Minutes of the meeting held on May 7, 2014

Present: Francis Murphy - Chairman, Jim Monagle, Michael Gardner, Ellen Philbin, Louis Depasquale, Rafik Ghazarian, Dan Westerheide and Chris Burns.

The meeting was called to order at 10:10 AM. The meeting was digitally recorded.

Agenda Item # 1 – Asset Allocation Study

The Board reviewed a written asset allocation study prepared by Segal Rogerscasey.

Ghazarian congratulated Murphy on his election as Board Chairman.

Ghazarian reviewed Segal's process in assembling asset allocation models, stating that their goal was to allow the system to reach the target rate of return with a reasonable level of risk.

Westerheide discussed the challenges that pension systems can face as they approach full funding. Systems may choose to take risk off the table, which reduces their likely returns, and can then result in systems falling behind in their funding ratio. He stated that it will be important to find a glide path which will allow the system to de-risk in a reasonable manner, allowing the system to continue to meet return objectives.

Westerheide noted that bond yields are now at historic lows, having fallen for most of the last thirty years, although Segal's models assume that there will be higher yields over the next five years. He also described Segal's process for forecasting equity returns, adding earnings growth, dividend yield and inflation, which results in nominal returns of 7.5% annually. Taking into consideration compounded returns over a long period, this suggests an average annual return of 9.2%.

Ghazarian reviewed various asset classes, and their roles within the portfolio. He reviewed their average returns, expected volatility, and discussed the importance of diversification. He stressed that there is no free lunch in picking asset classes, in that the highest returning classes are the riskiest, and have the highest volatility. Westerheide noted that certain asset classes, such as private equity, also pay a premium for illiquidity, and that Cambridge was well-positioned, with adequate cash flow to take advantage of these types of investments.

Ghazarian described the current target allocations for the retirement system. He noted that he has redefined timber as falling into the Real Assets sleeve, rather than in Alternatives. He stated that his major concerns in reviewing the current targets are low yields within the fixed income sleeve, minimal exposure to real assets, and that the majority of the portfolio's risk comes from the domestic equity segment. The expected return, using a 20-year horizon, for the current portfolio is 7.8% annually. Ghazarian noted that the shortfall would compound to well over 2% over ten years. Gardner requested that Ghazarian provide additional information on Segal's formula for determining how losses compound over a given period, noting that he would like to apply this information to determine losses from investment management fees.

Depasquale noted that he had supported the Board's prior choices to drop the assumed rate of return to 8.25% and later to 8%. He stated that he was somewhat concerned about the possibility of a further reduction, and that some people might question if the Board was being too conservative by lowering the return assumption, rather than chasing returns more aggressively.

Westerheide stated that he would not classify the current portfolio as being conservative, but rather average for a public pension fund. Ghazarian added that many public plans still use an 8% assumption.

Gardner stated that he expected that the Investment Consultant side of Segal would be able to provide useful information as to what types of returns would be achievable with reasonable risk. He added that he did not expect this sort of information from the Segal actuarial consultant, and that he saw the actuary's role as taking a rate set by the Board, and explaining how it would affect the funding schedule.

Monagle stated that he has been concerned at the conflict of having the same company providing both consulting and actuarial services. He feared that the two sides might refrain from criticizing the assumptions made by the other side, since they both work under the same company.
Ghazarian reviewed the six proposed allocations prepared by Segal. All of the proposals require a significant reduction to US Equity investments, and an increase to Emerging Markets Equities, Private Equity, Hedge Funds and Timber. Some of the allocations also require new investments in Emerging Market Debt and Infrastructure. Ghazarian proposed that by shifting assets, and moving risk away from US Equities, the portfolio could achieve a higher return with less risk.
Gardner noted that the Board has struggled to meet the current 6.5% target to private equity and that he was concerned that the portfolio would not be able to meet the higher allocation target in Segal's proposal.
Ghazarian reviewed the current investment sleeves. In the equity sleeve, he stated that the system may wish to consider consolidating some of the current funds, moving some accounts over to passive managers, and cutting the allocation to small and mid-cap funds. Ghazarian also reminded the Board that the Board is required to issue RFPs for nine existing managers before February 2017, and that consolidating some managers would make the process less burdensome. In the fixed income sleeve, he stated that Segal did not recommend any changes, other than the possible addition of an Emerging Market Debt manager. In the real estate sleeve, Segal moved Landmark and Penn Square into this sleeve. Ghazarian stated that this, plus the full funding of the Rockwood account, would bring the sleeve in-line with the target allocation.

