

MINUTES OF BOSTON RETIREMENT BOARD

Administrative Session

July 20, 2022

Boston Retirement Board, Room 716

Boston, Massachusetts 02201

TRUSTEES IN ATTENDANCE: Daniel J. Greene, Mayoral Appointed Member (Chairman); Michael D. O'Reilly, Elected Member; Michael W. McLaughlin, Elected Member (Remote) Maureen A. Joyce, *Ex Officio* Member; Thomas V.J. Jackson, Fifth Member.

STAFF IN ATTENDANCE: Christine Wier, Interim Executive Director; John F. Kelly, Investment Analyst; Natacha Thomas, General Counsel; Ellen M. McCarthy, Comptroller; Lauren Santillana Interim, Operations Officer; Gregory Molina, Executive Assistant

ALSO IN ATTENDANCE: Michael Manning, Kiley Fischer, NEPC; Joel Francis, Ernest & Young; David Allen, AlbaCore; Fran Peters, Peter Lipson, HarbourVest; Gene Martin, Mark Forti, Tyler Bak, Callodine; Chris Hentemann, Chris Schiavone, Kevin McAdams, 400 Capital; Batool Raza, Boston Public Health.

Administrative Session Convene

The Board voted unanimously via roll call (5-0) to enter into Administrative Session at approximately 10:04 a.m.

Roll Call Vote: Member O'Reilly: Aye; Member Jackson: Aye; Member Joyce: Aye; Member McLaughlin: Aye; (Remote) Chairman Greene: Aye.

Motion accepted (5-0)

Previous Minutes

Motion made, and seconded, to accept the Administrative Session Minutes of the June 19, 2022 meeting as presented.

Roll Call Vote: Member O'Reilly: Aye; Member Jackson: Aye; Member Joyce: Aye; Member McLaughlin: Aye; (Remote) Chairman Greene: Aye.

Motion accepted (5-0)

Outstanding/Ongoing Administrative Issues: Christine Weir, Interim Executive Officer

Staff Update

Ms. Weir stated that the unit recently signed for the ability to go hybrid. Staff is currently working on a schedule for 90% of the staff to go hybrid. There are some positions that can not work hybrid. This will be implemented on August 1st, 2022. This pilot program will run for six months then it will be reviewed.

IT Update

Ms. Weir stated GreyCastle is coming in to do the cyber security analysis and review our risk assessment. Bill Oates will be reporting at the next Board meeting.

Chairman Greene elected to go out of order to have Ernest & Young (E&Y) present audit results.

Chairman Greene also acknowledged the presence of Batool Raza, Boston Public Health. She said she was there testifying on behalf of the Boston Public Health Commission (BPHC).

Chairman Green and General Counsel Thomas stated that testimony will be taken in Executive Session of Board meeting.

Outstanding/Ongoing Financial Issues: Ellen M. McCarthy, Comptroller

Ernest & Young Audit update

Mr. Joel Francis presented the December 31; 2021 GASB 67_68 Report to the Board stating that E&Y We are pleased to submit this Governmental Accounting Standards Board (GASB) Statements No. 67 and 68 Accounting Valuation as of December 31, 2021 for the Boston Retirement System, a cost-sharing multiple employer defined benefit pension plan. It contains the actuarial information that will need to be disclosed in order to comply with GASB 67 and 68. Except as noted otherwise, please refer to the Boston Retirement System Actuarial Valuation Report as of January 1, 2020, dated August 25, 2020, for the data, assumptions and plan of benefits underlying these calculations.

This report was prepared in accordance with generally accepted actuarial principles and practices at the request of the Board to assist the Board and the member units in preparing their financial reports for their liabilities associated

with the Boston Retirement System. The census and financial information on which our calculations were based were provided by the staff of the Boston Retirement System. That assistance is gratefully acknowledged.

The measurements shown in this actuarial valuation may not be applicable for other purposes. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; and changes in plan provisions or applicable law.

The actuarial calculations were completed under the supervision of Ms. Kathleen Riley. She is a member of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. To the best of her knowledge, the information supplied in the actuarial valuation is complete and accurate. Further, in her opinion, the assumptions as approved by the Board are reasonably related to the experience of and expectations for the Boston Retirement System.

No adjustments needed to be made once E&Y received the information No concerns at all the way management put together the statement and exercised good judgement.

This report has been prepared by Segal to present certain disclosure information required by Governmental Accounting Standards.

