MINUTES OF BOSTON RETIREMENT BOARD

Administrative Session

August 17, 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 Weir, 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, NEPC; Kathleen Riley, Segal.

Administrative Session Convene

The Board voted unanimously via roll call (5-0) to enter into Administrative Session at approximately 10:09 a.m.

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

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

Previous Minutes

Motion made, and seconded, to <u>accept</u> the Administrative Session Minutes of the July 17, 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 (4-0), (Member McLaughlin Offline)

Chairman Green requested to go out of order to give Segal report.

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

Segal Final Valuation 01/01/2022

Kathleen Riley of Segal gave her report and stated that the Board has already reviewed the preliminary results and the funding schedule. She began on section two, which starts with the participant data. The report is organized in the same manner than the past. Section two is the BRS excluding teachers. Section three is the teachers. The participants data excluding the teachers. We have 14,500 participants or so active participants and about 10,000 inactive participants. This table shows a trend of active and retired participants over the past eight valuations over 16 years. With the exception 2007 when the active participants were around 16,000. The number has been fairly steady at the mid 14,000's. The number of retirees has also been steady, down slightly from the beginning.

It shows that the ratio between active and non-actives, it's called a maturity measure. It is often used as a risk measure and what we are watching for is when the number gets really high. Often times you can't do anything about the number getting really high. It's just the demographics of the system. But it is a measure of risk because it tends to imply that you have a lot of liability for inactive members whose contributions aren't coming in. So, less flexibility if the system would become troubled in the future. What's interesting though, is that this statistic includes your inactive participants and your inactive participants include members due a refund, so it's actually a little bit distorted and She thinks it's better to look at your true inactive compared to your retirees. You have 50% more inactive than retirees and that's a really good ratio.

For more information on the active population, the average age of the group and the average service of the group are a little lower with this valuation than they were in the prior valuation which saw an increase in the actual participants. Average compensation has increased by about 7% during the two-year period, from \$72,000 to \$77,000.

We have had a slight increase in retired participants counts over the two-year period. Average age has come down a little bit. The average monthly benefit is around \$3,500. Distribution of the participants by age is at the bottom of page 16.

The financial information comes from the annual statement and the information that Ms. McCarthy provides to Segal to split out the information for the teacher's assets and the non-teachers' assets. This is the systems cashflow projection or your cashflow history for the last 10 years, show employer and

employee contributions, benefits and administrative expenses. Beginning in 2018 the system has a positive cashflow situation. Contributions are exceeding the benefits for the last eight years. The gap did get smaller between 2021 between employer contributions going up about 8.85%.

The Actuarial Valuation results are that the value of assets recalls that market value is much more volatile. They can be volatile for purposes of putting together a funding schedule. They try to smooth out some of that volatility by using an actuarial value of assets. This methodology looks at what the expected return on the portfolio was based on the assumption of the prior evaluation, which was 7.05%. That calculates an expected value of assets was \$6.7 million. When they compare that to the actual value of assets, which reflects the full market returns, of \$7.1 million. There are gains that haven't been recognized, so for this valuation we recognize 20% of those gains, or \$90 million. That's the figure if you combine 05 and 07 you get an actuarial valuation of assets that's about \$68 million, that's roughly 95% of the market value. A much better place than where the system was in the prior valuation which a little buffer in the event of adverse performance during the next two-year period.

As for the investment returns, on both the market value and the actuarial basis for the last 12 tears. With a market return in the last valuation of 12% in both 2020 and 2021, they have actuarial returns of about 7.5% in 2020 and 8.5% in 2021. All compared to the assumption it was 7.05%. You can see some of the five, 10- and 15-year returns. Both on an actuarial and the market value basis.

The experience summary indicates that when they do the valuation, they take data and calculate liabilities and compare it to the actuarial assets and come up with an unfunded liability. They then compare with the unfunded liability to where they expected to be. For this valuation they measured an experienced gain of \$180 million. About two thirds of the net gains were through investments on an actuarial basis and \$119.6 million, a small gain on the administrative expenses' assumption and a gain on all other sources. That's demographic gains, population gains, of about \$58 million. The experience gains on a market value basis over the two-year period is about \$600.000. Actuarial gains because they are not recognizing all of those market gains, actuarial gains are a little over \$120 million.

