

Minutes of the meeting held on February 28, 2017

Present: Francis Murphy - Chair, Jim Monagle, John Shinkwin, Michelle Kincaid, Ellen Philbin, Rafik Ghazarian and Chris Burns.

Absent: Michael Gardner and Nadia Chamblin-Foster

The meeting was called to order at 11:01 AM. The meeting was digitally recorded.

Agenda Item # 1 – 2016 Performance Review

Ghazarian reviewed Segal Rogerscasey's written analysis of investment performance for the period ending December 31, 2016. Over the last year, the domestic and emerging equity markets showed very strong returns. Real estate also performed well. Fixed income showed modest returns. Hedge funds continued to show very weak returns. Over the last ten years, this asset class has returned 1.33% annually.

Overall, the Total Fund was valued at \$1.151 billion, representing a gain of 0.96% during the quarter. The fund underperformed the policy index return of 1.58%. Over the full year, the fund returned 8.48% vs. the policy index at 9.72%. Ghazarian noted that this number does not include returns from some of the private equity, real estate and secondary funds, which may push the return slightly higher.

Ghazarian reviewed the system's current asset allocation. The system remains significantly overweighted to equities, but some of these funds will be drawn down as new managers are funded. Ghazarain stated that he believed that the new Infrastructure manager would call funds soon. The Chairman stated that he remains concerned with the returns from hedge funds, in that the asset class has been a consistent drag on the portfolio's performance. Ghazarian stated that PRIT appears to be committed to maintaining a 10% allocation to hedge funds. He stated that he would like to review the options again for changing this allocation. Ghazarian stated that it appears that the State Retirement Board is likely to lower their assumed rate of return. It is currently 7.75%.

Over the last year, the fund has seen poor returns from Wedge Capital. They returned 15.36% vs. the benchmark at 20%. Over the longer term, the fund does have stronger returns. Lazard has generated very strong returns over the last year, returning 22.77% vs. the benchmark at 11.19%. Returns from fixed income and emerging markets have been strong. Returns from the hedge fund sleeve are running ahead of their benchmark.

Ghazarian reviewed a chart comparing Cambridge's performance to PRIT. He noted that over the last ten years, Cambridge continues to post higher returns than PRIT.

Ghazarian stated that, at the next meeting, he would review which managers are still subject to evaluation and issuance of an RFP. He said that he would appreciate guidance from the Board if there is a desire to make changes to the domestic equity sleeve, either by indexing the midcap portfolio, or by consolidating the various index funds. He noted that the recent poor performance from Wedge would make them a candidate to be replaced with an index fund. He also noted that there are now five funds in this sleeve, and noted that consolidation would leave fewer managers to track, and save on management fees.

Gregory Balewicz, Derek Lightburn and Olga Winner represented State Street Global Advisors. A written portfolio report was submitted to the Board. State Street now manages approximately \$187 million for the Cambridge Retirement Board, across three funds. Cambridge is presently

invested in an S&P 500 index, MSCI EAFE index, and Russell 2500 Growth index. Lightburn noted that over the past year, there had been about \$55 million in net withdrawals. He emphasized that the system had only incurred about \$3,000 in trading costs over the last year. Winner described technological upgrades over the last year, focused on smoothing and monitoring the trading process. The funds performed in-line with the benchmark in a year that saw strong appreciation in the domestic equity markets. Winner noted a slight positive tracking error vs. the EAFE index, stating that this was due to favorable tax treatment. She also stated that the exclusion of tobacco firms causes a small tracking error in the Russell 2500 fund. The Chairman asked if there were any additional fees for segregating out tobacco firms. Balewicz stated that Cambridge is paying higher fees than they would in a commingled fund. A separate account is required in order to comply with the tobacco regulations. He offered to report back with more information on the fee difference. Lightburn described changes within State Street that were necessary to comply with the Dodd-Frank act. Rather than being a division of State Street Bank, SSgA will be converted to a wholly-owned subsidiary. Lightburn stated that he expects no changes to personnel or investment process as a result of this change. He stated that he was not aware of any other pending changes connected to Dodd-Frank, but offered to consult with his Legal Department and report back.

Brian Drainville, Earl McKennon and Jim Zadrozny represented Fidelity Institutional Asset Management. A written portfolio report was submitted to the Board. Drainville reviewed the Emerging Markets Debt strategy. The portfolio consists primarily of US dollar denominated sovereign and quasi-sovereign bonds. The portfolio invests 15-25% of the fund in corporate debt, and up to 10% in local currency. The fund has added a co-portfolio manager within the last year. The portfolio has been in existence since 1990, and Cambridge began investing in May 2016. The fund has outperformed significantly since that time, returning 8.23% net of fees, vs. the index at 4.55%. The portfolio was helped by overweights in Brazil, Argentina and Ukraine. Exposure to national oil companies drove performance due to rising oil prices. Drainville noted that the portfolio has maintained an overweight to Argentina for more than twelve years. He stated that since their 2001 default, there have been good buying opportunities as the country normalizes their economy.