Board (GASB) Statements No. 67 and 68 as of December 31, 2021. This report is based on financial information as of December 31, 2021 provided by the Retirement System and the Boston Retirement System Actuarial Valuation and Review as of January 1, 2020, which reflects:

- The benefit provisions of Massachusetts General Law Chapter 32;
- The characteristics of covered active participants, inactive participants, and retired participants and beneficiaries as of December 31, 2019, provided by the staff of the Retirement System;
- Economic assumptions regarding future salary increases and investment earnings; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc.

This report reflects the following changes in assumptions:

- The investment return assumption was lowered from 7.05% to 6.90% for BRS excluding Teachers and from 7.15% to 7.00% for Teachers.
- The mortality improvement scale was updated from MP-2019 to MP-2021.

This report reflects an increase in the COLA based from \$14,000 to \$15,000 effective July 1, 2021. The following key findings were the result of this actuarial valuation:

1. The Net Pension Liability (NPL) is equal to the difference between the Total Pension Liability (TPL) and the Plan Fiduciary Net Position. The Plan Fiduciary Net Position is equal to the market value of assets and therefore, the NPL measure is very similar to an Unfunded Actuarial Accrued Liability (UAAL) on a market value basis. The NPL decreased from \$3.97 billion as of December 31, 2020 to \$3.46 billion as of December 31, 2021, and the Plan's fiduciary Net Position as a percent of the TPL increased from 67.64% to 73.26%.

2. The NPL measured as of December 31, 2021 and December 31, 2020 was determined based upon the results of the actuarial valuation as of January 1, 2020.

3. The discount rates used to measure the TPL and NPL as of December 31, 2021 were 6.90% for the BRS excluding Teachers and 7.00% for the Teachers. The discount rates used to measure the TPL and NPL as of December 31, 2020 were 7.05% for the BRS excluding Teachers and 7.15% for the Teachers.

Motion made, and seconded, to accept the 2021 Ernest & Young Audit results, schedules and GASB 67_68 Report evaluation as presented.

Roll Call Vote: Member O'Reilly: Aye; Member Jackson: Aye; Member Joyce: Aye; Member McLaughlin: Aye; (Remote) Chairman Greene: Aye.

Motion accepted (5-0)

Outstanding/Ongoing Investment Issues: John Kelly, Investment Analyst

Private Debt Search

Mr. Manning opened by stating that the private debt search was issued in April on behalf of the System and was open to various private debt sub-strategies. The

annual private markets pacing plan calls for ~\$60 million in private debt commitments in 2022.

At the June meeting, the respondents were reviewed by strategy type and NEPC provided additional information on managers of interest. Additionally, we decided to prioritize strategies that have time-sensitive final close dates and will revisit the direct lending respondents later in the year. The Board selected four candidates to present at today's meeting.

AlbaCore

Mr. Allen started by stating that the AlbaCore Partners III fund is based in London and manages international funds through European credit. Fund III is Vintage 2021 with a closed ended fund type. It has total commitments of \$2.3 billion, with 77.5% Called. Alacore is in the fund raising and investing status and is ramping up. There are three complementary strategies that allow us to invest capital across the market cycle in pursuit of independent sources of alpha. Private: End-to-end capital solutions provider for private markets, Opportunistic: Trading arising from frequent market mispricing and Dislocation: Dry powder ready to invest in periods of significant market stress.

The company found that there were very little people in Europe doing opportunistic trading which gave the firm an advantage. Fund III is investing in European corporate credit funding in Europe. Private credit but also opportunistic investments.

The mandate that the company has is to maximize returns without undue risk of loss. We feel that our ability to get returns from the public market. At about 16% per year. Our targets for this fund is that we've invested about \$1 Billion in the market which are yielding about 15% to 20%. The firm feels it will come in at the mid-teens. Which they have done for 13 years. With a low double-digit net return.

From their perspective they are not taking more risks but mitigating losses, which has led to their success.

HarbourVest

Mr. Peters opened by introducing himself and Mr. Lipson. He stated that currently HarbourVest manages \$98.4 billion total AUM across all strategies. They are Private markets specialists in equity, credit, and real assets. Expertise in primary, secondary, direct co-investments, credit, and real assets. They are a firm

with 800+ colleagues and 175+ investment professionals. The firm has existed for 25 years average industry experience of managing directors. With 900+ advisory board seats, with a strong track record 35+ years.

