NEW HAMPSHIRE RETIREMENT SYSTEM

BOARD MEETING

Tuesday, November 14, 2023

Agenda

9:30 a.m.	1.	Ascertain Quorum and Call to Order		T. Lesko
9:35 a.m.	2.	Approval of Minutes	(Tab 1)	T. Lesko
		October 10, 2023(Action Expected)		
9:40 a.m.	3.	Standing Committee Reports		
		• Audit	(Tab 2)	M. Mezzapelle
		 Fraud Policy Revisions (Action Expected) 		
		GovernanceCharter Revisions	(Tab 3)	D. Roy
		(Action Expected)		
		InvestmentsIIC Monthly Report	(Tab 4)	M. Kelliher
		o Callan Monthly Review (9/30/2	3)	R. Leveque
		o Callan Annual Review (6/30/23	•	R. Leveque
		 Legislative 	(Tab 5)	K. Merrifield
		 Benefits 	(Tab 6)	G. Martins
		o Review Disability Approval		
		(Non-public Session and A	_	•
		• PPCC	(Tab 7)	S. Hannan
10:10 a.m.	4.	Actuarial Presentation - GRS	(Tab 8)	Heidi Barry, GRS
10:50 a.m.	5 .	Fiduciary Presentation - Groom	(Tab 9)	D. Levine, Groom Law
11:20 a.m.	6.	Operating Reports		
		Executive	(Tab 10)	J. Goodwin
		 Human Resources 	(Tab 11)	R. Cain
		• Legal	(Tab 12)	T. Crutchfield
		• PIO	(Tab 13)	M. Karlon
		• IT	(Tab 14)	J. Laferriere
		 Investments 	(Tab 15)	R. Leveque

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11:45 a.m.	6.	Consent Agenda (Action Expected)	(Tab 16)	T. Lesko
11:50 a.m.	8.	Trustee Travel	(Tab 17)	T. Lesko
11:55 a.m.	9.	Action Items - October 10, 2023	(Tab 18)	J. Goodwin
12:00 p.m.	10.	Board Checkpoint Discussion	(Tab 19)	T. Lesko
12:05 p.m.	11.	Adjournment		T. Lesko
	12.	Informational Materials	(Tab 20)	

2023 Board Action Calendar Committee Membership Trustee Confidential Contact Information Trustee Appointments and Terms NHRS Conference Resource List NHRS Acronyms

Remote access information will be provided in advance of the meeting at:

https://www.nhrs.org/meetings-events/event/2023/11/14/default-calendar/board-of-trustees-meeting

The following email will be monitored throughout the meeting by someone who can assist with and alert the Board to any technical issues:

publicrelations@nhrs.org (or call 603-410-3648)

NHRS Board of Trustees

DRAFT Minutes - October 10, 2023

Note: These draft minutes from the October 10, 2023 Public Session are subject for approval at a subsequent Board of Trustees meeting.

Board of Trustees October 10, 2023

DRAFT Public Minutes

New Hampshire Retirement System 54 Regional Drive Concord, New Hampshire 03301

Participating: Tim Lesko, Chair; Trustees Sue Hannan, Maureen Kelliher, Robert Maloney, Andrew Martineau, Germano Martins, Ken Merrifield, Monica Mezzapelle, and Joshua Quigley.

Absent: Trustees Jon Frederick, Jason Henry, Paul Provost, and Don Roy.

Staff: Jan Goodwin, Executive Director; Timothy Crutchfield, Deputy Director and Chief Legal Counsel; Raynald Leveque, Chief Investment Officer; John Laferriere, Director of IT; Marty Karlon, Director of Communications and Legislative Affairs; Mark F. Cavanaugh, Associate Counsel and Compliance Officer; Rosamond Cain, Director of Human Resources; Heather Hoffacker, Internal Auditor; Nina Calkins, Administrative and Contact Center Manager; Greg Richard, Senior Investment Officer; Shana Biletch, Investment Officer; Jesse Pasierb, Investment Operations Analyst; Diana Crichton, Hearings Examiner; and Christine McKenney, Communications Specialist.

Guests: Jay Kloepfer, Pete Kelouotis, Angel Haddad, and Catherine Beard, all of Callan, LLC.

Chair Tim Lesko called the October 10, 2023, regular meeting of the NHRS Board of Trustees to order at 10:00 a.m. and after establishing a quorum, he called for a vote to approve the meeting minutes of the September 12, 2023, Board meeting. On a motion by Trustee Maloney, seconded by Trustee Hannan, the Board voted unanimously to approve the meeting minutes.

Due to last-minute exigencies, the Board's action on the Consent Agenda was considered next. On a motion by Trustee Hannan, seconded by Trustee Martins, the Board voted unanimously to approve the Consent Agenda, as presented.

Trustee Mezzapelle gave the report of the Audit Committee, which met earlier this morning. The Committee reviewed the open items in Internal Audit, which are on hold until PGV3 parallel processing is completed. She noted the GASB Census Data Audits are under review with NHRS's external auditor, Plante Moran. She reported the Committee reviewed the Fraud Policy, which had minor changes, and voted unanimously to approve the amended policy and will recommend it to the Board at its November meeting. Lastly, Trustee Mezzapelle gave a status update on the Financial Statements Audit, which is in process, and noted Plante Moran will be at NHRS by the end of the month to continue work on the audit.

On behalf of Trustee Roy, Associate Counsel Mark Cavanaugh gave a brief update on the Governance Committee, which had not met since the last Board meeting.

Trustee Kelliher reported on the September 12, 2023, Independent Investment Committee (IIC, Committee) meeting. Chief Investment Officer Raynald Leveque reported on investment returns through recent time periods, referring to Callan's July 31, 2023, report. He gave updates on holdings within the NHRS portfolio and confirmed asset allocations are within range. Mr. Leveque also reviewed plan liquidity, Russian holdings, and the Work Plan. Trustee Kelliher noted staff continue to prepare the strategic asset allocation for presentation by the end of the calendar year. She mentioned that in 2024 staff will submit a request for proposal (RFP), for an analytic system to assist with their total plan analysis. She reported that Mr. Leveque reviewed the August Committee vote to commit \$50 million to Ares Management Pathfinder Fund II and with the staff's recommendation to commit an additional \$25 million, the IIC, at its September meeting, voted unanimously to approve the recommendation, subject to contract and legal review, resulting in a \$75 million total commitment to the fund. She reported the Committee reviewed the September presentation from Income Research & Management (IR+M) and voted unanimously to renew the five-year contract with IR+M, ending October 31, 2028. In closing, Trustee Kelliher summarized a presentation that the Committee heard from Callan on the retirement system's performance in the public market in Fiscal Year (FY) 2023, its broad market performance, and future plans for asset allocation positioning. She then turned to Mr. Leveque for further updates on portfolio performance.

