2006 and kept on file at the ARMB offices.

WILL ROBB and KATHRYN SPRITZER presented to the Board. MS. SPRITZER stated she has been with LaSalle for 17 years and on the ARMB account for the last two years. Mr. Robb is the asset manager on the account. She briefly reviewed an organizational chart outlining the ARMB portfolio management team, the ARMB client team, and LaSalle Investment Management Committee. The Client Team is multi-disciplinary. The Client Team reviews all major decisions for the account. Once a recommendation is ready, it is made to the LaSalle Investment Management Committee.

LaSalle focuses on real estate in all of its forms and has done this work for 26 years. The firm has $40 billion under management around the world, with 550 employees in 13 countries. The firm is an integrated, global real estate investment company. There is stable leadership and ownership. Lynn Thurber, the firm's CEO, will be moving into the role of Chairman with LaSalle Investment Management. Jeff Jacobson will assume the role of CEO in January 2007. He currently holds the position of CEO of LaSalle's Investment Management in Europe. This succession is planned and has been underway for several years.

Research underpins the firm's decision-making. There is also direct information through Jones Lang LaSalle, the firm's parent company that has over 10,000 employees in 100 markets and 36 countries around the world.

The ARMB separate account was begun in October 2003 with a $210 million allocation to invest in core real estate; of that $104 million was in take over of 6 assets from another manager. The portfolio invests in all four property types in geographic markets across the US. Over $130 million has been invested in four strategic core assets. These assets are office, industrial, and retail in target markets. LaSalle has sold $43 million of non-strategic assets and is readying to sell three more this fiscal year. The portfolio has performed strongly in terms of average occupancy at 96%. The portfolio has tracked pro forma and net income and cash flow targets have exceeded targets in each year. Net real returns are 10-11%, far exceeding the ARMB's net target of 5% net real return.

The ARMB has also committed $30 million to LaSalle's Medical Office Fund II. This is a value added fund that invests in medical properties located near hospital systems. The capital raising for that fund is winding down and property acquisition is gearing up.

MR. ROBB stated the current portfolio is $224 million in value with 9 assets, all of which are core, and there is $12 million remaining in the allocation. The portfolio is diversified by geography and by product type. There is no investment in the north/northeast markets, but LaSalle is actively looking for investments in those markets.

MR. ROBB reviewed three assets in the portfolio, beginning with AmberGlen in Hillsboro, Oregon. This property is 100% leased with two tenants. There are terms left on both of those leases; LaSalle expects to be able to renew these tenants at higher rates and then will sell the asset. MR. ROBB next reviewed Greenwood Industrial Center in McDonough, Georgia, which is comprised of one vacant building and Sports Authority in another building. Sports Authority has been talking about expanding the building and extending the lease term; $7 million will be spent to expand their space, adding $10 million in value. This property will be taken to the market in the fourth quarter in order to realize the gains. Lastly, MR. ROBB reviewed Virginia Square in Arlington, Virginia, a Class A office and the largest single asset in this account at $67 million. It is a multi-tenant office building with no significant lease expirations until 2009. Good success has been realized with this asset and it is expected to continue. Many of the tenants have business relationships with the Defense Advanced Research Project Agency (DARPA), which is located nearby. This close physical proximity gives high probability to the tenants renewing their leases.

MR. SEMMENS noted that from comments made earlier in the meeting he thought there was significant resistance to the idea of selling, so he was surprised to hear LaSalle talking of selling. He asked how the decision to sell is made and what is done with the cash after sale. MS. SPRITZER explained the portfolio is continually being upgraded. Some assets were inherited from other investors and now there are certain markets with flat rent prospects and those are the assets LaSalle would like to cull out of the portfolio. LaSalle would then reinvest the proceeds from those sales into target markets like the coastal areas, more supply constrained markets, and/or markets that are recovering. On an annual basis each asset is looked at critically to determine if it belongs in the portfolio or should be sold. MR. SEMMENS inquired as to the time lag between sale and purchase of a more desirable property. MS. SPRITZER replied that when there are funds available in FY07 LaSalle will be able to acquire at least one or two assets up to $50 million in value. She noted that clients similar to ARMB are moving from core to value added, so there is less competition among LaSalle’s clients to place money in core real estate. A great number of deal opportunities come through LaSalle daily. She explained that there is no urgency to acquire another property immediately upon the sale of a property in the portfolio. MR. ROBB noted that the purchase and sale of AmberGlen has a five-year time horizon. If tenants are renewed and this is top market with barrier to entry, there could be a recommendation to hold the asset longer. MS. YALONIS noted that all individually managed account managers are asked to annually evaluate each property for hold/sell, including redeployment of the capital into the market.

