Minutes of the meeting held on December 10, 2018

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

Left Early: Nadia Chamblin-Foster (Left following Hamilton Lane presentation)

The meeting was called to order at 10:31 AM. The meeting was digitally recorded.

Agenda Item # 1 – Segal Marco Advisors
Ghazarian reviewed Segal Marco's written analysis of investment performance for the period ending September 30, 2018. The third quarter saw strong returns in the equity markets, but also saw losses in emerging markets and fixed income. Ghazarian also noted that it appears likely that the fourth quarter will end with significant losses across all asset classes. Overall, the Total Fund was valued at $1.385 billion, representing a gain of 2.71% during the quarter. The fund slightly underperformed with the policy index return of 3.1%.

Ghazarian reviewed the fund's asset allocation. The fund remains overallocated to equities, as the fund waits for commitments to the private equity sleeve to be drawn down. The system also has one new fixed income manager to fund. Finally, the system remains underallocated to hedge funds, although Ghazarian stated that he would not recommend committing more money to this fund until the system makes a decision about how much to commit to hedge funds going forward.

Ghazarian reviewed an asset allocation study prepared by Segal Marco. He discussed Segal's process for performing a study, reviewed various assumptions around likely returns, and described how certain asset classes may be correlated with each other. He reviewed the current asset allocation targets and described five alternative proposals for an asset mix. Segal has proposed that the real estate sleeve be subdivided into three buckets which are Core, Value Add and Opportunistic. Ghazarian noted that returns for these sub-strategies can vary significantly, and that the Board ought to carefully review relative allocations to all three. As the Board has never divided funds in this manner, Ghazarian stated that he was using his best estimate to determine how funds are currently allocated. Some of the asset mixes also add a Bank Loans allocation under the fixed income sleeve. According to Segal's model, all of the proposed mixes would generate higher returns, and give the system a higher probability of meeting the 7.5% return assumption. Mix 1 and Mix 2 would reduce allocations to core fixed income and hedge funds. Funds would be added to equities, real estate, timber and infrastructure. Mix 3 cuts the hedge fund allocation to zero and makes no changes to the fixed income sleeve. Allocations to equities, real estate, timber and infrastructure would increase. This mix would have the highest risk component of any of the options. Mix 4 and Mix 5 add Bank Loans as an asset class, cutting back allocations to core fixed income and high yield in order to fund the new mandate. In addition, the hedge fund allocation would be reduced and funds added to equities, real estate, timber and infrastructure. Ghazarian stated that there are already a number of Massachusetts funds that have dedicated bank loans investments, and he provided an overview of how such funds work. He also stated that Segal does include bank loans in the portfolio for about half of their portfolio-managed clients. Gardner stated that he has been concerned for some time about the high fees and low returns from the hedge fund allocation. The Chairman stated that it appears that equities are now entering a bear market and that the hedge fund strategy might be a more stable option in the near future. Ghazarian reminded the Board that the PRIT hedge fund sleeve has outperformed their peer group and has lower fees than most other funds in this asset class.

The Board reviewed a draft Investment Policy Statement, revised for 2018. Ghazarian advised that the Board may wish to have the statement reviewed by Attorney Quirk before approving it.

Simon Dwyer, Joe Gelly and Meredith Moran represented BlackRock. A written review of the portfolio was presented to the Board. There have been no changes to the investment strategy or the management team at BlackRock. Cambridge currently has investments in DivPEP Fund II and DivPEP Fund V. Dwyer reviewed the construction of the portfolios. The DivPEP portfolios are primarily fund-of-funds, but about one-third of the portfolio is direct co-investments, and a smaller amount in secondaries. Fund II is a 2002 vintage fund, now well into the harvesting phase. Cambridge committed $10 million to the fund. The portfolio currently has a net IRR of 10.5% and has returned $16.2 million in distributions to Cambridge since inception. The remaining value in the fund is about $800,000. Dwyer stated that he was considering offers to liquidate the fund by selling the tail-end assets on the secondary market. Fund V is a 2012 vintage fund, now fully constructed and entering the harvesting phase. Cambridge has committed $6.5 million, and paid in $4.7 million. To date, the fund has returned about $100,000 to Cambridge. The firm is likely to call an additional $1.5 million over the next two or three years. The fund differs from Fund II, in that it includes some investments in energy funds, and also includes investments in Asia and Latin America. The fund is heavily weighted toward buyouts, with smaller amounts in energy, venture capital and distressed debt. The fund is about 6% in secondaries, 17% direct co-investments, with the rest structured as a fund-of-funds. Fund V is likely to run another eight years.