Mr. Leveque reported on performance for NHRS as of August 31, 2023, noting the Total Fund net return for the fiscal year-to-date (FYTD) period was -1.34%, outperforming the benchmark, which returned -1.71% by 37 basis points. The plan trailed the benchmark for the calendar year-to-date (CYTD) period, by 194 basis points. He reported on the long-term performance of the plan relative to the policy benchmark for three, five, and 10-year periods, which generated 2.41%, 0.14%, and -0.04% of excess returns, respectively. Mr. Levegue noted the positive return to NHRS cash holdings, and the performance for the private markets are still reporting 1st Quarter returns. He expects to have 2nd Quarter returns to present next month. In closing, he reported all of the asset classes are in line with the balancing ranges, and noted the Total Plan is at \$11.4 billion. He opened the floor for questions. A Trustee requested a spreadsheet for next month on the duration of the fixed-income portfolio. Lastly, Mr. Leveque referred to Callan's quarterly review, noting asset allocations and the gross performance compared to the Callan peer universe of large public plans greater than \$1 billion. NHRS's gross Total Plan lands in the top half of the peer universe and continues to show strong performance in the fiscal years for three, five, seven, 10, 20, and 25 years. He ended his report with a summary of the total plan attribution on a one-year basis, as listed in Callan's review.

Trustee Merrifield gave an update on the Legislative Committee, which has not met since September. He mentioned the House filing period for Legislative Service Requests (LSRs) ended, and noted the Senate filing period ends soon. Trustee Merrifield then reported staff identified 11 LSRs that are relative to NHRS, and they continue to monitor others that may possibly affect the retirement system. He gave an update on the Retirement Benefits Commission, which met twice in the last month, but had no votes to recommend any actions. The Commission is scheduled to meet this Thursday, October 12. He turned to Attorney Cavanaugh for an update on the Private Letter Ruling (PLR) to the IRS pertaining to the 2021 House Bill (HB) 2 on the medical subsidy payment process. Attorney Cavanaugh reported that the IRS declined to make a ruling on the matter after months of inquiries and NHRS providing requested information. He stated NHRS will notify the NH Legislature that there was no ruling and contact the Department of Administrative Services (DAS) with the result. Attorney Cavanaugh mentioned there is no change to the current order of the medical subsidy payment process, and there would not be unless it is proposed in legislation. With no further discussion, Attorney Cavanaugh returned the floor to Trustee Merrifield, who requested Marty Karlon, Director of Communications and Legislative Affairs, to provide any other updates, and

he had none to add.

Trustee Martins reported on the Benefits Committee, which met September 27 and referred to Attorney Cavanaugh's presentation of the annual Gainful Occupation (GO) Report for the Committee's review, noting that Attorney Cavanaugh provided an overview on the GO reporting process and the CY 2022 results, which were consistent with past years and noted there was an increase of allowable earnings due to inflation in 2021 and 2022. The Committee voted unanimously to recommend that the Board vote to authorize staff to implement the offsets and excess earnings and non-compliance withholdings, as described in the report. Trustee Martins mentioned the Committee went into non-public session to discuss a disability matter. Upon return to public session the Committee voted unanimously to recommend to the Board to rescind its prior reward of an Ordinary Disability Retirement (ODR) benefit. This will be brought to the Board for a vote at the November meeting.

On a motion by Trustee Martins, seconded by Trustee Mezzapelle, the Board voted unanimously to accept the recommendation of the Benefits Committee that the Board approve the Calendar Year 2022 Gainful Occupation Compliance Report, as presented.

Trustee Hannan next gave a brief report on the PPCC, noting it has not met since last month.

The Board was next presented with an analysis of the long-term Capital Market Assumptions (CMA). Mr. Leveque spoke briefly about why Callan, the retirement system's investment consultant, is presenting today on the CMA and introduced the team and representatives from Callan. Angel Haddad, Senior Vice President of Callan, introduced Jay Kloepfer, Callan's Executive Vice President and Director, who provided a detailed overview of Callan's methodology. This presentation was part of an assessment of NHRS's strategic asset allocation review to be presented to the Board at a future meeting. Following that presentation, a Trustee inquired about how fossil fuel investment might factor into the CMAs. Mr. Haddad commented on how the CMA generally takes into consideration the market volatility of certain investments, such as fossil fuels, when estimating the asset class assumptions.

Chair Lesko turned to Executive Director Goodwin for her operating report. She began by noting the KPMs were at 100% for the month, and thanked management and staff for their work. She cited the 12-month rolling average, which has been well above the 95% benchmark for several months. She announced the start of PGV3 parallel processing, which began October 9, as part of the implementation of the new data system. She explained that prior to parallel, NHRS was operating in a blackout period, which prevented staff from using PGV2 or PGV3, and blocked employers from using the Data Reporting System (DRS) to report to NHRS, while LRS converted 378 million records from PGV2 into PGV3. Employers began filing their September reports on Monday. Finance, and LRS, who are on site, have been fielding questions to assist staff and employers with the transition to the new system. Ms. Goodwin reported that the implementation of new legislation from 2023 is on hold until after parallel processing. She provided an update on employer XML test files, noting there are approximately 10 that NHRS seeks to obtain.

Ms. Goodwin informed the Trustees of three consulting contracts with former employees to assist with finance and PIO matters relating to the PGV3 transition. It is anticipated that the total costs will be well within the Executive Director's limits under the Procurement Policy. Further disclosure of the final costs and rationale for sole sourcing will be provided to the Board at the end of the engagement period.