MS. SPRITZER stated the strategy for the ARMB’s portfolio this year is to focus on office because the ARMB is slightly under weight in office and a pension fund like the ARMB should be over weight in office in order to take advantage of recovering office markets. The ARMB is at the market weight in terms of retail investments. If interest rates move up, pricing could improve on the retail side. LaSalle will also maintain high occupancy. Non-core opportunities through LaSalle for FY07 include international commingled funds such as Asia Recovery Fund III and Japan Logistics Fund II, domestic commingled funds such as Income & Growth V and the Infrastructure Fund, as well as global REITs.

23. ING Clarion Partners

Development

For more information on this presentation, please refer to the document entitled "ING Clarion Development Ventures II, Presentation to Alaska Retirement Management Board" dated October 2006 and kept on file at the ARMB offices.

DOUG BOWEN explained that Lou Jug is hosting a client conference in California and is unable to attend this meeting. In 1998, Clarion Partners was acquired by ING, a large international financial services firm managing $700 billion of assets, of which ING Real Estate manages $97 billion. ING Clarion manages $36 billion in public equities through ING Clarion Real Estate Securities, private market through ING Clarion Partners, and public debt through ING Clarion Capital. ING Clarion Partners has internal management and leasing services group managing 31.5 million square feet of commercial space and 36,000 apartments.

MR. BOWEN stated that the CDV II fund seeks to achieve high returns on the ARMB's behalf. The fund closed in January 2006, raising nearly $205 million from 12 institutional investors. The funds are leveraged so there is $1 billion of buying power. The strategy is to build, lease, and sell properties. The target returns are 16-18%. Since initial closing in December 2004, substantial progress has been made with 11 transactions totaling nearly $160 million.

The investment strategy of this product is to enter into a venture with a developer to build a property; then it is leased and sold. The firm can maximize returns through timely execution. In most situations there is a joint venture with a developer and in some instances ING will provide mezzanine loans that are senior to a developer's equity, but subordinate to the construction lender. Leverage is anywhere from 60-80% of cost, which is 50-70% of value. The properties are in targeted markets and are opportunistic in nature. Risk is mitigated by minimizing entitlement risk, participating in predevelopment costs, shifting construction risk to the developers, and establishing a clear exit strategy. ING deals with national, regional and local developers. The equity contributions by developers are 0-20% and can be higher.

With respect to targeting markets, ING looks for markets with strong job growth and strong population growth. It is desirable to develop in a marketplace where there are constraints to new supply. There must also be improving underlying property fundamentals. ING goes into markets where vacancies are declining and will continue to decline so that rental rates can be increased.

MR. BOWEN reviewed the properties in CDV II, both closed and working. He explained that the full $205 million allocation will not be invested; ING will go to $190 million and stop. He reviewed the composition of the existing portfolio, as well as the properties in the pipeline, by property type and geography. There is significant exposure in Florida, which accounted for 30% of the job growth in the nation over the last five years. Development in this state is physically constrained by water.

MR. BOWEN reviewed a condominium project in Sarasota, Florida, an industrial project near Los Angeles, California, a multifamily rental development in Miramar, Florida, a condo/hotel development in Miami, Florida, and a condominium project in Manhattan, New York. He noted that the condominium project would have represented too high a share of the fund's total investment, so the fund partnered equally with the Clarion Lion Value Fund.

MR. BADER asked if there are ever joint ventures with investors in the fund. MR. BOWEN replied that joint ventures with investors could be done, but in the case of the condominium project the time frame was extremely short.

MR. BOWEN lastly reviewed an office development in Washington, DC. He noted that this fund is nearly fully invested and, when it is closed, a third fund will be started. He offered that if the ARMB were interested, ING would like to discuss that fund.

MR. WILSON noted that this product is risky compared to the core approach and it provides good diversification to the ARMB's portfolio.

24. Lehman Brothers Real Estate Partners
Partners II

For more information on this presentation, please refer to the document entitled "Alaska Retirement Management Board, Lehman Brothers Real Estate Partners II Fund Update" dated October 2006 and kept on file at the ARMB offices.