Administrative expenses over the last two years is \$6.2 million and \$7.3 million. Compared to they're assumption, which is closer to \$8 million for both of those years. They trend that going forward each year. After speaking to Ms. McCarthy, they have lowered that assumption a little bit. The aggregate assumption was

lowered from \$11 million to \$10.4 million with 70% of that assigned to the teachers' liabilities. The \$58 million experience gain due to non-investment related sources. There was a gain in mortality experience of about \$33 million. A gain due to participants being transferred over to the teacher side and a miscellaneous gain of about \$40 million. Offsetting that we had a small loss due to salaries increasing more than they expected and they have identified a loss due to the COLA base increasing to \$15,000. It's not so much a loss, but more of an additional liability. The demographic experience is quite favorable. As for the plan changes that are reflected here versus prior valuation. Segal is recommending that you approve a reduction in the rate of return assumption from 7.05% to 6.90%. An update to the mortality improvement scale from scale MP-2019 to scale MP-2021.

They conducted a reconciliation of the systems unfunded liability. The systems unfunded liability is expected to decrease from \$1.8 billion to \$1.5 billion. They ended up a little bit lower at \$1.4 billion. Primarily due to the experience gain, partially offset by the experience gain. The cost factors in the valuation, the actuarial valuation has two components. One is the ongoing cost of the plan, the cost of funding for benefits that active employees earn each and every year. Cost of funding administrative expenses and that is offset by expected employees' contributions for one year. The cost of funding benefits is about \$200 million or 17% of payroll. It has gone up both as a dollar amount, which you would expect because of pay increases every year. It's also gone up slightly as a percentage of payroll. So, employer normal cost at \$90 million for the current valuation is the ongoing cost to the plan. What has to be kept in mind is that even when the system is fully funded, which is shooting distance. There is still a cost to the plan. Roughly 7.7% of the payroll or \$90 million. The other costs to the plan are funding benefits earned. Which Ms. Riley unfunded as non-funded liability. Liabilities are at 8.2 billion compared to the actuarial value of assets of \$6.8 billion, leaving an unfunded liability of \$1.4 billion. As for the funding schedule, employer normal costs are around \$90 million and is adjusted in a fiscal year basis. It's a little higher than the prior page. They then go with the payroll adjustment of 3.25%. So, they increase a little each and every year. Payments on the unfunded liabilities, they carved out for Sheriffs liability associated with retired sheriffs. The system is paying that down over a fixed payment of \$2.9 billion a year. The remaining unfunded liability and the payment on the unfunded liability. Clearly the biggest number here. Starting out at about \$300 million in 2023 and increasing to a little over \$400 million in 2026 and a partial payment in 2027. This is a schedule that fully funds the Retirement system over five years with the last payment in 2027. You can see the unfunded liability declining steadily until the partial payment. Total payments are calculated to increase by 8.85%, which is the rate of increase

that the City has been funding at for the last couple of valuations. This schedule shows A; That the system is projected to be fully funded and B; That the system has a little bite of maneuvering room in that last payment and it will still fall under that 8.85% increase.

One of Segal's actuarial standard practice requires them to include in their valuation reports are elements that contribute to risk of a retirement system. So, the client is aware of what the variables are. Ms. Riley thinks the key risks are investment risk and longevity risks. They are attempting to manage the investment risk by ratcheting down the investment return assumption (a little bit) each valuation. They had a further reduction from the investment return assumption from 7.05% to 6.9%. Given the capital market assumptions and their review of there is still about a 50% probability of making that assumption each and every year. The 50% chance of exceeding it, there's also a 50% chance of not making it. In the long run, the long run could be longer than the five years remaining on the unfunded liability. The other risk often identified in pension funds is people living longer. We think we addressed that risk by updating the BASE table and continuing to monitor the mortality table. Contribution risk, not too much of an issue in Massachusetts where you have to make your appropriation. The Board decides and the City has to fund. Chapter 32 requires systems to be fully funded by 2040 and they have a schedule in place to be fully funded in five years.