Ms. Goodwin then presented the annual Call Firefighter Report on behalf of Finance Director Marie Mullen. She referred to the legislation last fall that provided an additional \$40,000 from the general fund to support the benefit. As of June, the balance of the allocated funding, with the \$40,000, was

\$52,000. Earlier this year, NHRS was providing benefits to two Call Firefighter beneficiaries, and one beneficiary has since died, resulting in a reduced amount of funds necessary to allocate for the benefit. Any remaining monies from the additional \$40,000 will go back into the general fund. She provided an update on the Contact Center, which continues to achieve its monthly goal. She noted she continues to receive favorable feedback from her monthly calls to employers, members, retirees, and beneficiaries on NHRS' customer service. She referred to her action plan and presented the NHRS Dashboard on behalf of Ms. Mullen. Lastly, she mentioned that, for the first two weeks of parallel processing, all staff will be on site, along with LRS. After the two-week period, staff will return to a hybrid schedule to conduct remote testing of PGV3.

A Trustee inquired about the actuarial funding rate in relation to the allocation between what is currently funded and what is unfunded. Ms. Goodwin noted the shortfall amount is approximately \$5.7 billion, noting the actuarial fund is a 30-year amortization, with 18 years remaining. A brief discussion followed on layered amortization.

Mr. Leveque gave his report on Investments, noting his team achieved six of the 10 KPMs, noting four were not applicable for the month. He then summarized the agenda for today's IIC meeting, which immediately follows the Board meeting.

Rosamond Cain, Director of Human Resources, gave her HR report, noting the department achieved all four of its KPMs for the month. HR is recruiting for two positions: Investment Officer, and an Executive Assistant, which is a confidential position, as approved by the union. HR is also working with ADP on performance appraisals to streamline the current manual process to a fully electronic one. She reported on training for the HR Generalist, who has a new title, and will be responsible for tracking employee leave time that Ms. Cain previously performed. In closing, she noted HR is planning trainings for all staff for next year.

On behalf of Deputy Director and Chief Legal Counsel Tim Crutchfield, Attorney Cavanaugh presented the legal report. He began with a discussion of the possible delegation of the Consent Agenda for approved disability applications to the Benefits Committee to accommodate the Board's new meeting schedule starting in 2024. He conveyed that the Legal Department had reviewed the statute and consulted with Groom Law, the NHRS outside fiduciary and tax counsel, on what actions are permissible for the Board relative to delegating duties to subcommittees. Groom Law confirmed that the Board has the authority to delegate pursuant to its general powers of administration under RSA 100-A:14. Attorney Cavanaugh then gave an overview of how the delegation would be implemented, noting the Governance Committee would review the Benefits Committee Charter, make any necessary amendments to affirm its powers, and recommend the revised charter to the Board at its November meeting.

Some discussion followed regarding the opportunity for a disability applicant's right to appeal and the notification process to the member of that right. Trustee Merrifield encouraged the Board to review the relevant sections of the statute, including Section 100-A:1, A:6, A:14 and A:14-a, regarding delegation by the Board. Chair Lesko reminded Trustees that any Board member can attend any committee meetings.

Mr. Karlon gave his PIO report, beginning with a summary of the communications and trainings outreach on PGV3, which, to date, has included extensive written documentation on how to perform certain things online; development of reporting and insurance slides for multiple types of employers; and holding about 25 employer presentations. He provided the Board with a list of other projects that PIO and a contracted former employee are working on, including aspects of the PGV3 project that is not included in parallel processing, such as the new version of My Account, which goes live in December. Mr. Karlon explained that PIO will roll out communication incrementally on My Account 2.0 to prevent oversaturation of access to the system, starting with retirees because the

1099-Rs needed for tax filing purposes will be distributed in January via My Account. Lastly, he noted his department met all applicable KPMs for the month.

Mr. Laferriere opened his IT report with cyber security awareness, noting IT regularly conducts phishing tests and stated no extra training for staff was necessary in August. He commented on the completion of the onboarding of the new Managed Security Service Provider (MSSP), Green Pages, which is now called Blue Mantis. He noted IT is working with the MSSP to create new phishing exercises for staff. In addition, he commented on the implementation and monitoring of infrastructure security monitors and patching deployment and noted the advantages of having an MSSP. He gave a summary of the MSSP's recent activities and steps to maintain high security for the retirement system.

He reported IT scored 100% on customer satisfaction and met all eight of its KPMs. He also gave an update on several projects. He noted his department is now fully staffed, and gave an overview of upcoming projects, including an AI chat bot. Lastly, he noted his action plan, which is on track.

Following his report, Mr. Laferriere presented to the Board the AI chat bot and explained how it would work on the NHRS website and demonstrated what it can do to answer retirement-related questions and how it responds to non-retirement-related ones. He explained how the bot was developed and the training involved for it to pull accurate information from internal existing sources: NHRS documentation and the website.

A healthy discussion on the validity of the information the bot retrieves and how the bot could be a benefit to the general public, aside from NHRS members, and the ability to include a legal disclaimer to protect NHRS from what information the bot shares. Mr. Laferriere displayed various settings on the slide presentation to show how IT can monitor the bot and track statistics on the information the bot retrieves. He mentioned the bot would be trained every 24 hours to keep it updated on current NHRS information.

Chair Lesko next presented the travel reports and requests, and there were none.

Ms. Goodwin provided an update on Action Items from the September 12, 2023, Board meeting, noting everything will be completed at the conclusion of today's meeting.

During the Board checkpoint, Chair Lesko requested that Trustees think about what information the Board would want to receive between the months that it meets in 2024.

With no further business to discuss, on a motion by Trustee Merrifield, seconded by Trustee Martins, the Board voted unanimously to adjourn the meeting at 12:14 p.m.

Respectfully submitted,

Christine McKenney Communications Specialist

AUDIT COMMITTEE



Approved at the	, 2023 NHRS Board meeting

Fraud Policy

I. Purpose and Intent

This policy expresses the commitment of NHRS to effective fraud risk management through the commitment, cooperation and involvement of employees and members of the Board of Trustees in preventing, detecting and responding to all instances of fraud. This policy affirms the importance of fraud prevention to NHRS as a tool to achieve its mission, vision and strategic plan.

Non-compliance with this policy may lead to disciplinary action including, but not limited to, termination and criminal or civil action.

This policy is intended to provide a framework for the responsible and professional conduct by all NHRS employees and members of the Board of Trustees who may find themselves in a position of suspecting or identifying potentially fraudulent activities related to NHRS.