TANYA TARAR and MIKE McNAMARA presented to the Board. MS. TARAR began with an overview of the Lehman group, which is staffed by over 100 investment professionals and is headquartered in New York, London, Hong Kong, and Tokyo. The group was formed in 2000 to continue the investment activities of Lehman's global real estate group, which had been investing for a decade before the launch of the first fund. The first fund, LBREP I, was closed in 2001 with $1.6 billion in equity capital and targeting a 20% net return to investors. That fund was fully invested as of December 2004 and it is in full liquidation mode; the fund is on target to achieve a 30% gross IRR to investors. The second fund, LBREP II, was raised in 2005, closing with $2.4 billion of equity, including an ARMB investment of $150 million. At the same time, Lehman launched the inaugural mezzanine fund, which targets real estate debt investments, primarily in the US, but also in Europe. The firm has a large investor base, with a great deal of commitments coming from state and corporate pension plans. Lehman Brothers and its employees have contributed 20% of the capital alongside institutional investors.

LBREP II began investing in December 2004 and to date $1.5 billion has been committed across 51 investments globally. There have been three full liquidations to date and capital and profits have been received. Alaska has contributed $68 million to this fund to date, representing just under half of its capital commitment. ARMB received $9 million through the first distribution and has a net capital contribution of $59 million. This compares favorably to the current net asset value (NAV) of $76 million. The early distributions should help mitigate the J-curve effect.

MR. McNAMARA explained that some of the themes from LBREP I have been continued in LBREP II. These themes include residential lot development where there is investment with one partner to buy entitled land to ultimately sell to homebuilders. Most of this has been done in California. Lehman continues to believe in this market, focusing on affordable housing properties. Opportunities also exist in office in North America because of the lack of supply and the fact that rental rates are rising. There have been portfolio acquisitions in Europe, primarily in the office and hotel sectors; there are also housing opportunities. In addition, there are residential and retail opportunities in Asia.

MR. McNAMARA stated that emerging trends are seen in the hotel sector. Supply is being reduced by a number of factors, such as conversion of hotels to condominiums, while fundamentals and rental rates are increasing. The firm has also invested in multifamily. Emerging markets of interest include Turkey, Spain, Thailand and others.

The LBREP II has $1.3 billion in holdings, of which 55% is in North America, 21% in Europe and 24% in Asia. MS. TARAR stated the corresponding equity invested is $1 billion, which is now worth $1.3 billion.

MR. McNAMARA stated portfolio diversity is strong; there are continued opportunities in countries and product types. Transactions to date include 80 high quality multifamily properties in the southeast US; this is a joint venture of ING and Lehman Brothers. ARMB invested $100 million in that apartment fund. The LBREP II fund has also invested $50 million in an office building on Park Avenue in New York City. The fund invested in a controlling interest in a hotel company that owns 10 hotels. The fund has also invested in residential lot developments in California and a luxury condominium project in San Francisco that is doing well.

The LBREP II has sold an extended stay hotel portfolio generating a $24 million in profit, an over 300% IRR, and 1.8x multiple of capital. A condominium conversion property in San Francisco was also sold, as was an office portfolio in Silicon Valley.

The European projects in the portfolio include a high quality residential project in Poland; four office buildings in Hamburg, Germany; a portfolio of 73 hotels flagged under Holiday Inn; 40 residential properties in Sweden; 169 residential properties throughout Italy; a mid-sized French private real estate company; and four industrial assets in Sweden. A total of 9 properties have been sold out of the UK hotel portfolio and returned 20% of the invested capital in that transaction.

In Asia, the fund purchased 14 buildings in Tokyo, a four-star hotel in Singapore and high-end condominium projects in Singapore, a 50% interest in a hotel and residential development and holding company listed on the Thailand Stock Exchange, a 29-story industrial office building in Hong Kong, and a 22-story mixed-use building in Seoul. The fund has sold all interests in China in light of escalating economic and geopolitical risks. MS. TARAR explained that China was a new market, so a small investment was made and then it was sold.

MS. HARBO asked if there are concerns with Thailand given the recent change. MS. TARAR replied that there are no immediate concerns, but Lehman is closely monitoring the coup to see what will happen with the new system in place. Lehman has people on the ground in Bangkok monitoring that investment.

