Minutes of the meeting held on September 9, 2019

Present: Francis Murphy – Chair, James Monagle, Michael Gardner, Nadia Chamblin-Foster, John Shinkwin, Ellen Philbin, James Quirk, Rafik Ghazarian and Chris Burns.

The meeting was called to order at 2:00 PM. The meeting was digitally recorded.

Agenda Item #1 – Credit Suisse Asset Management
David Mechlin and Russ Huewe represented Credit Suisse. A written proposal was reviewed by the Board. Mechlin provided an overview of the Bank Loans asset class. He noted that the worldwide market is about $1.25 trillion, similar in size to the high yield market. The loans are backed by collateral and used to finance borrowing firms in various ways. About half the borrowers are publicly traded firms. Bank loans sit at the top of the capital structure, above unsecured bonds and equity. Historically, such loans would have been made by traditional banks. Over the last 20 years, these loans have developed into an institutional product. Credit Suisse has $52 billion in assets under management within the bank loans portfolio, consisting of loans from 200 different issuers. 80% of the portfolio are US-based loans. Mechlin stated that Credit Suisse's scale was an advantage in the ability to maintain relationships with borrowers or syndicates that assemble loans, and in conducting research on borrowers. Gardner quoted from William Cohan's New York Times opinion piece and asked if bank loans were part of the "shadow banking system". Mechlin stated that the bank loans space is quite transparent, and that Cohan's piece was more directed at the risks of private debt lenders. Mechlin stated that the collateral required by bank loans is typically property, inventory or receivables. He stated that liquidations of borrowers have been extremely rare. Distressed firms are more likely to reorganize, but in such situations the bank loans would be paid off first, and the lender has significant influence in negotiating the form of any reorganization. Only 1% of the portfolio consists of unsecured loans. Mechlin reviewed the process of how a loan would be issued and funded, noting how bonds for secured and unsecured debt would be issued separately, and the role of bond syndicators in working with the lenders. The portfolio is heavily traded, with about $20 billion worth of transactions in the portfolio annually. The portfolio will typically be less volatile than a high yield portfolio, although over the last few years, high yield has not generated a higher return over bank loans. Huewe reviewed the structure of the fund and fee structure. The portfolio offers redemptions on a monthly basis, although Credit Suisse also offers a product with daily liquidity. Any commitment could be fully invested within weeks. Ghazarian asked if the portfolio contains Collateralized Loan Obligations. Mechlin stated that CLOs are targeted to about 5% of the portfolio.

Agenda Item #2 – Octagon Credit Investors
Lauren Basmadjian, Peter Kenny and Micahel Nechamkin represented Octagon. A written proposal was reviewed by the Board. Kenny provided an overview of the firm. Octagon spun off from JP Morgan in 1999. He described the portfolio's strong performance, ranking in the top decile of its universe. Kenny described his history working with the MACRS community, and familiarity with PERAC regulations. He stated that Octagon would offer a reduction in their quoted management fee from 65 to 55 basis points annually. The firm recently took on the MWRA retirement system as a client. Nechamkin described the composition of the portfolio. It consists of 95% senior secured loans, and 5% high yield or second lien loans. There are virtually no unsecured loans. Basmadjian described the firm's diversity efforts. She noted that three of five members of the firm's Investment Committee were women. She attributed this to the firm's meritocratic culture. Octagon was $23.8 billion in assets under management. The firm is known for their specialization in the CLO space. Basmadjian reviewed the process for sourcing loans and how it would be reviewed by the investment committee. She stated that the firm is active with all the major players in the bank loans space and has no bias toward JP Morgan as a source

of new business. She also described how the firm evaluates its own portfolio, and might make the decision to sell a loan. She reviewed the history of defaults in the portfolio. Octagon has about one-third of the number of defaults vs. other firms in the bank loans universe. Nechamkin reviewed the performance history. The existing portfolio has a seven year history, although Nechamkin emphasized that Octagon's style and strategy had changed very little over the last twenty years. Loans are not typically held until maturity, and the portfolio is frequently traded. On an annual basis, about 35% of loans will be paid off early. The portfolio offers monthly liquidity, with fifteen days' notice. Ghazarian asked about the risk level of the CLOs within the portfolio. Kenny stated that he would consider CLOs to be simply another vehicle for investing in bank loans and emphasized their skill in selecting the best available loans. Ghazarian also asked about trades between loans and CLOs held within the portfolio. Nechamkin stated that Octagon does have a cross-trading policy. Such trades must be approved by the CEO and accompanied by a written explanation. There are times when the firm feels that such trades are appropriate.