II. Definitions

- A. Fraud Fraud is an intentional act or use of words or an intentional omission designed to deceive another and avoid detection, resulting in the victim suffering a loss and/or the perpetrator achieving a gain. Fraud includes the use of one's position for personal gain through the deliberate misuse or misapplication of NHRS assets or resources. Examples of fraud could include, but are not limited to:
 - 1. Misappropriation of assets such as funds, information, equipment and supplies.
 - 2. Impropriety in processing or reporting of financial transactions.
 - 3. Profiting as a result of insider information acquired by virtue of employment or Trusteeship at NHRS.
 - 4. Disclosing confidential and proprietary information to outside parties.
 - 5. Accepting or seeking anything of value from contractors, vendors or others providing supplies or services to NHRS.
 - 6. Destruction, removal or inappropriate use or accessing of records or other NHRS property.
- B. Retaliation NHRS recognizes that the requirement to report fraudulent acts or other irregularities can be difficult because of the fear of reprisals against the complainant. NHRS will not tolerate such retaliation and will take the necessary action to protect those who raise concerns in good faith. NHRS management strictly prohibits any person from engaging in retaliation against a complainant for:
 - 1. Providing information or making a complaint regarding conduct the complainant reasonably believes constitutes fraud.
 - 2. Reporting of, or participating in, proceedings related to fraud against the alleged perpetrator.

- C. *Confidentiality* When an individual raises a concern or reports a possible fraudulent event and does not wish his or her name to be disclosed, NHRS will do its best to protect that individual's identity. However, it should be noted that the investigation process may require that the source of the information be revealed and the complainant may be required to provide a statement and identity as part of the evidence.
- D. *Untrue Allegations* Allegations made in good faith, but not confirmed by the investigation, will not result in any action against the complainant. However, if it is determined that the complainant made an allegation of fraud maliciously and without a reasonable basis, a disciplinary action may be considered against the complainant.

III. Responsibilities

All NHRS employees and Trustees are required to:

- A. Act in an honest and ethical manner and protect the reputation and assets of NHRS.
- B. Be alert for signs of fraudulent activity.
- C. Uphold, institute, review and maintain fraud prevention strategies.
- D. Fully cooperate with the implementation of fraud prevention strategies and with investigations related to fraud.
- E. Report awareness of suspected fraudulent conduct.

IV. Reporting Requirements

- A. All Trustees and NHRS employees are required to report suspected fraudulent activity in good faith based on reasonable belief.
- B. Reports from employees should generally be made to the complainant's immediate supervisor or, if uncomfortable doing so, to the employee's ETeam Director, the Executive Director, the Deputy Director and Chief Legal Counsel, the Director of HR, or the Internal Auditor.
- C. Reports from Trustees should be made to the Board Chair or, if uncomfortable doing so, to the Executive Director, Deputy Director and Chief Legal Counsel, and Internal Auditor.
- D. The Executive Director, Deputy Director and Chief Legal Counsel, and Internal Auditor will be provided with all reports of suspected fraudulent activity unless there is a conflict of interest on their parts.

V. Investigations

Great care needs to be taken in the investigation of suspected fraud or criminal action so as to avoid: 1) unfounded/incorrect accusations; 2) alerting individuals against whom an allegation has been made that a matter has been raised and an investigation is underway; and, 3) making statements which could expose the complainant to legal liability. Confidentiality in accordance with any and all applicable laws concerning the information offered by the complainant will be maintained at all times.

Accordingly, the complainant and/or supervisor should not:

- 1. Attempt to personally conduct investigations or interviews in order to determine whether or not a suspected activity is improper.
- 2. Contact the suspected individual(s) to determine facts or demand restitution.
- 3. Discuss any facts, suspicions or allegations associated with the case with anyone, other than the Executive Director, Deputy Director and Chief Legal Counsel, and Internal Auditor.

- A. Investigations will be performed under the direction of the Executive Director, Deputy Director and Chief Legal Counsel, and Internal Auditor, any of whom will recuse themselves if there is a conflict of interest on their part.
 - 1. Full cooperation with the investigation is required.
 - 2. If the complaint is determined to have merit, the Executive Director, Deputy Director and Chief Legal Counsel, and Internal Auditor, unless there is a conflict of interest on the part of any, will notify the Audit Committee and will keep the Committee apprised of the situation.
 - 3. In order to avoid damaging the reputations of innocent persons initially suspected of wrongful conduct, the results of the investigation will be disclosed or discussed only with those persons who require this knowledge in the proper performance of their office or function.

VI. Response

- A. As necessary, guidance may be sought to facilitate appropriate documentation of the facts. If it is determined that the complaint is factual and fraud has been committed, the Executive Director, Deputy Director and Chief Legal Counsel, and Internal Auditor, unless there is a conflict of interest on the part of any, will confer with the Audit Committee in order to effectuate a resolution. Topics for a possible resolution may include:
 - 1. Appropriate personnel action.
 - 2. Protection of innocent persons, including the complainant and anyone wrongly accused of committing fraud.
 - 3. Appropriate civil or criminal actions.
 - 4. Documentation and submission of claims against the insurers.
 - 5. Preservation of the integrity of any criminal investigation and prosecution.
 - 6. Avoidance of any unnecessary litigation.

Following a fraudulent event, the relevant internal controls will be thoroughly evaluated, and any appropriate changes will be made.

GOVERNANCE COMMITTEE



To: NHRS Board of Trustees

From: Tim Crutchfield, Deputy Director and Chief Legal Counsel

Date: November 1, 2023

Re: Delegation of Disability Determinations on the Consent Agenda

Item: Action: \square Discussion: \square Informational: \square

Beginning in CY 2024, the Board will be meeting on a bi-monthly basis. In order to prevent undue delay in the consideration of applications for disability retirement, NHRS Legal staff proposes that the Board delegate that portion of the consent agenda to the Benefits Committee, which will meet on a monthly basis to ensure a timely review and vote on the recommendations of the Hearing Examiner.

Under RSA 100-A:14-a, the Board has the general power to establish Board subcommittees and adopt charters specifying the scope of a committee's authority and responsibilities. In addition, RSA 100-A:14, II states that the "board of trustees shall establish such rules and regulations as it deems necessary for the proper administration of this chapter." The focus of this memorandum is whether it is reasonable for the Board to carry out its duties relating to initial disability determinations by delegation to the Benefits Committee.