Expertise Across Capital Structure (Equity and Debt) and Investment Types. They operate at a global scale, thier market coverage is broad and deep In the Americas they employ 135 investment professionals with \$77 billion in committed assets. In Europe they have 35 investment professionals with \$33.3 billion in committed assets and Asia Pacific, 25 investment professionals with \$11.2 Billion in committed assets. In primary investments they have \$51.4 billion committed. In secondary & real assets markets they have \$41.6 billion committed and in direct equity & credit they have committed \$28.6 billion. They have over 400 institutional clients and have won many industry awards.

Mr. Lipson presented. Private Credit Selectivity is a core tenet of HarbourVest's private credit strategy. Private Credit platform stands at \$4.7 billion* in AUM and leverages the firm's position as a significant LP to hundreds of GPs to source, evaluate, and transact on private credit opportunities. Active deal-sourcing platform; Active LP in 2,000+ Funds, 365+ Primary GP Relationships, 400+ Secondary GP Relationship, 15 credit investment professionals.

Risks include but are not limited to: Market risk – The value of assets is typically dictated by a number of factors, including the confidence levels of the market in which they are traded. Leverage - Leverage may result in large fluctuations in value and therefore entails a high degree of risk including the risk that losses may be substantial. Sophisticated LP with a dedicated credit team Access to Premier PE Sponsors. Focus on creating solutions for GPs. Consistent Investment Process and demonstrated track record.

HarbourVest Private Credit platform stands at \$4.7 billion* in AUM and leverages the firm's position as a significant LP to hundreds of GPs to source, evaluate, and transact on private credit opportunities.

The HarbourVest private credit team closed 50 deals totaling over \$1.1 billion since June 2021. Investing in opportunistic credit. A credit opportunities strategy can invest across the capital structure, capitalizing on shifts in relative value by issuer, security, and industry.

Mr. Peters stated that the HarbourVest credit opportunities Fund III The strategy will seek to develop a well-diversified portfolio. These amounts reflect

the current expectations for the allocation of the Fund. The ultimate allocation will differ based upon market conditions and available investment opportunities over the life of the Fund. Additionally, these are not prescriptive guidelines. The objective is to provide clients with access to a diversified portfolio of junior credit investments complemented by an equity component. They seek current income and long-term capital gains for investors, with a focus on downside protection and capital preservation. Their investment focus is to construct a diversified portfolio of 35-40 direct investments in junior credit securities complemented by equity exposure through warrants or purchased equity. The firm is targeting US-based small market and middle-market sponsor-backed companies. Fund has a eight year run. Thank you for your business.

Member McLaughlin went offline.

Callodine

Mr. Martin opened by introducing himself and his colleagues and thanking the Board for the opportunity to present.

Mr. Forti followed by stating that their product is an established, highly-structured product offering that has resulted in consistent performance over time. Loan type is fully funded Asset Based Term Loans including First Lien, Second Lien, FILO and Unitranch. Collateral are Fixed assets (M&E / FF&E), working capital (A/R and inventory), real estate and IP. They lend to borrowers in the United States, Canada and certain jurisdictions in Western Europe. The typical loan size investment is between \$10-50mm, with an ability to underwrite and syndicate larger transactions. The duration is 3-5 years legal maturity with an expected duration of 2-3 years. The loans are protected by asset-based covenants, borrowing base reporting, frequent collateral diligence including third party appraisals and field exams. Yield and cash coupons. The floating rate; cash coupons range between 7-10% with interest typically paid monthly, in cash. Closing and upfront fees range between 1-3%. Prepayment fees Range from a full "Make Whole" to 1%. Amortization CCF loans typically include amortization that is paid quarterly throughout.

Mr. Martin continued by stating that the Callodine Commercial Finance Senior Team is managed by a long-tenured, highly regarded team with 150+ years of industry-leading experience lead by Gene Martin, President & CEO, with 31 years of experience .

Mr. Forti focused on the evolving asset-based Financing landscape. Callodine has been on the forefront of the continued emergence of asset-based lending as a viable multi-sector capital source, focused on the highest-quality opportunities across the broader economy. Since 1992 asset-based lending has proliferated as an alternative capital source as traditional funding sources have become limited in capacity and businesses consider a broader range of solutions. The firm focuses on providing creative asset-based solutions, making the Firm a preferred financing partner across the industry. Callodine continues to identify borrowers with attractive asset-based credit profiles, oftentimes "Fallen Angels" that were once unsecured borrowers that migrate into more flexible asset-based financing extensive asset-based background.

The firm focuses on Retail & Consumer, Industrials & Technology, Transportation / Logistics, Textiles, Plastics & Timber, Pharma & Healthcare and Food & Beverage investments.