Agenda Item #3 – PineBridge Investments
Joy Booker, Jeremy Burton and Thomas Cosmer represented PineBridge. A written proposal was reviewed by the Board. Cosmer described the firm's philosophy, stating his opinion about the benefits of active management, and noting the firm's size as a competitive advantage. He stated that PineBridge considers bank loans and CLOs to be distinct investment types, and they are managed by separate divisions. The firm does not currently have any Massachusetts public funds in the bank loans fund but does work with Watertown and MWRA in other portfolios. The firm is based in New York City. Burton described the operation of the portfolio. The portfolio consists of 95% bank loans, with 5% high yield bonds. Bank loans are now the fastest growing segment of the assets that PineBridge manages. He described the role of the research analysts in generating buy and sell recommendations, noting that the portfolio is heavily traded and that selling a loan at the right time is a critical decision in avoiding losses. He also described the longevity of the management team and their long history of working together, through a number of market conditions. He stated that he would not forecast a recession within the next 18 months. Booker described her role as the client contact, noting that she works with the other Mass. public funds on their portfolios, and is familiar with PERAC regulations. She also reviewed the firm's diversity initiatives. Over the last three years, 39% of managerial hires were female and 40% were minorities. Burton reviewed the performance record. 2018 was a difficult year due to poor loan selection. The default rate has been consistently lower than the benchmark.

Agenda Item #4 – Wellington Management Company
Leigh Crosby, Jeff Heuer, David Marshak and Sam Steere represented Wellington. A written proposal was reviewed by the Board. Crosby stated that Wellington manages funds for ten Massachusetts public funds, although none have invested in the Bank Loans strategy to date. Crosby described Wellington's structure. The firm as a whole has $1 trillion in assets under management. There are thirteen different fixed income strategies, one of which is the Bank Loans fund. All the different boutiques are supported by the Wellington back office. Crosby stated that the firm's size and ability for different teams to collaborate was a significant advantage. She also discussed the firm's diversity and inclusion strategy. Steere discussed the portfolio strategy. The portfolio contains no CLOs. Steere stated that he felt CLOs were a distraction that required significant time and expertise to manage well. The portfolio has consistently delivered top quartile returns, with low volatility. He stated the firm's default rate was lower than most funds in their universe, adding that he didn't find it to be an especially useful metric as managers may manipulate their statistics by selling just prior to a default. Heuer described the investment process. The firm's focus is on capital preservation. He described the risk analysis that the fund research team performs. Marshak discussed the risk out outflows from

the portfolio in cases such as late 2018 where funds withdrew from their accounts. This may force the portfolio to liquidate desirable loans in order to provide liquidity. Marhsak noted some risk could be avoided by placing funds in a separate account. Ghazarian asked for more discussion on the risks of holding CLOs in the portfolio. Steere noted that CLOs are typically analyzed relative to par, and only marked-to-market in the event of a default. He also noted that the need to manage to the rules of the CLO may be in conflict with the ability to deliver returns. Wellington does not create their own CLOs in any division, and there is no cross-trading with the bank loans portfolio.

Agenda Item #5 – Segal Marco Advisors Discussion

The Board reviewed Segal's analysis of the bank loans proposals. Ghazarian described the rankings process and the process used to eliminate proposals which were judged "Not Advantageous". The report also contains a summary of quoted fees. Credit Suisse quoted the highest fee, and Wellington the lowest. Ghazarian reviewed the history of returns for the bank loans candidates. He noted that in comparing rolling 5-year returns, Wellington had the most periods of underperformance. Monagle noted that there do not appear to be many Massachusetts public funds investing in this asset class. Ghazarian stated that a number of systems have looked at the asset class. Some did opt to invest, while others opted to allocate additional funds into High Yield bonds, or Emerging Markets Debt.