RSA 100-A:6 does not expressly require the full Board to make disability determinations, nor does it expressly prohibit delegation of this function in general. RSA 100-A:6, I(a) and II(a) each provide that a qualified member "... may be retired by the board of trustees on an ordinary disability retirement allowance . . ." In addition, RSA 100-A:6, I(c)(1) and II(c)(1) each provide that "... any member shall be retired by the board of trustees on an accidental disability retirement allowance . . ." Legal staff believes that a reasonable interpretation of these provisions is that they convey a responsibility and authority on the Board but do not provide for a specific method by which such authority must be exercised.

There are numerous provisions in RSA 100-A that similarly convey certain Board responsibilities without specifying a method of exercise and many such responsibilities are delegated. Most notably, RSA 100-A:5, I(a) and II(a) provide that a member ". . . may retire on a service allowance upon a written application to the Board" This language is very similar to the language in RSA 100-A:6 and the Board has never considered individual applications for service retirements as that task has always been performed by staff.

Other examples of Board Committees and/or staff performing responsibilities of the Board under RSA 100-A include:

- a. RSA 100-A:14, XIV "The board of trustees <u>shall have the authority to</u> <u>recover</u> for the retirement system any benefits deemed not payable"¹
- b. RSA 100-A:14, V "The <u>board of trustees shall have the full power</u> to employ and compensate such employees. . ."²
- c. RSA 100-A:14, VII-a- "<u>The board of trustees shall submit</u> a report each quarter . . ."³
- d. RSA 100-A:14, XI, "The board of trustees <u>shall annually notify</u> each active member . . ."⁴
- e. RSA 100-A:6, III(c), Disability allowances are offset by workers' compensation awards "(c) . . . <u>in such manner as the board of trustees</u> shall determine"⁵

These examples are in contrast with other provisions of RSA 100-A which use language best interpreted as requiring an express vote of the Board.

- a. RSA 100-A:3, VI(f) "The board of trustees <u>shall adopt rules</u>, pursuant to RSA 541-A, relative to permitting employees to pay the amount determined by the actuary . . . on an installment basis . . ."
- b. RSA 100-A:3, IX "If there is any doubt as to the proper classification of a job in the retirement system, the trustees shall determine whether the person holding the job is an employee, teacher, permanent policeman, or permanent fireman as defined in RSA 100-A:1; provided, however, that a 2/3 vote shall be required to classify the job in group II . . ."
- c. RSA 100-A:7, III "The board of trustees <u>shall adopt</u> rules, under RSA 541-A as necessary to administer and enforce the provisions of this section."
- d. RSA 100-A:14, IX. "In 1970, and at least once in each 5-year period thereafter, . . ., the board <u>shall adopt</u> such mortality, service and other tables as shall be deemed necessary, and certify the rates of contribution payable under the provisions of this chapter."

¹ Recoupments are currently approved by the Benefits Committee or, if under \$5,000, by the staff recoupment committee in accordance with the Pension Recoupment and Hardship Policy. www.nhrs.org/docs/default-source/board-policies/pension_recoupment_and_hardship_policies.pdf?sfvrsn=2ee39b4_4

² Employment and compensation decisions are mostly made by the Personnel Performance and Compensation Committee and staff. The full Board votes on Executive Director compensation and the Collective Bargaining Agreement.

³ Quarterly legislative notices are prepared and submitted by staff.

⁴ Member statements are prepared and delivered by staff.

⁵ Workers' compensation offsets are administered by staff.

- e. RSA 100-A:15, I-a(c) "The board of trustees <u>shall adopt</u> a statement of investment objectives and policy for the retirement system"
- f. RSA 100-A:15, VII. "The independent investment committee shall prepare for board review and approval a comprehensive annual investment report. The <u>board shall approve</u> the comprehensive annual investment report at the same time that it approves the annual financial report . . ."

In each of these provisions, the use of the words "vote", "adopt", and "approve" is best interpreted as requiring that the full Board vote on the matter and that such tasks should not be delegated.

Moreover, the Benefit Committee's determination process will provide adequate safeguards to protect a member or retiree's due process rights. First, the Committee can decide to refer a matter back to the full Board if a particular case is difficult or potentially controversial. Second, if the Committee approves a recommendation to deny benefits, the member will have the right to request a rehearing and reconsideration pursuant to Ret 204.11 which would be heard by the full Board.⁶ Thus, a member or retiree will always have the opportunity to have the full Board consider his or her application prior to final denial.

In conclusion, Legal staff believes that the Board has the authority to delegate the initial consideration of disability applications to the Benefits Committee. We have consulted with Groom Law Group, NHRS' outside fiduciary counsel, who agrees with this interpretation.

Given this information, at its October 31, 2023 meeting, the Governance Committee unanimously recommended to the full Board that it approve the delegation of the initial determinations on disability retirement applications to the Benefits Committee and approve the related revisions to the Benefits Committee Charter provided with this memo.

Therefore, Legal staff now respectfully requests that the Board vote to delegate the consideration of disability applications on the consent agenda to the Benefits Committee and the related revisions to the Benefits Committee Charter provided with this memo.

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⁶ In this regard, Legal staff notes that the initial review and denial of a disability application is not an adjudicatory proceeding as defined in Ret 201.02(a) "'Adjudicative proceeding' means the process by which the board of trustees resolves a dispute concerning the interpretation of the retirement system's laws and rules or its administration when a member, employer, or beneficiary appeals a decision of the NHRS staff; . . ."

Benefits Committee Charter - Revisions approved at the ______, 2023 NHRS Board meeting.

Purpose

The New Hampshire Retirement System Board of Trustees has established a Benefits Committee in order to assist the Board of Trustees in creating efficiencies, improving services to members and beneficiaries and any other actions referred to it by the Board for recommended action. The Committee will also make recommendations to the Board on findings, procedures, and statutory interpretations related to benefits and service levels.

Authority

The Committee shall have the authority to carry out all responsibilities as delegated to it by the Board of Trustees relative to the administration of benefits and delivery of services to members and beneficiaries. The Committee may direct staff to undertake research and analysis on issues related to benefits and services and to seek relevant information from the firms (actuarial, legal, technology, public pension plan consultant, etc.) that provide services to the Board to assist the Committee in carrying out its responsibilities.

The Committee has the Board-delegated authority to request the hiring of outside service providers (auditors, researchers, etc.), to assist it in carrying out its responsibilities, pursuant to NHRS Procurement Policy in effect at the time of such requests.

Composition

The Benefits Committee will consist of up to five members appointed by the Board Chair. The Chair of the Benefits Committee will also be appointed by the Board Chair.