The report talks about maturity measures. Maturity measures can be used as a measure of risk. Your ratio of active to inactive participants is in place. Over the last 10 years the investment gain/loss on the market value of assets for a year ranged from a loss of almost \$6.5 million to a gain of over \$4 million. Over the past seven valuations, the non-investment gain (loss) for a year has ranged from a loss of \$57.6 million to a gain of \$189 million. The systems contributions exceeded payments by about \$40 million last year which give s little flexibility with your investment allocation. Cash may be needed in future years. As for teachers, the teacher population. They see an increase of 5,800 in 2007 to 6,300 in 2021. You also see an increase in the number of retirees in pay status from 3,700 to about 4,800. Similar comments on the ratio of active to retirees. When they include the inactives they have more inactives than actives. But, if you look at the actives and retirees. Again, you have 50% more actives teachers than retirees. Which is a good place to be. Stats on teachers, slight increase in average age, average service and about a 9.5% increase in average compensation since the prior valuation. Retiree statistics shows a slight increase in the number of retirees, a slightly larger increase in the number of beneficiaries, age and average amounts. Cashflow for the teachers is negative although the gap is getting smaller by negative cashflow which means benefits are exceeding employee and employer contributions. The actuarial value of assets shows that although the assumption for the teachers was 7.15% in the prior valuation the final result is an actuarial of value of assets of just over \$2 billion compared to the market value of \$2.35 billion.

The investment performance shows an 11% return in 2020 and a 19% return in 2021. Resulting in actuarial return of 8.5% in 2020 and almost 11% for 2021.

The Board discussed the report, teachers and administrative increases and PERAC memo.

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

Staff Update & MBTA

Ms. Weir stated that the orange line will be down for a month and the City has asked the Retirement system to increase the time for our hybrid schedule. Staff is increasing some of the staff members from two days a week to three or four days. City Hall is still open so the system cannot go fully hybrid. Staff is currently strongly urging appointments.

Move Request

Ms. Weir stated that looking to finalizing estimate for architect. Would like a vote next month. Some staff remote, possible Court street relocating. 311 the office adjacent to the Boston Retirement System (BRS) is willing to take the current BRS location. Staff will be all on one floor and the BRS will have additional square footage. They are looking to complete the moving process within a month.

IT Security

Ms. Weir stated that GreyCastle sessions have begun. They are working on National Institute of Science and Tech (NIST) which is the framework of people processing technology. As well as the Amazon web services. The bulk of the sessions were held on the 15th and the 16th. Key DoIt leaders from the system attended a dozen sessions. The sense from GreyCastle is that they are really getting what they need. Vitech did join and there are two more scheduled sessions. To repeat the process.

One of the things that we learned at the session is that during the kick off meeting we had an issue with Vitech in their contractual cyber security policy and audit constraints provided full access by to GreyCastle for their NWS. But, they were able to have some quick back and forth and they did some screen prints and they were able to get what they wanted. On August 18th there is morning risk workshop and the focus will be on high risk findings of the risk assessment. Mr. Oates might be attending the next meeting or Mr. Dwyer and will update on GreyCastle.

COLA

Ms. Weir stated that nothing has passed legislation that would affect the BRS.

Ms. Thomas stated the State voted the COLA increase but it still doesn't affect the system

Legislation Update

Ms. Weir stated the other legislation update is the option to join TARP Plan. Ms. Weir will conduct a is conducting a conference call with the teachers to make sure we are consistent with a process.

The other legislation is on vacation buyback. Waiting for PERAC guidelines. The teachers, vacation buybacks and Tarp are all manual process that will take time. So, this is going to be quite a job for operations.

Chairman Greene asked; How many of these TARP's are now eligible people?

M. Weir stated that if they elect, then they would have to do a buyback and she assumes they would want an estimate, prior to deciding to elect.

Ms. Santillana stated that at last review, there were about 600.

Ms. Weir stated that the other legislation topic regarding vacation buybacks. In the legislation update there is no reference to personal time buyback. They only talked about vacation buybacks and the system has always treated them separately.

Outstanding/Ongoing Investment Issues: John Kelly, Investment Analyst

Investment Update

Real Estate Search

Mr. Manning reported that NEPC has provided a list of respondents to the System's real estate search which focused on identifying candidates across three

different strategy types: Debt, Value-Add and Opportunistic. The search received 68 responses in total. As a reminder, this search encompasses the targeted real estate commitments for 2022 and 2023, totaling approximately \$150 million in commitments over the two-year period. The objective of today's discussion is to (1) identify a shortlist of respondents to include in a detailed search analysis across the three different sub-strategies, or (2) select candidates to interview at an upcoming meeting.

