Minutes of the meeting held on March 5, 2019

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

Absent: Nadia Chamblin-Foster, Michael Gardner

The meeting was called to order at 11:00 AM. The meeting was digitally recorded.

Agenda Item # 1 - 2018 Performance Review

Ghazarian reviewed Segal Rogerscasey's written analysis of investment performance for the period ending December 31, 2018. Markets experienced steep losses in the 4th quarter, pulling most asset classes into negative returns for the full year. Real estate and private equity were the only classes that showed positive returns. However, the first quarter has seen some recovery, with equites posting better results. Overall, the Total Fund was valued at \$1.267 billion, representing a loss of 6.36% during the quarter. The fund was ahead of the policy index return of -6.64%. Over the full year, the fund returned -3.56% vs. the policy index at -3.19%.

Ghazarian reviewed the system's current asset allocation. With the significant equity losses in the last quarter, the system is now largely in-line with the target allocation, although still somewhat short of the target to the alternatives sleeve. Ghazarian noted that the system will consider new asset allocation targets in the near future. He stated that PRIT continues to draw down the commitment on all of the system's investments from the 2015-2019 private equity funds. Segal will continue to monitor those funds and to prepare an annual cash flow analysis.

Reviewing the performance of individual managers, Ghazarian noted that Lazard has continued to underperform their benchmark over the last year. Their long-term performance still outperforms their benchmark. He small cap index was the worst overall performer in the last quarter. Ghazarian stated that he was concerned this asset class might experience liquidity issues as investors try to sell out of small cap stocks.

Ghazarian reviewed the status of pending searches. The system is currently soliciting proposals from bank loans and infrastructure managers. The deadline for responses is on March 7th. Segal should be able to prepare analysis of the candidates in time for the first quarter review.

Ghazarian stated that he believes that share repurchases are not a significant driver of the current equity rally. He stated that the overall strength of the US economy is more important. He offered to forward more information if the Board wished to review it.

Bernard Horn and Ashley Hyotte represented RBC Global Asset Management. A written portfolio review was submitted to the Board. Over the last year, RBC has merged three separate units servicing the USA, Canada and the UK. This is part of an effort at making RBC into a more "global" firm. There have been some staff changes as a result of this merger. Horn noted the hiring of one new analyst, Jamie White. He described White's military background and reviewed his work in helping the firm to develop human information sources, improve their profiling and interviewing process through various techniques including reading body language. Horn noted that he has observed that it has become significantly more difficult for firms to raise prices in real terms. Over the last year, the portfolio ran behind the benchmark, returning - 13.71% net vs. the index at -13.36%. He stated that over the last two years, the firm had been working to de-risk the portfolio, in anticipation of a downturn. The firm made a number of new investments in Korea. These firms were an excellent value and helped to mitigate some of the losses in the 4th quarter. Over the last year, Popular Inc., a Puerto Rican bank has been the

strongest returner as the recovery from Hurricane Maria has continued. Infosys Ltd was another strong performer. Horn stated that he toured their campus in Bangalore, India. WorleyParsons was another strong performer. RBC exited this position in the third quarter due to the high valuation. Three chemical companies were among the worst performers. Horn stated that a fall in oil prices hurt this entire industry. Two British homebuilders also showed weak performance as uncertainty around Brexit weighed on consumer confidence. Horn stated that he feels the companies' fundamentals remain strong. The Chairman asked about the impact of a potential trade deal with China. Horn stated that a number of materials firms had suffered due to the trade war, and would benefit from a new deal.

Bob McManama and Tom Stolberg represented Loomis Sayles. A written portfolio review was submitted to the Board. There have been no changes to the portfolio team or investment strategy. Over the last year, the portfolio has behind the benchmark, returning -3.31% net of fees, vs. the BARC High Yield Index at -2.08%. McManama stated that he had anticipated a difficult environment in 2018 due to interest rate increases, as well as continued worries about trade, and the portfolio had been defensively positioned. However, the portfolio is up 6.15% to date in the first quarter. He noted that it now appears likely that the Fed will pause on further interest rate increases, which has helped the portfolio. Stolberg conceded that the firm had made some poor selections which hurt returns in 2018. He stated that he believed, as of January, that the poor returns in 2018 had overshot the mark, and that the actual fundamentals would support stronger returns. Looking at the markets today, he said that he feels valuations may be a little too high. He noted that there was still a great deal of uncertainty around slow growth, Brexit and US-China trade. However, the apparent stability of interest rates has driven strong returns over the last two months.