Meetings

The Committee will meet monthly <<quarterly>> or more frequently as needed. All committee members are expected to attend each meeting in person or via teleconference or video- conference. Meetings will be held in accordance with New Hampshire open meeting requirements under RSA 91-A and RSA 100-A:14-a. The Committee may invite members of staff or others to attend meetings and provide pertinent information, as necessary. Meeting agendas will be prepared and provided in advance to members, along with appropriate briefing materials. Minutes of the meeting discussions and decisions will be prepared by staff. Any Trustee may attend the Committee's meetings and participate in discussions; however, only Committee members may vote.

Staffing

The Executive Director will appoint a senior staff member who will act as staff liaison to the Committee. NHRS staff will assist the Committee in the discharge of its responsibilities.

Responsibilities

The Committee will have the following responsibilities:

- Provide clarification, as needed, on statutory and administrative requirements related to benefits and services;
- Develop policies for recommendation to the Board regarding efficient benefits administration to ensure best practices;
- Make recommendations to the Board regarding necessary legislative, administrative rules, or policy changes related to benefits and service levels;
- Act as the Board's delegee in making initial determinations regarding disability retirement applications or, if necessary and appropriate, refer such determinations to the <<full>> Board;
- Review and make recommendations to the Board relating to applications and appeals for benefits under RSA 100-A;
- Review and make determinations relating to recoupment matters in accordance with the Pension Recoupment and Hardship Policies;
- Review and make recommendations to the Board relating to ongoing litigation involving benefits;
- Perform other activities related to this Charter as requested by the Board of Trustees: and.
- Review its Charter at least annually and make recommendations to the Board for approval and adoption of the Charter, including any revisions as may be deemed appropriate.



To: NHRS Board of Trustees

From: Tim Crutchfield, Deputy Director and Chief Legal Counsel

Date: November 1, 2023

Re: Delegation of Approval of Fiduciary and Cyber Insurance

Item: Action: \square Discussion: \square Informational: \square

NHRS' fiduciary insurance policy and cyber insurance policy both have annual premiums in excess of \$50,000 and, therefore, require prior Board approval under the Procurement Policy. The fiduciary insurance renews each January 15th, and the cyber insurance renews each July 15th. Under the Board's new bi-monthly meeting schedule beginning in CY 2024, there will be no Board meetings in January or July.

We have discussed with our long-time insurance broker, Cross Insurance, the possibility of receiving premium quotes earlier than usual so that the Board could approve the policies at its December 2023 and June 2024 meetings, respectively. Cross has advised that this is highly unlikely to occur because of a general trend in the industry to provide renewal quotes just prior to each policy's renewal date due to concerns and caution about market volatility. Nor is it feasible to alter the renewal dates without there being a gap in coverage.

The Committee has historically provided the Board with recommendations to renew these two policies and it has the flexibility to call a meeting on short notice once the premium quotes are received.

Given this information, at its October 31, 2023 meeting, the Governance Committee unanimously recommended to the full Board that it delegate the review and renewal of the fiduciary and cyber insurance policies to the Governance Committee and approve the related revisions to the Governance Committee Charter provided with this memo.

Therefore, Legal staff now respectfully requests that the Board vote to delegate the authority to approve these insurance renewals to the Governance Committee the related revisions to the Governance Committee Charter provided with this memo.

Governance Committee Charter - Revisions approved at the_______, 2023 NHRS Board meeting.

Purpose

The Governance Committee has been established as a standing committee to support the NHRS Board in promoting the best interests of NHRS, its members, retirees, and beneficiaries through the implementation of sound Board governance policies and practices that enhance good, fair, and open decision-making.

Authority

The Committee has the authority to review data, historical information, consultants' reports, and any other documents it deems reasonably necessary to form an opinion on the issues it reviews. The Committee also has the authority to carry out any responsibilities delegated to it by the Board of Trustees.

The Committee also has the authority to call upon the Executive Director or designee, and NHRS's service providers to assist it in carrying out its responsibilities. The Committee has the Board-delegated authority to request the hiring of outside service providers (auditors, researchers, etc.), to assist it in carrying out its responsibilities, pursuant to NHRS Procurement Policy in effect at the time of such requests.

Composition

The Governance Committee will consist of up to five members appointed by the Board Chair. The Chair of the Governance Committee will also be appointed by the Board Chair.

Meetings

The Committee shall meet at least twice per year, with the authority to convene additional meetings, as circumstances require. All Committee members are expected to attend each meeting in person or via teleconference or video-conference. Meetings will be held in accordance with New Hampshire open meeting requirements under RSA 91-A and RSA 100-A:14-a. The Committee may invite members of staff or others to attend meetings and provide pertinent information, as necessary. Meeting agendas will be prepared and provided in advance to members, along with appropriate briefing materials. Minutes of the meeting discussions and decisions will be prepared by staff. Any Trustee may attend the Committee's meetings and participate in discussions; however, only Committee members may vote.

Staffing

The Executive Director will appoint a senior staff member who will act as staff liaison to the Committee. NHRS staff will assist the Committee in the discharge of its responsibilities.

Responsibilities

The Committee has the following responsibilities:

- Monitor and evaluate best governance practices in the public retirement industry in order to report and recommend to the Board any changes applicable to NHRS;
- Recommend to the Board what duties should be retained by the Board, and what duties should be delegated to committees or staff;
- Recommend changes, as needed, on the timing, amount, and types of information the Board receives in advance of meetings;
- Evaluate legislative proposals relating to Board governance and make recommendations to the Board on positions to take:
- Review and make recommendations to the Board about the content of the Board Governance Manual:
- Recommend the roles and responsibilities of the various committees for consideration by those respective committees;
- Ensure charters for each committee are annually reviewed and revised if necessary, approved by the Board, and adopted into the Governance Manual:
- Oversee the process by which Board policies are reviewed for accuracy, and updated if necessary, on an annual basis;
- Recommend changes in the functioning of the Board meetings to improve effectiveness and efficiency;
- Encourage the Board to participate in regular self-assessment;
- Receive input from the members, business partners, and other interested parties on suggestions for improving Board organization and functions;
- Review and make recommendations to the Board relating to the selection of outside legal counsel;
- Review and approve the annual renewal of the fiduciary and cyber insurance policies.
- Perform other activities related to this Charter as requested by the Board; and,
- Review its Charter at least annually and make recommendations to the Board for approval and adoption of the Charter, including any revisions, as may be deemed appropriate.