Tim D'Arcy and Jackie Rantanen represented Hamilton Lane. A written overview of the portfolio was presented to the Board. There have been no changes to the investment strategy or the management team at Hamilton Lane. Cambridge has investments in Fund VI and Fund VIII. Cambridge made a $10 million commitment to fund VI, which is a 2007 vintage fund. The fund has an 8.7% net IRR. The fund is well into the harvesting phase. The fund is weighted toward buyouts, and to investments in North America. Rantanen noted that one weak spot in the portfolio is the performance of the secondaries. She noted these funds were purchased in 2007, before the Global Financial Crisis. Cambridge has committed $6.5 million to Fund VIII, which is a 2012 vintage fund. The fund is now fully committed although the underlying managers are still making investments. Some of the earlier investments are now making distributions, and returns are picking up. The portfolio has a net IRR of 8.2%. This fund is not as heavily weighted toward buyouts, with larger amounts of distressed debt and venture capital. Rantanen described an issue with the Abraaj Global Markets Strategic Fund. This is a new manager that Hamilton Lane had not worked with before. Although returns from this fund are positive to date, there have been issues with cash management and corporate governance at the management company. The firm is in the process of bringing in new management. Rantanen stated she would keep the Board updated of any changes to this situation.

The Board reviewed Segal Marco's analysis of the responses to the Passive Funds RFP. Ghazarian reminded the Board that the Board described four separate mandates within the RFP. They are a Russell 1000 fund, Russell 2000 fund, MDCI EAFE fund and an MSCI Emerging Markets fund. The Board received seven responses. AXA Advisors was eliminated because they submitted only marketing materials and did not complete Segal's questionnaire. Fidelity was not able to offer a Russell 1000 fund. They offer only Russell 1000 Growth and Russell 1000 Value. As the Board has previously expressed concerns about the duplication of holdings between these funds, Fidelity was eliminated. Legal & General Investment Management was eliminated because they have little experience in managing index funds. Vanguard was eliminated because their fees were significantly higher than any of the other respondents. Gardner stated that he was surprised by the fees that Vanguard quoted, as their retail funds tend to be very inexpensive. Ghazarian stated that he was prepared to recommend that the Board consider the three remaining candidates, BNY Mellon, RhumbLine Advisers and State Street Global Advisors. Motion by Gardner, seconded by Shinkwin to invite these three managers to interview with the Board. The motion carried on a 4-0 vote with Chamblin-Foster absent. Monagle stated that he remains concerned about issues with State Street's client service, and the Board's experience with changes to the custodial business. The Board agreed to schedule interviews with the candidates on Thursday, January 3, 2019 at 1:00 PM. Ghazarian stated that he would request that all managers be prepared to offer their best and final quote on fees prior to the meeting.

Francesco Daniele represented the PRIT Fund. A written portfolio report was submitted to the Board. He provided an overview of global market activity. He also reviewed staffing changes, noting that PRIT has been able to attract very talented professionals. He described the selection process within the private equity portfolio, noting that PRIT has a good reputation in the investment community and is able to attract top-quality funds. This allows PRIT to be very particular in selecting managers. The private equity fund has taken advantage of their flexibility to make direct co-investments. Existing managers may approach PRIT with an opportunity to make a direct investment, which would come with no management fee. Daniele stated that he understood the Board's concern about private equity commitments not being drawn down, as the 2015 and 2016 funds fell short of the commitments target. He noted that the 2017 vintage fund was slightly oversubscribed. It appears that 2018 will be fully subscribed, and he anticipated that 2019 would also be fully subscribed. The Chairman stated that he remains concerned with the performance of the hedge fund sleeve, but also questions if the Board should cut the fund back significantly given the likelihood of a decline in the equity markets. Daniele emphasized that he would never advise on a market timing strategy. He added that hedge funds are not intended to be a driver of returns, but rather to mitigate risk. He stated that the hedge fund sleeve was intended to compliment the equity sleeve, which included more aggressive investments.
He stated that PRIT would make decisions about their own future asset allocation on February 7, and that Cambridge might wish to take that as a signal as to how PRIT views the viability of the strategy. At the last asset allocation review, PRIT added more money into hedge funds. The PRIT hedge fund strategy continues to outperform its benchmark across all time periods. Daniele noted that PRIT has doubled the staffing on the hedge fund team.