DR. MITCHELL asked how 169 well maintained residential properties in Italy are valued. MR. McNAMARA stated the process is not different than underwriting a portfolio in the US. DR. MITCHELL asked if there is an Italian appraiser or does Lehman send people to Italy. MR. McNAMARA explained there is a local operating partner, local Lehman people in Italy, and Lehman has done a fair amount of debt in Italy. MS. TARAR added that local experts are hired to be sure Lehman is aware of leasing, budget, and costs related to the investments. DR. MITCHELL asked if the Thailand property is valued daily, if it is on the stock exchange. MS. TARAR explained that there is a business plan for the portfolio of development properties. Lehman has used its assumptions to create a value that is reviewed quarterly, if not monthly, with Lehman's global asset management and people who are on the ground. MR. McNAMARA added that in most situations, Lehman is investing side-by-side with local operating partners.

MS. HARBO asked if Lehman has much invested in Ireland. MR. McNAMARA replied in the negative.

MR. McNAMARA reviewed the investment market outlook for real estate. He stated that sustained investor demand for real estate has resulted in spread compression. Despite the fact there has been a bottoming out, pure fundamentals and management of expenses present opportunities. He expected a continued staggering volume of equity available for real estate. Transactions will continue to be at a brisk pace. Lehman looks for volatility and there it finds opportunity. Lehman believes the fundamentals in the US will continue to improve, significantly in the multifamily, hotel, and office sector. Higher rates in Europe have resulted in a bit of a sluggish investment pace, but Lehman has still found opportunities. Japan's improving economy and low interest rate environment should lead to opportunities. Lehman is looking for opportunities in India, China, and Latin/South America.

MR. BADER asked for comment on Lehman's ability to identify deal flows because of Lehman's investment banking relationships. MR. McNAMARA stated there are over 300 people in the real estate business and they touch a number of opportunities. Most of the deals on the equity side are with operating partners. There have been 60 operating partners over the last five years and they bring Lehman opportunities. Specifically in relation to the investment banking franchise, the bank is dealing with public companies that bring deals to Lehman Brothers Real Estate Partners. The bank makes loans to developers and when that developer needs equity to invest in the next project, they will come directly to Lehman Brothers Real Estate Partners. He noted that 85% of the deals in LBREP I were done with longstanding relationships.

25. Tishman Speyer Properties

Fund VI

For more information on this presentation, please refer to the document entitled "Alaska Retirement Management Board, Tishman Speyer" dated October 2006 and kept on file at the ARMB offices.

FRED McINTOSH explained that Tishman deals in office space, most prominently the Rockefeller Center, Chrysler Building, and the MetLife building. The firm owns 140 properties around the world and employs 600 real estate professionals. Assets under management are just under $20 billion in market value in 47 million square feet. The firm is fully integrated; it sponsors the fund, acquires the properties, finances them, asset manages, portfolio manages, designs and constructs, builds buildings, develops, and manages properties. The firm has employees in local markets.

MR. McINTOSH stated the ARMB is invested in Fund VI, which targets IRR of 18% and net IRR of 14%. It is a $1.1 billion fund that has acquired 18 investments and is 75-80% invested.

There have been three internal valuations on the assets in the fund and there have been good returns as a result. This fund targets IRR returns.

MR. McINTOSH reviewed a chart depicting capital flow to the fund in each year. He stated he expects the fund to be fully invested by next year. He next reviewed the fund's exposure to different markets, noting that it is fluid. Three assets in L.A. will be sold and 25% of the fund capital remains to be invested, which will change the allocations to each market.

MR. McINTOSH reviewed the size of the fund. The ARMB invested $100 million to this fund and, $50.7 million of that has been called. A total of $9.3 million has been identified for capital to go into some of the projects already acquired. Another $18 million has been earmarked for pending acquisitions. Tishman Speyer will have called or earmarked 78% of the ARMB's capital by the end of the year.

MR. McINTOSH briefly reviewed photographs of several properties in the portfolio, noting specifics with regard to several of the properties. He indicated that the fund paid $600 SF for a the MetLife Building in New York and in the last 1.5 years there have been transactions in midtown at and above $1000 SF. CHAIR SCHUBERT noted that she used to work in this building.

MR. McINTOSH noted that the New York Times Building has high ceiling spaces that provide opportunities for retail clients.