Independent Investment Committee's Monthly Report to the Board

NHRS Investment Team
Board of Trustees Meeting
November 14, 2023

Total Plan Performance as of September 30, 2023



The table below details the rates of return for the fund's asset classes over various time periods ended September 30, 2023. Negative mar excess returns are shown in red, positive excess returns in green. Returns for one year or greater are annualized.

	Net of Fees Returns for Periods Ended September 30, 2023									
Composite	Total Fund Weighting As of 9/30/2023	Last Month	Last 3 Months	FYTD	СҮТД	LTM	3-YR	5-YR	10-YR	
Total Domestic Equity	30.18%	-4.89%	-3.45%	-3.45%	9.16%	17.98%	10.21%	7.66%	10.09%	
Domestic Equity Benchmark(1)		-4.76%	-3.25%	-3.25%	12.39%	20.46%	8.61%	8.99%	11.37%	
Excess Return		-0.13%	-0.20%	-0.20%	-3.23%	-2.48%	1.60%	-1.33%	-1.28%	
Total Non US Equity	17.86%	-4.35%	-4.52%	-4.52%	8.52%	24.08%	4.04%	2.82%	3.68%	
Non US Equity Benchmark(2)		-3.16%	-3.77%	-3.77%	5.34%	20.39%	3.74%	2.58%	3.35%	
Excess Return		-1.19%	-0.75%	-0.75%	3.18%	3.69%	0.30%	0.24%	0.33%	
Total Fixed Income	19.77%	-2.40%	-2.86%	-2.86%	-0.12%	2.50%	-3.22%	0.97%	1.86%	
Bloomberg Capital Universe Bond Index		-2.38%	-2.88%	-2.88%	-0.62%	1.61%	-4.68%	0.34%	1.43%	
Excess Return		-0.02%	0.02%	0.02%	0.50%	0.89%	1.46%	0.63%	0.43%	
Total Cash	0.80%	0.44%	1.34%	1.34%	3.76%	4.71%	1.79%	1.80%	1.20%	
3-Month Treasury Bill		0.46%	1.31%	1.31%	3.60%	4.47%	1.70%	1.72%	1.11%	
Excess Return		-0.01%	0.03%	0.03%	0.16%	0.24%	0.09%	0.08%	0.08%	
Total Real Estate (Q2)*	11.47%	-1.14%	-0.17%	-0.17%	-8.34%	-7.06%	11.50%	9.00%	10.77%	
Real Estate Benchmark(3)		-0.97%	-2.88%	-2.88%	-11.01%	-10.73%	7.04%	5.56%	7.81%	
Excess Return		-0.18%	2.71%	2.71%	2.67%	3.68%	4.45%	3.44%	2.96%	
Total Private Equity (Q2)*	14.89%	-0.70%	-0.02%	-0.02%	5.24%	3.15%	19.63%	13.70%	12.50%	
Private Equity Benchmark(4)		6.91%	8.80%	8.80%	26.12%	21.50%	17.16%	15.41%	16.44%	
Excess Return		-7.61%	-8.82%	-8.82%	-20.88%	-18.36%	2.48%	-1.71%	-3.94%	
Total Private Debt (Q2)*	5.04%	-1.34%	-0.03%	-0.03%	3.54%	4.97%	8.48%	5.37%	6.70%	
Private Debt Benchmark(5)		2.22%	2.77%	2.77%	10.90%	11.55%	4.59%	3.48%	6.74%	
Excess Return		-3.56%	-2.81%	-2.81%	-7.36%	-6.57%	3.89%	1.88%	-0.04%	
Total Fund Composite	100.00%	-3.05%	-2.45%	-2.45%	3.96%	9.18%	7.34%	6.11%	7.10%	
Total Fund Benchmark(6)		-1.95%	-1.70%	-1.70%	6.54%	12.24%	5.13%	6.03%	7.22%	
Excess Return		-1.10%	-0.75%	-0.75%	-2.58%	-3.05%	2.21%	0.08%	-0.12%	

The Domestic Equity Benchmark is the Russell 3000 Index as of 7/1/2021.

Source: Callan

FYTD Fiscal Year to Date

CYTD Calendar Year to Date

LTM Last Twelve Months

⁽²⁾ The Non US Equity Index is the MSCI ACWI ex US Index as of 7/1/2003. Prior to 7/1/2003 it was the MSCI EAFE Index.

⁽³⁾ The Real Estate Benchmark is the NCREIF NFI-ODCE Value Weight Net Index lagged 1 quarter as of 7/1/2015.

⁽⁴⁾ The Private Equity Benchmark is the Russell 3000 Index + 2% lagged 1 quarter as of 7/1/2022.

⁽⁵⁾ The Private Debt Benchmark is (50% MStar LSTA Leveraged Loan 100 ldx + 50% Bloomberg High Yield Index) + 1% lagged 1 quarter as of 7/1/2022.

⁽⁶⁾ Current Month Target = 30.0% Russell 3000 Index, 25.0% Bloomberg Universal, 20.0% MSCI ACWI ex-US, 10.0% NCREIF NFI-ODCE Value Weight Net lagged 3 months, 10.0% Russell 3000 Index lagged 3 months+2.0%, 2.5% Bloomberg High Yield Corp lagged 3 months+1.0% and 2.5% MStar LSTA Lev Loan 100 lagged 3 months +1.0%.

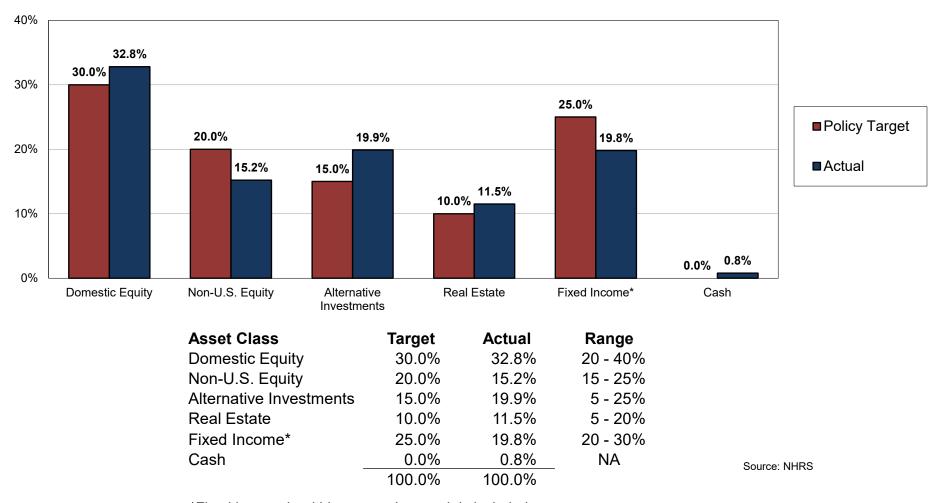
⁽⁷⁾ For the trailing 25 year period ended 9/30/23, the Total Fund has returned 6.73% versus the Total Fund Custom Benchmark return of 6.75%.