Mr. Martin stated that Callodine offers advantages compared to many fixed income alternatives. Higher current yields; In a market environment starved for income, they provide significant cash yield to investors. Their originated portfolio offer higher rates with greater collateral backed security than HY bonds. They also offers a substantial yield premium over the average middle-market leveraged loans. He went on to state that the firm offers stronger protections. Their originated portfolio recovery rate has significantly outperformed traditional cash flow loan and bond benchmarks. They have a strong structural protection and collateral coverage which result in superior recoveries for them vs. traditional credit offering. The firm also has lower interest rate risk. Floating interest rates on thier loans reset regularly and offer lower duration risk. This is helpful in a rising interest rate environment relative to fixed interest rate and fixed income alternatives. Interest on CCF Investments is typically paid monthly, in cash.

400 Capital;

Mr. McAdams started by introducing himself and his colleagues.

Mr. Hentemann went on to give a brief history on himself and how he became founder of 400 Capital and a firm overview.

Mr. Hentemann went on to discuss the 400 Capital Asset Based Term Fund III. The Fund was launched in July of 2021. As of date, they have committed \$523.5 million in capital and are in the marketing facet of strategy. The fund's

total paid in capital is \$200 million, with a total paid in capital percentage of 38%. The total invested capital is \$165 million.

The City of Boston Retirement System (CBRS) has been an investor in Fund II. We appreciate that partnership and are happy to report a strong performance in Fund II to date. They launched Fund II two years ago. Fund II was a \$435 million Fund. It is fully invested and completed the investment period in June. They will start returning capital in the second quarter of 2022. The fund is currently returning at 22% Net return. Fund I was launched in 2017 and has a similar rate of return.

They feel that they have a team with in-depth experience, with a far enough reach. That they are excited that Fund III is very well to achieve similar returns. This strategy also has access to also exercise investments when markets become dislocated. Which they have actually deployed in Fund II. Its very opportunistic and that's helped augment returns. Markets have been rough and that gives them opportunities to exercise that flexibility with the fund.

The asset-based strategy of the Fund from past experience, they believe it has very good correlation to the returns and inflationary related environments. At this time, he introduced Mr. Schiavone.

Mr. Schiavone went on to state that when they think of asset-based lending, Asset is secured by some type of asset for downside protection. A lot of the sectors that we focus on tend to be on residential real estate, commercial space opportunities and consumer products. Much has to do with an aggregated portfolio.

Generating access to unique deal flow for Fund III. The strategy is U.S. Bank and GSE De-leveraging and Risk Transfer, 25%. Specialty Finance, 50%. European Bank De-leveraging and Risk Transfer, 10% and Market Dislocation, 15%

The Board and NEPC consultants discussed the merits of the firm's presentation, fees, performance and current relationships and came to a decision.

Motion made, and seconded, to hire 400 Capital Asset Based Term Fund III for \$20 million and \$20 million to HarbourVest Credit Opportunities Fund III in the asset-based credit opportunity space.

Roll Call Vote: Member O'Reilly: Aye; Member Jackson: Aye; Member Joyce: Aye; and, Chairman Greene: Aye.

Motion accepted (4-0) (Member McLaughlin Offline)

Real Estate Portfolio Review

Mr. Manning continued stating that NEPC will provide a review of the System's current real estate portfolio and suggested areas of focus for the 2022 search. The System's real estate program is diversified across sub-strategies, sectors, vintage years, and fund sizes. The objective of the analysis is to gain insight on the current structure of your portfolio and set the stage for the 2022 search.

July Flash Report

Mr. Manning went on to state that the total fund is down 11.9 % year to date. That has dragged the long-term numbers down. No surprise the total equity is down a little over 20%. Lagging the bench mark almost exclusively due to Zevenbergen Capital who is down almost -60% this year. The system has a lot more in Value than it does in Growth. Value has done better but it's still down -13% for the year and Large Cap Growth is down- 20%