MR. McINTOSH reviewed the property at 5215 Old Orchard Road in Skokie, Illinois, which is for sale. This asset had some vacancy, it was purchased, leased, and now is on the market to be sold. At the price in the letter of intent, this property will generate an IRR over 30%. He next reviewed 400 South Hope Street in Los Angeles, California. This property took $75 million in equity and the fund in which the ARMB is invested put in $25 million, with another US advisory firm providing the other $50 million. The return to the fund from this property is generated from attractive debt and it is enhanced by the fees Tishman charges on the $50 million. Through this type of arrangement, Tishman can acquire an asset that has a 12-14% return and the fund can achieve an additional 200-300 bp of return with no additional risk.

MR. McINTOSH lastly reviewed the Beverly Hills portfolio, comprised of three office properties. Tishman was able to increase occupancies and add value in this portfolio. Tishman is currently reviewing a sale of 80% of the portfolio in the fourth quarter of 2006 for a projected IRR of over 50%.

MR. McINTOSH stated the goals for this fund in the next year are to continue to invest the capital of this fund, sell the Beverly Hills assets, sell the Old Orchard Road property, and review other sales opportunistically. He noted that Tishman is currently seeking capital for the European Venture VI Fund, India Fund, China Fund, and Brazil Fund.

MR. TRIVETTE asked if these property acquisitions are in lieu of starting a Fund VII. MR. McNAMARA anticipated that Fund VII would begin in the fourth quarter.

BREAK 3:25 p.m. to 3:43 p.m.

26. REIT Portfolio

For more information on this presentation, please refer to the document entitled "Alaska Retirement Management Board, Public Real Estate Equities" dated October 2006 and kept on file at the ARMB offices.

STEVE SIKES, State Investment Officer, reviewed the internally managed REIT portfolio. He explained that a REIT is a corporation that owns and operates income-producing real estate across various sectors, including apartments, shopping centers, offices, and hotels. The major differentiating factor between a REIT and a typical corporation is that a REIT receives preferential federal income tax advantage. The most interesting requirement of REIT is that it must distribute at least 90% of its taxable income annually. If it meets that and other requirements, it can then deduct distributions from its federal tax liability. REITs include large public companies that are traded daily. The largest public REIT, Simon Property Group, is among the largest owners of malls in the US with an estimated total asset value of $45 billion. REITs are members of the S&P 500 and small and mid-cap indices.

MR. SIKES explained that the internal portfolio is benchmarked to the NAREIT Equity Index, which has a capitalization of over $300 billion comprised of 150 companies. Since 1990, both the market capitalization and the number of companies in the index has grown. REITs offer investors an opportunity to invest in a variety of real estate property types, including major property types as well as niche strategies like self storage, manufactured housing, and healthcare. REITs diversify an overall real estate portfolio, offer a higher dividend yield compared to broad equity markets, are a liquid form of real estate investment, and have strong historical performance.

The historical risk/return of REITs has been, on an annualized basis, exceptional and superior to large and small cap stocks. REITs have the closest correlation to small cap stocks; the ARMB small cap investors can and do invest in REITs. There is a low correlation between private real estate and REITs, primarily due to different property type mix, leverage and valuation methodologies.

The in-house portfolio strategy is based on the philosophy that the NAV of REIT stocks can be estimated as it reflects the total market value of its underlying assets, less the liabilities. REIT stock prices tend to trade at or slightly above the NAV over time. The ARMB REIT strategy focuses on REITs that are priced relatively cheaply to the NAV estimate. Staff believes this is an opportunity to enhance returns due to the upside potential as the REIT reverts to their NAVs, they have higher dividend yields, and there is less downside risk.

Staff began managing this REIT portfolio in November 2004 with $100 million. It was initially comprised of 25 REIT stocks trading at the deepest discounts to NAV. During the last six months of calendar year 2005, the portfolio substantially under performed the NAREIT Index and staff determined this was not the appropriate tracking error; the strategy was modified in January 2006 to reduce the NAV strategy to half of the portfolio with the other half invested in an index approach. Staff can now judgmentally review the results of the quantitative analysis to determine if there are factors causing no investment, even if a REIT is trading at a discount to NAV.

The process is to invest half of the portfolio using an index strategy. Half of the portfolio is invested in the largest REIT stocks until half of the portfolio is invested. The remainder of the portfolio is then invested using the NAV valuation approach. The NAV estimates received from brokerage and third party REIT analysts are reviewed monthly and compared to stock prices to determine if adjustments are appropriate. Staff is focused on limiting portfolio turnover, so any valuation adjustments need to be fairly significant in order for staff to trade. MR. SIKES indicated that he brings trade recommendations to the CIO before executing any trades.