McKennon reviewed the fixed income portfolio. There have been no changes to the portfolio management team, or investment strategy over the last year. Over the last year, the portfolio returned 3.99% vs. the Barclays US Aggregate at 1.45%. The portfolio has consistently outperformed since inception. McKennon stated that he was pleased the portfolio was able to outperform in a very volatile environment, noting the unexpected results of the Brexit vote and the US election. He noted that a number of sectors have rebounded quite strongly after posting weak returns in 2015, with TIPS, CMBS and Corporates all posting good returns. The portfolio is overweighted to Corporates, and this was a major driver of returns. McKennon stated that the portfolio has been de-risking over the last six months. Holdings of US Treasuries were at 9% of the portfolio, but now comprise 25%. McKennon stated that he was anticipating two interest rate increases from the Fed this year. He stated that he felt the portfolio was positioned to perform well in an environment of gradually rising interest rates.

John Norman represented Wedge Capital Management. A written review of the portfolio was presented to the Board. Norman reminded the Board that when he last reported on portfolio performance in June 2016, the fund had experienced a period of underperformance. The fund ran approximately even with the benchmark throughout the rest of 2016. He stated that performance has improved since the beginning of 2017, with about 80 basis points of outperformance in January, and is poised to gain about 110 points for February. Norman updated the Board on changes at Wedge. The firm added one new partner, and had another retire. One junior analyst on the mid-cap team was terminated due to performance issues. There have been no changes to the overall investment strategy. In reviewing performance, Norman

noted that Wedge continues to perform ahead of the benchmark over the long-term. He stated that the recent outperformance is the result of their willingness to hold slumping stocks during a period in which their price fell more than was warranted. Of 45 stocks in the portfolio, 35 are up over 20% in the past year. The two strongest performers were Dana and CIT Group. He noted that there had been only modest changes to the portfolio since June.

Matt Drasser, Sean Patterson and Mike Sheldon represented Income Research & Management. A written portfolio report was submitted to the Board. Drasser stated that there have been no changes to the portfolio team or strategy. In 2016, the firm was named as one of the best places to work by Pensions & Investments Magazine. The portfolio's returns have outperformed the benchmark across all time periods, adding about 30 basis points of returns annually over the benchmark since inception. Sheldon reviewed the current composition of the portfolio. Average yield in the portfolio is 2.74% vs. the index at 2.5%. This is achieved with little sacrifice in quality. Patterson stated that it has been the policy of the firm to take a neutral view of average duration in the portfolio, due to the difficulty of predicting future interest rates. Corporate bonds generated the highest returns in 2016, and the portfolio was overweight in this sector. The portfolio was hurt by an overweight position in ABS bonds, but Sheldon stated that he felt it was important from a diversification perspective to hold the position. The portfolio has increased holdings of Treasuries over the last year in an effort to control risk. Sheldon stated that he does expect at least two interest rate increases within the next year. He added that the Fed has been telegraphing each rate increase well in advance, which he felt has helped stabilize the bond markets.

Wayne Owen, Denise D'Entremont and Julie Lind represented RhumbLine. A written portfolio report was submitted to the Board. There have been no changes to the portfolio management over the last year. RhumbLine currently manages two indexed portfolios for Cambridge, the Russell 1000 Growth Fund and the Russell 1000 Value Fund. D'Entremont noted there was some overlap between the two funds. Lind reviewed the returns of both funds. The Growth fund returned 17.13% over the last year. Lind reviewed the composition of the index, and sector weightings. She also reviewed trading costs, noting that the average commission is 0.4 cents per share. Cambridge began investing in the Value fund in May 2016. The value fund returned 12.07% since inception. Both funds have minimal tracking error. D'Entremont reported on changes to the firm, stating that Alex Ryer was hired as Director of Investments, and that he was likely to take over upon the retirement of Norman Meltz. Monagle noted that the firm handles OPEB investments for a number of clients, and asked about the composition of those Boards. D'Entremont stated that most OPEB Boards are separate from pension Boards, and each makes their own investment decisions.

Jason Crawshaw, Gerald Cosgrove and Emily Moran represented RBC Global Asset Management. A written portfolio review was submitted to the Board. There have been no changes to the portfolio management in the last year. Crawshaw stated that Bernie Horn wished to apologize for being unable to attend the meeting due to a trip to Korea. Over the last year, the portfolio ran well ahead on the benchmark, returning 5.81% net vs. the index at 1.51%. Crawshaw said he was particularly pleased with this return, given that the portfolio lost about 400 basis points of performance due to currency effects. The materials and financials sectors were the biggest contributors to performance. Over the last year, the firm has made three new investments in financial firms. The health care sector detracted from performance, particularly the holding of Teva Pharmaceutical. Holdings of British homebuilders also hurt performance, with the Brexit vote weighing on the stocks, and leading to a decline in the value of the British Pound. The firm sold holdings of six firms, two of which were due to takeovers. Crawshaw also discussed the decision to sell Rexlot, a Chinese lottery firm, at a loss. He noted that the US

dollar has had a very strong run for several years now, and that he felt that international firms were likely to catch up at some point soon.

The Chairman stated that he received correspondence from Professor Max Tegmark, which he would discuss further at the regular Board meeting.

Monagle moved to adjourn at 2:40 PM.