The Board reviewed Segal's asset allocation review. Ghazarian discussed the assumptions around returns for various asset classes. Over the next 20 years, Segal estimates that Core Fixed Income will return 3.6% annually, Bank Loans will return 5.3% annually, High Yield will returns 5.7% annually and Emerging Markets Debt will return 6.1% annually. Ghazarian reviewed the different asset allocation proposals. Based on the return assumptions, Segal calculates the likelihood of any given portfolio achieving at least a 7.5% return over 20 years. Ghazarian emphasized the importance of having at least a 50% change of reaching that target. Not all of the proposals would require the addition of a bank loans manager. Gardner stated that he hoped to adopt a strategy which would make a significant reduction to the amount invested in hedge funds.

Ghazarian reviewed the presentations of the bank loans candidates. He stated that Segal considers CLOs to be different from bank loans, in that they should be subject to different types of analysis and there are different strategies around how long they should be held. Monagle asked about the appraisal process used to verify that collateral was available. Ghazarian noted there was a risk, and that lenders generally would expect to recoup only 70-80% in the event of default. Monagle moved to not add bank loans to the portfolio. The motion failed for lack of a second. Gardner stated that he would support adopting asset mix #5 from the Segal report, which does include bank loans and also trims the hedge fund allocation from 9% to 5%. The Chairman stated that he also felt that adding bank loans would help the portfolio. Gardner moved to adopt asset mix #5. Chamblin-Foster seconded the motion and it was voted unanimously.

The Chairman noted that Octagon has substantially outperformed the other candidates over the trailing 3, 5 and 7-year periods. Ghazarian stated that the last five years have been a very favorable environment for this asset class and reminded the Board of the importance of reviewing a long track record of performance. He noted that Octagon has a different philosophy on CLOs than the other managers. Segal has reviewed this and they feel that CLOs and bank loans should be handled separately. Ghazarian stated that he felt that Octagon's cross-trading policy has the potential for conflict. This was one of the reasons that Octagon was rated as "advantageous" rather than "highly advantageous". Octagon is also the smallest firm under consideration. If Cambridge were to invest $35 million, that amount would constitute 15% of the assets in the Octagon bank loans fund.

The Chairman asked, if the board hired two managers to split the mandate, if it would be permissible to move money between them. Quirk confirmed that this could be done without issuing an RFP. Gardner stated that he felt Credit Suisse's fees were too high. He also believed that the Board should not hire Octagon because Segal had not ranked it has highly as the others. He said he appreciated that Wellington was a local firm, with the lowest fee, but that PineBridge had a better performance record. Chamblin-Foster said she would hire either PineBridge or Octagon, based on their performance record and reasonable fees. Shinkwin said he also favored hiring either Octagon or PineBridge. The Chairman said he was impressed with Octagon's record on promoting women into management positions. Gardner stated that he felt that PineBridge also demonstrated a strong commitment to diversity. Gardner moved to hire PineBridge. Monagle seconded the motion and it was voted unanimously.

Agenda Item #6 – Minutes
Motion by Chamblin-Foster, seconded by Monagle to accept the regular minutes of the meeting held on August 5, 2019. Voted unanimously.
Motion by Gardner, seconded by Shinkwin to accept the executive session minutes of the meeting held on August 5, 2019. Voted unanimously.

Agenda Item #7 - Warrants
Motion by Chamblin-Foster, seconded by Shinkwin to accept payment of warrant #16 in the amount of $7,615,333.87 and to accept payment of warrant #17 in the amount of $1,144,030.82. Voted unanimously.

Agenda Item #3 – Superannuations
Motion by Shinkwin, seconded by Gardner to accept the Superannuation retirement applications submitted by Peter Blades, Cashier, Traffic & Parking Dept. with fifteen years; Mary Choppa, Claims Processing Manager, Cambridge Health Alliance with eleven years, eight months; Steven DeMarco, Superintendent, Police Dept. with thirty-three years, eight months; Janet Dunphy, Clinical Director, Cambridge Health Alliance with forty years, eight months; Kathleen Johnson, Paraprofessional, School Dept. with twenty-one years, four months; raymonda Lagmay-Carter, Instructor, Human Services Dept. with seventeen years, seven months; Lynn Levecque, Senior Director, Cambridge Health Alliance with twenty-four years, eight months; and John Silva, Director of Safety and Security, School Dept. with thirty-nine years, eight months. Voted unanimously.