MR. SIKES stated that absolute performance of this portfolio has been good with a since inception return of 29.12%, which under performed the NAREIT by 185 bp.

MR. WILLIAMS asked what the expense ratio on the index fund is. MR. SIKES replied that he estimates the expense at 50 bp.

MR. SIKES stated that since portfolio changes were made in January 2006, the portfolio has out performed the NAREIT by 97 bp and monthly tracking error has been reduced from 120 bp to 40 bp per month. For the third quarter through September this experience has continued.

A benefit of the in-house REIT portfolio is that knowledge acquired through REIT investing improves staff's ability to evaluate private market real estate opportunities. In addition, the suggestions and thoughts of several ARMB advisors that manage REITs have been solicited in managing this portfolio. Another benefit is that there are no additional fees for in-house management.

COMMISSIONER CORBUS asked for the source of research information. MR. SIKES replied that research information is provided by Morgan Stanley, Merrill Lynch, and Lehman Brothers, as well as Greenstreet Advisors, a third party research provider that is exclusively focused on REITs. A 50% average is input on Greenstreet with an average weighting on the other advisors in determining NAV. COMMISSIONER CORBUS asked if the analysts charge for research. MR. SIKES replied that the cost of the research is not direct; all of those firms are paid for their research through trading commissions. COMMISSIONER CORBUS asked if these firms' analysts visit staff. MR. SIKES replied that staff has not been visited directly by these analysts.

MR. PIHL noted that performance as of March 31, 2006 is shown as 15.68% of which 14.74% was appreciation. For the year the return was 32.35% return. He asked for comment on these returns. MR. SIKES replied that these returns are accurate. On an absolute basis, 32.35% is a good return, but on a relative basis the NAREIT was 38% for that same period. MR. PIHL noted that the appreciation is the actual value of REIT shares that can be readily determined. MR. SIKES agreed that this is measurable, but it is not realized until the REITs are sold. He noted that the index set an all-time high today. The year-to-date return as of June 30, 2006 was 13.87% for the ARMB REIT portfolio versus the NAREIT at 12.9%, but as of September 29, 2006 the ARMB REIT portfolio return was 24.8% and 23.37% for the index.

MR. SEMMENS was impressed that this REIT portfolio has out performed the other components of the real estate portfolio. He asked if this out performance would continue. MR. SIKES replied that when record highs in prices are being set, it is hard to think this out performance would continue. He noted that REITs have historic performance of 14-15%; they have been doing well for some time. The general consensus among managers is that REITs would perform 6-8%. MR. JOHNSON added that over the long term real estate would be expected to out perform private equities because of the additional volatility. Long-term returns for real estate have been 8-9% and for REITs has been 10-12%. MR. WILSON added that at one extreme there is core unleveraged real estate, REITs are in the middle with 50% leverage, and non-core uses 60-80% leverage. REITs should perform in the middle over the longer term at 8-10%. Many of the differences in return will be based on financial engineering.

DR. JENNINGS noted that he was initially quite skeptical of the active management of the REIT portfolio, but he has found academic research that Greenstreet does a good job of NAV estimates that lead to good REIT returns.

VII. UNFINISHED BUSINESS

1. 2007 Calendar

JUDY HALL stated the dates for the ARMB's 2007 meetings are finalized; an Audit Committee meeting was added in February and another can be scheduled in April, if necessary.

2. Disclosure Report

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

3. Legal Report

ROB JOHNSON had no specific report. He stated he has worked with Steve Sikes, Clay Cummins and Zach Hanna on various projects. He noted that there has been resolution of a process to involve the Attorney General's (AG) office in a quick turnaround with regard to the indemnification clauses contained in the various contracts between ARMB and various investment managers and in various investment vehicles. The AG was insisting upon the inclusion of language notifying anyone on the receiving end of an indemnification that any indemnification was subject to appropriation by legislation, that there was no request to the Legislature for money, and there could be no guarantee the Legislature would so provide, if the request were made. All parties have agreed to this language.

MR. BADER noted that these indemnification provisions are also requested to be included in all contracts entered into by the ARMB. Mr. Johnson and Mr. Mitchell worked on the State Street contract, which is the back-up contract for fixed income management should something happen to staff.