Brian Drainville, Earl McKennon and Melissa Moesman represented Fidelity Institutional Asset Management. A written portfolio report was submitted to the Board. 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 2.1% net of fees vs. the Barclays US Aggregate at 2.25%. The portfolio has a strong record of outperformance since inception. 2018 was an eventful and volatile year, with four Fed rate increases and the market slump in the fourth quarter. 2019 has seen some recovery of those losses. McKennon stated that it appears interest rates will remain steady for the rest of 2019. US Treasuries now comprise 31% of the portfolio, somewhat below the benchmark weight of 38.6%. TIPS were reduced from 8% to 3.5% of the fund over the last year, and the portfolio opted to move into higher yielding bonds. Corporates were increased from 27% to 31%. McKennon stated that he was particularly bullish on the Financials sector. He stated that he was prepared to shift more money from Treasuries once valuations look more favorable. He stated that 2019 appears to be shaping up to be much more stable than 2018, and that the successful conclusion of a trade deal with China would help returns. The Chairman asked McKennon to describe the impact of increasing rates of default on auto loans. McKennon stated that he believes that underwriting standards have deteriorated for some lenders, but that Fidelity has no exposure to those bonds. He said that he did not see issues with auto loans as having a significant impact on the larger economy.

Drainville reviewed the Emerging Markets Debt strategy. He reported that Jonathan Kelly, one of the co-portfolio managers, has taken on additional role as manager of an equity fund. The portfolio consists primarily of US dollar denominated sovereign and quasi-sovereign bonds. The portfolio now invests 25% of the fund in corporate debt, and approximately 3% in local currency. The portfolio typically invests in bonds with a maturity date between 1-10 years off. Bonds may be held until maturity. Drainville stated that about 15% of the portfolio would reach maturity within the next year. Over the last year, the portfolio returned -5.19% net of fees, vs. the benchmark return of -4.61%. Since inception, the fund has returned 4.13% annually vs. the

benchmark at 2.83%. He stated that EM portfolios will tend to lag in rising interest rate environments. He noted that Argentina and Turkey were particularly hurt in 2018 as they run higher than average deficits. Performance has rebounded in 2019, with the portfolio showing at 4.29% return in January. The portfolio continues to overweight Argentina, Brazil and Ukraine. Mexico is underweighted. None of these positions have changed significantly over the last several years. The portfolio has now overweighted Turkey, feeling that the assets became quite cheap during the fourth quarter. Drainville reviewed the Argentina position, noting that the overweight had been in place since 2005. He stated that, even with economic difficulties over the last year, the country remains underleveraged, and with potential for strong growth.

Jonathan Cordo represented Brandywine. A written portfolio report was submitted to the Board. There have been no significant changes to the portfolio team or investment strategy. In June, the firm completed a move to a larger office, but is remaining headquartered in Philadelphia. The firm has \$72 billion in assets under management. The firm lost 22 clients over the last year, while gaining 20 new clients. Cordo reviewed the portfolio strategy, noting that it was constrained to investing in sovereign and government-related debt. The portfolio underperformed the benchmark over the last year, returning -4.52% net vs. the Citigroup WGBI Ex-US at -1.823%. The portfolio has now run behind the benchmark over the trailing five-year period. Cordo noted that the benchmark is heavily weighted toward the most stable nations, such as Germany and Japan. Brandywine tends to see these bonds as overvalued. The fourth quarter saw a flight to quality which benefited those bonds, resulting in Brandywine's underperformance. The US Dollar maintained its strong run in 2018, resulting in significant losses to currency positions. The Mexican Peso was the only currency position which generated a positive return. Looking forward, Cordo stated that he expected the growth of the US economy to slow from the pace in early 2018. He also anticipated that the US and China would conclude a trade deal in the first half of 2019. The portfolio is positioned to take advantage of a boost to the Chinese economy and other emerging markets. Cordon suggested that if the Board is concerned about excessive volatility in this portfolio, they may wish to look at a global fund which would include US Treasuries.

Matt Drasser 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. Over the last year, the portfolio returned -0.42% net of fees, which matched the benchmark performance. 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. Over the last year, Treasuries outperformed other bonds. Sheldon stated that, given headwinds in 2018, he felt the portfolio did well to match the benchmark. He credited strong security selection with ensuring sufficient performance to make up for the underweight to Treasuries. The portfolio is not currently making any significant sector bets. There are slight overweights to Financials, Utilities and Munis. Given the losses in the fourth quarter, the portfolio has moved to acquire undervalued bonds, including GE, Budweiser and Kroeger.

Sarah Duncan and Julie Lind represented RhumbLine. A written portfolio report was submitted to the Board. Within the last year, the firm hired Lisa Sheeler as Chief Compliance Officer. RhumbLine currently manages two indexed portfolios for Cambridge, the Russell 1000 Growth Fund and the Russell 1000 Value Fund. The portfolio saw heavy losses in the fourth quarter. Lind reported that the Growth fund has a 12.7% return thus far in 2019, and the value fund had returned 11% YTD. Lind stated that she had reviewed the process of combining the two funds into a single account. She said that she expected there would be little-to-no cost involved in that transaction. The Chairman asked about returns from fossil-free indexes. Duncan said that RhumbLine has a number of clients who use such funds. She stated that she ran reports when

the Somerville Retirement System was considering an investment, and that the exclusion of fossil fuel companies cost about 10 basis points of performance annually.

The Board agreed to hold the next investment review meeting on May 29, 2019 at 11 AM.

Monagle moved to adjourn at 3:30 PM.