Mr. Manning stated NEPC anticipates overweighting opportunistic and debt in the next few years because we are entering an attractive market environment for both sub strategies. Opportunistic (16%) and debt (2%) have the smallest allocations within the System's current real estate program. Mr. Manning went on to state that given the quality of the candidates, he would target \$70 million to Value-Add and then \$40 million each to Opportunistic and Debt.

Mr. Manning stated that of the current list, there are managers that the BRS has had previous good experience with such as Davis and TA Realty. Alidade is a little smaller fund and tend to be in the secondary market. Board Member Jackson expressed interest in hearing from Torchlight.

The Board discussed the strengths of the candidates and decided to have managers Davis, TA Realty, Alidade and Torchlight in to present at September Board meeting.

NEPC asked the Board to look over the managers in the Opportunistic and Debt space and identify other managers the Board would like to consider later as part of this search.

Q2 2022 Performance Summary

Mr. Manning continued stating that NEPC has provided the Q2 2022 Investment Performance Analysis ("IPA") which provides a high-level review of the program's performance along with a flash report through 6/30/2022. The System ranked in the 16th percentile of its peer universe in the second quarter, and the 28th percentile for the trailing one-year period.

July 2022 Flash Report

Mr. Manning went on to state that he wanted to focus on the one month only to say the there has been a pretty big sea change in July which has carried over into August. The system was up +3.4 % in July. The 3 months was down -0.6%, the

YTD was down -8.5% through July. Value had fared better than Growth in the first half of the year but that has begun to shift in the current quarter.

Work Plan

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

	Aug.	Sept.	Oct.	Nov.	Dec.
TOTAL PLAN					
Asset Allocation					
Performance	Q2			Q3	
Education/Review					
TRADITIONAL					
Search/ Prosentations			Issue Small Cap Search	Review Respondents	Analysis/ Presentations
HEDGE FUNDS					10
Program Planning					
Search/ Presentations		Discuss / Issue Search	Review Respondents	Analysis / Presentations	
PRIVATE MARKETS					
Program Planning					Pacing Plan
Search/ Presentations	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	

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

July 2022 Financial Snapshot

Ms. McCarthy reported the July 2022 pension payroll as follows: Contributory payroll: \$59,236,155; Contributory Payees: 15,598; Non-contributory payroll: \$276,486; Total Non-contributory payees: 31; Regular Retirees: 28; Survivor/Beneficiary Retirees: 1; Disability Retirees: 3; Option C/Disb Surv: 5; Members Refunds: 67 for \$1,749,601; Members Transfers: 4 for \$176,087 Option B Refunds: 3 for \$84,115; and Operational Warrants: \$334,301.

Ms. McCarthy went on to state that she is working on RFP for actuary out by October or November 2022.

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

July 2022 payroll update

Ms. Santillana provided an update on the payroll numbers for the month of July 2022. There were 33 possible cases, (29 Superannuation's, 1 Death of active, 3 Disabilities.) out of all the cases 29 were put on payroll. 4 cases did not make it to payroll. Ms. Santillana noted the following reasons the reasons members did not make it on payroll; 1 superannuation, 1 missing documents, (No signed DRO) 1 waiting on BHA information, 1 No final papers, 1 Members death before final papers.

Outstanding/Ongoing Legal Issues: Natacha Thomas, Esquire

Legal update

Ms. Thomas stated that she included the PERAC memo for the Boards review only.

- PERAC MEMO #20-2022
- O'Leary v. CRAB et.al SJC-13229 (August 11, 2022)

The system submitted amicus brief for O'Leary. SJC ruled that vacation buyback is not regular compensation for retirement purposes.

Adjourn from Administrative Session

The Board voted unanimously to adjourn from Administrative Session at approximately 11:10p.m.

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

Motion accepted (5-0)

Respectfully submitted, BOSTON RETIREMENT BOARD

Daniel J. Greene, Esquire
Mayoral Appointed Member, Chairman

Maureen A. Joyce
Ex Officio Member

Michael W. McLaughlin Michael W. McLaughlin

Elected Member

Thomas V.J. Jackson *Fifth Member*

Michael D. O'Reilly *Elected Member*