VIII. NEW BUSINESS – None

IX. OTHER MATTERS TO PROPERLY COME BEFORE THE BOARD – None

X. PUBLIC/MEMBER COMMENTS – None

XI. IAC COMMENTS

DR. MITCHELL joined Trustee Semmens in complimenting Mr. Bader and his staff for the first quartile performance achieved for the last year. He opined that perhaps the chief reason for this performance is that the fund has become and is becoming very different from other public funds. The asset allocation of the ARMB is parting ways with that of its peers. For example, the ARMB's commitment to alternatives is 9% and the median is 4%; ARMB has 10% in real estate and the median has 6%; ARMB has 38% in domestic equities and the median has 45%. To be the best, one must be different. He reminded the ARMB of remarks he made in Juneau in February 2006 at which time he said the investment world is changing and he guessed that by 2010 most successful institutional portfolios will be 50% invested in private investments of one sort or another. It is important that the ARMB stay ahead of the curve and continue to commit money to private investments because of vintage year risk and because of the unpredictability of fundraising on the part of the best private equity, the best real estate, and the best commodity and energy partnerships. It is critical that the ARMB's private investments be made in a continual, consistent, and regular manner. Relationships between the ARMB and private managers are very important. DR. MITCHELL remarked on manager performance that, insofar as private equity, CAI does a good job of measuring performance against standard benchmarks, peer groups, style groups, cap size groups, etc. all of which is important; however, equity managers can also be measured against what they promised when they were hired and how they were going to achieve out performance. He suggested this measurement be done when equity managers come before the ARMB in the future.

MR. WILSON noted that the presentations the ARMB received at this meeting show an impressive spread in real estate investments. He agreed with remarks made by Dr. Mitchell that diversification is the friend of the ARMB. He remarked that there is no clear idea what the world will look like in five years and the events that have occurred in the last five years were unpredictable and resulted in volatility in all of the markets. He stated it has been an amazing 20-year cycle in the real estate business; pricing is returning to where it was when he started in this business 15 years ago. He suggested that in viewing compressions and spreads from bond markets, the ARMB should proceed cautiously to ensure investments are in keeping with the spirit of what the ARMB is seeking from real estate. He encouraged continued investment in REITs.

DR. JENNINGS felt that the delegation of investment authority the ARMB granted to the CIO will streamline operations and clarifying governance is also a step forward. In terms of asset allocation, he noted that generally in every group with which he has been involved the approach has been incremental. He encouraged the ARMB to think what it would look like to arrive at the asset allocation set after next year's. While there are markets to which a measured approach is good, there are those in which speed is important. The ARMB can guide staff, CAI and the IAC whether it wants measured progress toward allocations or to move faster. There is time between now and the asset allocation in April 2007 for thought about this suggestion. He noted that on November 7, 2006 IAC members, Mr. O'Leary, and Mr. Bader will meet in Denver to review the ARMB's managers. This informal, in-depth discussion is helpful in making recommendations to the ARMB.

XI. TRUSTEE COMMENTS

MR. WILLIAMS thanked staff for coordinating and continuing the practice of roundtable discussions. He finds that getting managers together elicits dialogue that might not occur with single presentations.

MR. PIHL hoped that the ARMB follows through on Trustee Nordstrand's suggestion to think about where it is in the effort to achieve proper funding of the pension plans.

MS. HARBO agreed with Trustee Williams' comment about the work of the investment team in bringing informative presentations to the ARMB. She hoped that with the proposed budget the ARMB would be able to keep its home-grown investment team in place.

MR. TRIVETTE thanked staff for putting together the material for this meeting and to The Townsend Group for their help and oversight in the area of real estate.

MR. BOUTIN hoped the ARMB continues to try to meet in Juneau and occasionally hold committee meetings in Juneau because more staff can attend and it allows the ARMB to become more familiar with the Treasury Division. He noted that in four weeks there would be an election after which transition team members may contact the ARMB members. There will be a period of change that could be made easier by meeting in Juneau.

XII. FUTURE AGENDA ITEMS

MS. HARBO asked if a Legislative Committee meeting has been scheduled. MR. SEMMENS assumed the chair of that committee could schedule that meeting and inform the committee members of the date, time, and location.

XII. ADJOURNMENT

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

There being no objection, the motion PASSED unanimously.

THERE BEING NO FURTHER BUSINESS TO COME BEFORE THE BOARD, THE ARMB MEETING ADJOURNED AT 4:27 p.m. ON October 4, 2006.

Chairman of the Board of Trustees
Alaska Retirement Management Board

ATTEST: Gayle W. Harbo

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