Agenda Item #9 - Make-ups/Redeposits/Liability
The Board reviewed make-up and redeposit worksheets for ten members.
Monagle stated that he would abstain from voting on Cameron Monagle's buyback request.
Motion by Gardner, seconded by Shinkwin to allow the make-up of contributions requested by Anamika Anam, 3 months; Ravlin V. Cepeda, 1 year 1 month; Shawn P. Costanza, 2 years 8 months; Laurie J. Haddock, 3 years 7 months; Kathleen A. Johnson, 5 months; Maria Kefallinou, 4 months, requesting acceptance of liability; Maureen Spinetti, 2 years 10 months; and to allow the redeposit of refunds for Richard N. Furr, 9 years 11 months and Dawn M. Grassi, 4 years 3 months. Voted unanimously.
Motion by Shinkwin, seconded by Gardner to allow the make-up of contributions for Cameron J. Monagle, 1 year 2 months. The motion carried on a 4-0 vote, with Monagle abstaining.

Agenda Item #10 – Refund Applications
The Board reviewed a list of refund applications submitted in August.
Motion by Gardner, seconded by Shinkwin to accept three refund applications. Voted unanimously.

The Chairman requested to adjourn the open meeting and go into executive session for the purpose of discussing disability retirement applications. The Chairman stated that the meeting would reconvene in open session at the conclusion of the executive session. On a roll call, the vote was as follows:

Michael Gardner:	YES
Nadia Chamblin-Foster	YES
John Shinkwin:	YES
James Monagle:	YES
Francis Murphy:	YES

Agenda Item #11 – Accidental Death Benefit – Thomas Donahue
The Board reviewed Thomas Donahue's death certificate, the certificates and narrative reports of his 1995 medical panel, correspondence from Dr. David DeSimone and correspondence from Attorney Thomas Gibson. Thomas Gibson appeared, representing the applicant. Also appearing were Susan Donahue and Leanne Donahue.
Gardner moved to grant Accidental Death benefits to Thomas Donahue. Shinkwin seconded the motion. On a roll call, it was voted unanimously.

Agenda Item #12 – Accidental Disability Benefit – Francis Judd
The Board reviewed the DALA decision in the Francis Judd case, and Attorney Quirk's brief on the matter. Thomas Gibson appeared, representing Francis Judd.
Quirk stated that DALA had overturned the Board's denial of Accidental Disability benefits to Judd. Quirk stated that the decision was well reasoned and he felt it would likely hold up on appeal.
Motion by Gardner, seconded by Shinkwin to file no appeal of the DALA decision. On a role call, it was voted unanimously.

Agenda Item #13 – Contract for Executive Director
The Board reviewed a draft contract for the Executive Director.
Motion by Shinkwin, seconded by Monagle to accept the Executive Director's contract. Voted unanimously.

Agenda Item #14 – KPMG Audit Report
The Board reviewed a draft audit report prepared by KPMG and a draft of the GASB 68 report.
Monagle reviewed the GASB 68 report, noting that it describes how appropriations are split between the City's various units. The Director stated that KPMG approved the draft earlier in the day, without making any changes. The audit contains no material findings. Motion by Gardner, seconded by Chamblin-Foster, to accept the audit report and the GASB 68 report.
Voted unanimously.

Agenda Item #15 - PERAC Memos
The Board reviewed PERAC Memo 21. No action was taken.

Agenda Item #16 - Old Business
Not needed.

Agenda Item #17 - New Business
Quirk updated the Board on the Malvina Monteiro case. He stated that PERAC issued a written decision, stating that Monteiro could buy back service time only up to the date of the jury verdict in her case. The Director stated that her attorney has filed an appeal to DALA. Quirk noted that, as a party to the case, the Board could file their own appeal. However, Quirk recommended that the Board not file any appeal. The Board took no further action on the matter.

Agenda Item #18 - Executive Session
Agenda Item #11 – adopted
Agenda Item #12 – filed no appeal
Agenda Item #13 – contract approved

Agenda Item #19 - Chairman’s Report
The Chairman updated the Board on the litigation involving Stamps.com.

Agenda Item #20 – Executive Director’s Report
The Director stated that the past month was spent in working with KPMG on their audit. She said that the City staff were very helpful in providing documents.

The following documents were also reviewed by the Board:

- List of Retiree Deaths
- Institutional Investor – MassPRIM’s Michael Trotsky to Receive Lifetime Achievement Award

Monagle moved to adjourn at 7:25 PM.