Agenda Item #2 – PRIT Private Equity Segment Discussion
The Board reviewed a written analysis of the PRIT Private Equity Program.
In reviewing the alternatives sleeve, Ghazarian noted that Segal was proposing to invest $150 million in private equity funds over the next five years. Ghazarian said that he remains concerned with the possibility of overallocating to private equity, noting that he feels this problem would be worse than an overallocation in a more liquid asset class. He stated that while it would be possible to perform searches for individual managers, the Board may prefer to either invest with the PRIT fund or hire a separate account manager.
Ghazarian described the process by which a separate account manager would operate. The manager would act similarly to a fund-of-funds, making commitments on the Board's behalf to underlying managers. The Board could then provide general guidance as to which areas, such as venture capital, or secondaries, that the manager would invest in. Ghazarian also stated that such a manager would likely require a commitment of at least $100 million. Ghazarian stressed the importance of keeping the portfolio diversified by vintage year, and avoiding the temptation to make a large commitment to a 2014 fund in order to quickly bring the portfolio in-line with the target allocation.
Ghazarian noted that, in considering the options, the Board may wish to consider that, by issuing their own RFP for individual managers, Cambridge may not attract the most qualified managers. Using a separate account manager, or investing with PRIT would give Cambridge greater access to the top funds within the private equity universe.
Ghazarian reviewed PRIT's investment process. The PRIT Board approves a vintage year fund every February. Local Boards must notify PRIT of their interest in the following year's product by December. Since Cambridge could not be able to put any investments in place through PRIT until 2015, Ghazarian advised that the Board could issue an RFP for a secondaries manager in 2014, while committing to PRIT's 2015 fund.
In response to questions from Gardner, Ghazarian stated that Cambridge would likely be too small to attract a quality farmland fund. He added that the system would be likely to attract quality infrastructure funds.
Monagle stated that he would wish to consider reviewing the options for moving additional segments of the portfolio into the PRIT fund, such as the small cap fund. Ghazarian confirmed that if the Board opted to move all their investments into PRIT, there would be no need to

employ Segal as an investment consultant. He suggested that if the Board wishes to consolidate the equity portfolio, they could opt to move funds into a Russell 3000 or Wilshire 5000 index fund, which could replace five of the current equity managers.

Ghazarian stated that Segal has changed its assumptions regarding equity funds, partly due to the significant returns over the last three years, and the likelihood of a correction. The predicted returns from equities are lower than in the last asset allocation study, accounting for the significant shift away from this asset class that Segal now recommends. Segal performed the same risk analysis in the last allocation study, but it did not show the same level of risk that the models show now.

Ghazarian stated that, if asked to make a recommendation, he would advise the Board to select model #5 in his allocation model, noting that it has the most favorable balance of risk and return. He noted that this portfolio also required the addition of two new asset classes. Murphy stated that he would also favor adding an infrastructure fund, and reducing the equity allocation in order to realize the profits from the strong returns over the last three years.

Gardner requested that Segal forward additional educational materials on the Emerging Markets Debt asset class, as well as Infrastructure funds.

The Board agreed to hold the next quarterly review meeting on June 11 at 8:30 am.

Agenda Item #3 – Segal Rosgerscasey Contract Amendment Discussion

The Board reviewed a proposed amendment to the investment consultant's contract.

Ghazarian stated that Segal is requesting the amendment due to the added expense of conducting searches required by Chapter 176. Ghazarian acknowledged that he was aware of the changes at the time that the original contract was signed. However, at the time, he anticipated that the legislation would not remain in effect. He also acknowledged that Segal is now contractually obligated to perform the searches at no additional cost for the duration of the contract, and that Segal is prepared to honor that agreement. The amendment states that active manager searches will be billed at $15,000 per search.

Gardner requested that Segal provide information on how many searches they have conducted since 2001. He stated that he felt that the management fee had always included a certain number of searches, but that he could consider billing separately for searches above a certain number. Murphy stated that he would expect that Segal should perform the searches which were anticipated at the time the contract was signed, but that he would not object to paying a fee for new searches when the Board changes to a new manager. Ghazarian stated that such an arrangement might constitute a conflict of interest for him, as it would incentivize the consultant to recommend replacing managers more often. Gardner stated he would prefer to table the matter and discuss it with the full Board present.

Murphy noted that at the NCPERS conference, he was informed that at least one investment manager bills public pension funds as a group, allowing them to lower their management fees. He requested that Segal ask about this billing structure when new investment managers are hired.

Monagle moved to adjourn at 2:00 PM.