Eric Dooley and Matt Griffin represented Hancock Timber. A written overview of the portfolio was presented to the Board. Cambridge currently invests in two Hancock funds. Hancock Timberland X is a closed-end fund with a 2004 inception date. The Hancock Timberland and Farmland Fund is an open-ended fund with a 2018 inception date. Over the last year, the firm has worked to more closely integrate the timber and farmland sides of the business. The firm also shuttered the renewable energy investment unit due to difficulty raising capital. Dooley reviewed the performance of Fund X. The portfolio is now fully invested, and in the holding period. The fund will begin to wind down in 2023. Cambridge committed $6 million and the entire amount has been called. The fund has made $1.4 million in distributions. The current value of the fund is appraised at $8.8 million. The total portfolio consists of just under 500,000 acres of timberland. The properties are located in the Pacific Northwest, Louisiana and Queensland, Australia. The fund has returned 10.6% annually since inception and outperforms the NCREIF Timberland index since inception. The Prairie Lake property in Oregon did experience a fire. Approximately 12% of the property burned. However, this only represents 0.27% of the total portfolio. Hancock does not insure properties against natural disasters. Griffin reviewed the performance of the Hancock Timberland and Farmland Fund. Cambridge committed $15 million to HTFF. The fund has drawn $5.2 million to date. The fund invests in both timberland and farmland. The fund has flexibility to determine how much is allocated to each type of land, although neither will ever make up more than 70% of the portfolio. In 2018, the fund bought two timberland properties in the US South, apple orchards and processing facilities in Washington State and 16 row crop farms in Arkansas, Illinois and Nebraska. Griffin stated that he continues to work on building the portfolio, and he expects to close several more transactions in early 2019. He plans to expand the portfolio into Australia, New Zealand and South America. He described Hancock's approach to managing farmlands. With row crops, Hancock typically owns the land, then leases it to farmers. The farmers are responsible for growing crops, carrying insurance and hiring and paying their own employees. Leases are typically 1-3 years in duration. The size of these farms is typically around 200-300 acres, although some properties are as large as 5,000 acres. In properties with permanent crops, Hancock uses their own employees to operate the farm. The firm typically operates in dedicated farmland areas, where there is little demand to convert farmland to higher and better use. Griffin stated that he remains concerned about the effect of tariffs and noted that soybean exports to China have all but stopped over the last year, and he hoped that a quick resolution would limit losses.

David Greenberg and Joe Tremblay represented IFM Investors. A written portfolio review was presented to the Board. Cambridge committed $30 million in March 2016, and funds were fully drawn in September 2017. Tremblay reviewed the history of the firm, noting it was owned by a group of Australian pension funds, and that infrastructure investing was seen by those funds as a way of driving returns. 90% of current investors are connected to a pension fund. Greenberg reviewed the performance of the Global Infrastructure Fund. The fund consists of 13 portfolio companies, and 76 individual assets. The total value is $19.6 billion. He described the firm's ability to cut costs by consolidating insurance and retirement coverage for employees across multiple properties. Since 2013, the fund has executed 15 new and 4 follow-on investments. Greenberg described some of the current holdings, including Indiana Toll Road, Colonial Pipeline and Freeport LNG Terminal. Freeport is a new development in Texas, and is the only construction project in the portfolio. Over the last year, the fund returned 18.54%. Greenberg stated that this was the firm's best year on record. Over the last five years, the fund has returned 11.2% annually. Due to the strong returns, the firm opted to refund 7.5% of management fees paid by investors.

Steven King and Chris Wilson represented Campbell. A written portfolio review was presented to the Board. King stated that the portfolio had no losses due to fire. Monagle asked about the management of state-owned forest lands and asked if private timber funds would lobby for better management of these lands to prevent fires. He stated that Campbell does not lobby directly, but that they are part of industry groups that do some lobbying. The portfolio now consists of two forest estates. OneFortyOne Plantations consists of 80,000 hectares in Australia and Nelson Forests consists of 61,000 hectares in New Zealand. In addition, the portfolio owns sawmills servicing both estates. The Nelson deal closed in August 2018. Wilson described the process of transferring ownership, noting that everything went very smoothly. The portfolio is still in the investment phase, and King described high organizational costs as a drain on performance, similar to a J-curve effect. He stated that those costs would diminish over time. The investment period runs through 2020. Wilson stated that he is considering additional acquisitions in Brazil, Chile and the United States.

The Chairman stated that the Board may wish to consider issuing an RFP for a bank loans manager immediately. This would allow the Board to move more quickly to move assets to the new targets. He noted that if the Board ultimately opts to select an asset mix that doesn't include bank loans, the RFP could be cancelled. Motion by Gardner, seconded by Monagle to issue an RFP for a bank loans manager, with a $30 million mandate. The motion carried on a 4-0 vote with Chamblin-Foster absent.

The Chairman stated that the Board may also wish to consider hiring an additional infrastructure manager. Ghazarian stated that the Board could add funds to IFM without issuing an RFP. He also noted that IFM would not be due for a review under Chapter 176 for another five years. He stated under most of the asset mixes, the system would need to allocate another $5-$10 million into infrastructure. Monagle stated that he felt that the Board should have more than one manager in this asset class. Gardner stated that he was very happy with IFM's performance and that he did not feel hiring another manager was necessary. Motion by Monagle, seconded by Shinkwin to issue an RFP for an infrastructure manager, with a $10 million mandate. The motion carried on a 4-0 vote with Chamblin-Foster absent.

Ghazarian stated that Segal has not changed their recommended schedule of private equity investments. They advise that the Board commit $30 million to the PRIT 2019 vintage fund. Motion by Gardner, seconded by Shinkwin to commit $30 million to the PRIT 2019 vintage fund. The motion carried on a 4-0 vote with Chamblin-Foster absent.

Monagle moved to adjourn at 1:55 PM.