Work Plan

| | July | Aug. | Sept. | Oct. | Nov. | Dec. |
|--------------------------|--|-----------------------|--|----------------------------|----------------------------|----------------------------|
| TOTAL PLAN | | | | | | |
| Asset Allocation | | | | | | |
| Performance | | Q2 | | | Q3 | |
| Education/Review | | | | | | |
| TRADITIONAL | | | | | | |
| Search/ Presentations | | | | Issue Small Cap Search | Review Respondents | Analysis/ Presentations |
| HEDGE FUNDS | | | | | | |
| Program Planning | | | | | | |
| Search/ Presentations | | | Issue Search | Review Respondents | Analysis/ Presentations | |
| PRIVATE MARKETS | | | | | | |
| Program Planning | | | | | | Pacing Plan |
| Search/ Presentations | Debt Presentations (AlbaCore, 400 Capital, Callodine, HarbourVest) | Issue PE Search | Review PE Respondents Revisit PD Search (Direct Lending) | Analysis/ Presentations | Presentations | |
| Performance | | Q1 | | | Q2 | |
| REAL ESTATE | | | | | | |
| Program Planning | | | | | | Pacing Plan |
| Search/ Presentations | | Review Respondents | Analysis/ Presentations | Analysis/ Presentations | | |
| Performance | | Q1 | | | Q2 | |

Mr. Manning stated that NEPC has included an updated work plan with the including a proposed work plan for 2022:

Outstanding/Ongoing Financial Issues: Ellen M. McCarthy, Comptroller

June 2022 Financial Snapshot

Ms. McCarthy reported the June 2022 pension payroll as follows: Contributory payroll: \$ 58,715,930; Contributory Payees: 15,617; Non-contributory payroll: \$279,041; Total Non-contributory payees: 33; Regular Retirees: 36; Survivor/Beneficiary Retirees: 4; Disability Retirees: 5; Option C/Disb Surv: 12; Members Refunds: 67 for \$1,749,601; Members Transfers: 4 for \$ 176,087 Option B Refunds: 3 for \$84,115; and Operational Warrants: \$560,405.

2021 Boston Retirement System Gadsby 67-68 Annual Report

Ms. McCarthy also informed the Board that Gadsby 67-68 report is completed by Segal and ready for Board acceptance.

Motion made, and seconded, to accept Segal Gadsby 67-68 accounting evaluation report as of 12/31/2021 as presented.

Roll Call Vote: Member O'Reilly: Aye; Member Jackson: Aye; Member Joyce: Aye; and, Chairman Greene: Aye.

Motion accepted (4-0) (Member McLaughlin Offline)

Outstanding/Ongoing Operations Issues: Lauren Santillana, Interim Operations Officer

June 2022 payroll update

Ms. Santillana provided an update on the payroll numbers for the month of June 2022. There were 43 possible cases, (35 Superannuation's, 4 Death of active, 4 Disabilities.) out of all the cases 33 Superannuation and 4 Disabilities made it. 5 cases did not make it to payroll. Ms. Santillana noted the following reasons the reasons members did not make it on payroll; 3 did not return final options, 1 Salary for death, 2 outstanding Superannuation's from prior payroll.

Outstanding/Ongoing Legal Issues: Natasha Thomas, Esquire

Legal update

Ms. Thomas stated that she has submitted three PERAC memos for the Board to review.

- PERAC MEMO #17-2022
- PERAC MEMO #18-2022
- PERAC MEMO # 19-2022.
- OKeefe Memorandum denying summary judgment

Member O'Riely questioned Ms. Thomas and Ms. Weir about the RFP process and former process on how the Board is involved in the election process. Board would like to see a calendar with all upcoming RFP's.

Ms. Raza from the BPH stated that there are to members that are going before the Board for disability cases. She wanted to speak on behalf of the employer.

Chairman Greene and Board Counsel Thomas stated that these comments should be heard in Executive session.

Adjourn from Administrative Session

The Board voted unanimously to adjourn from Administrative Session at approximately 12:10 p.m.

Roll Call Vote: Member O'Reilly: Aye; Member Jackson: Aye; Member Joyce: Aye; and Chairman Greene: Aye.

Motion accepted (4-0) (Member McLaughlin Offline)

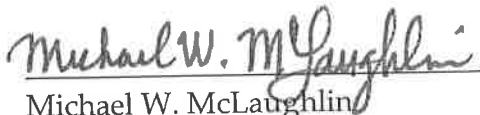
Respectfully submitted,
BOSTON RETIREMENT BOARD



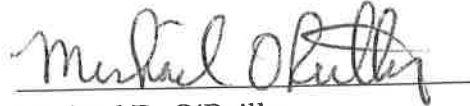
Daniel J. Greene, Esquire
Mayoral Appointed Member, Chairman



Maureen A. Joyce
Ex Officio Member



Michael W. McLaughlin
Elected Member



Michael D. O'Reilly
Elected Member



Thomas V.J. Jackson
Fifth Member