^{*}Real Estate and Alternatives market values reflect current custodian valuations, which are typically lagged approximately 1 quarter.

Asset Class Policy Targets vs. Actual Allocation



Asset Class Targets vs. Actual Allocation

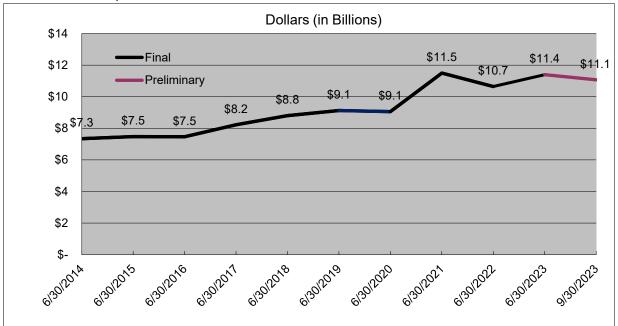


^{*}Fixed income is within range when cash is included

Total Fund Market Value



Dollars (in Billions)
\$7.3
\$7.5
\$7.5
\$8.2
\$8.8
\$9.1
\$9.1
\$11.5
\$10.7
\$11.4
\$11.1



Source: NHRS



Independent Investment Committee's Quarterly Report to the Board November 14, 2023



Discussion Topics

- Asset Allocation and Portfolio Structure
- Investment Performance
- Universe Comparisons
- Investment Expenses by Asset Class

Key Observations

NHRS Pension Plan

Asset Allocation and Portfolio Structure

• Overall, the Fund's asset allocation was close to the permissible Policy ranges at quarter-end. The Fund's allocation to defensive positions, including fixed income and cash, represented 20.7% of total assets. The fixed income allocation was below the policy range by 0.2%, partially balanced by a 0.9% allocation to cash equivalent instruments. During May, the fixed income component of the Fund was rebalanced back within the Investment Policy parameters. In addition, the international equity component of the Fund is now within the approved allocation range. The Fund had an overweight to domestic equity, real estate and alternatives relative to target, and underweight positions to international equity and fixed income

Investment Performance

- The Fund had a gross return of 2.84% over the fourth quarter of Fiscal Year 2023, underperforming the market benchmark return of 3.56% and ranking in the 46th percentile of its peers. On a net-of-fees basis, the Fund returned 2.68%
 - The Non-U.S. Equity and Fixed Income portfolios had positive impacts on relative performance
 - By contrast, the Alternative Assets, U.S. Equity, and Real Estate portfolios detracted from performance. This is a
 reflection of more modest valuations within alternatives and real estate investments, as well as the
 outperformance of large cap stocks versus their mid and small cap counterparts over the quarter (mostly driven
 by the technology sector)
- Overall, performance is competitive relative to both benchmarks over longer periods measured, including the most recent fiscal year. The Fund outperformed the peer group median over the long term, ranking in the top 17% of peers for the trailing 10-year period, and in the top 32% of peers over the last 25 years
- The Fund exhibits attractive risk-adjusted performance, as measured by the Sharpe Ratio over the last five years. In addition, relative risk-adjusted scores, as measured by the Excess Return Ratio, are also strong. Both of these ratios ranked within the top 31% of peers

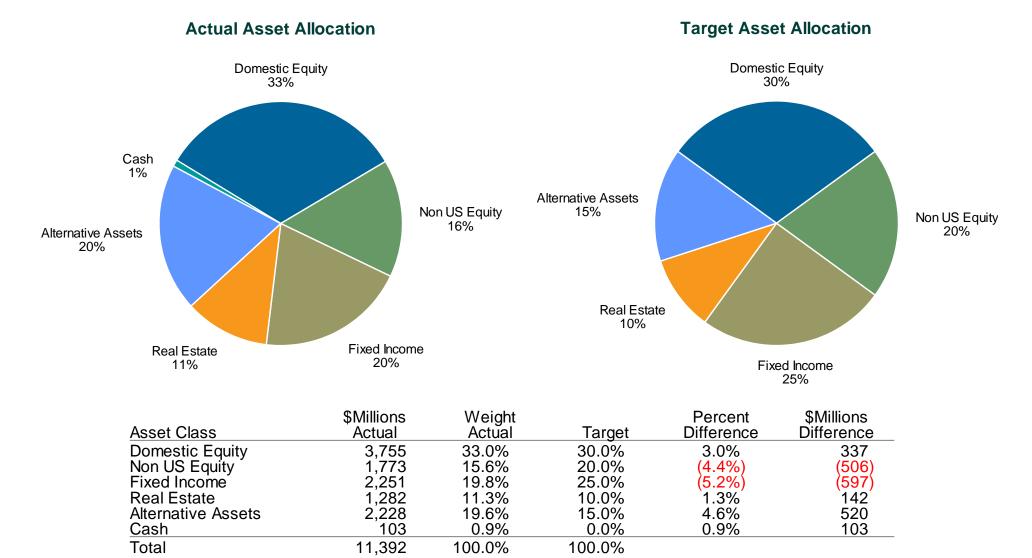
Other Developments

NHRS Staff and Callan will work closely together to evaluate the Fund's strategic asset allocation in 2023



Total Fund

Actual Asset Allocation vs. Target, as of June 30, 2023



^{*}Current Quarter Target = 30% Russell 3000 Index, 25% Bloomberg Universal, 20% MSCI ACWI ex US, 10% NCREIF NFI-ODCE Val Wt Net, 10% Russell 3000 Index +2.0%, 2.5% Bloomberg HY Corp +1.0%, and 2.5% Mstar LSTA Lev Loan 100 +1.0%.

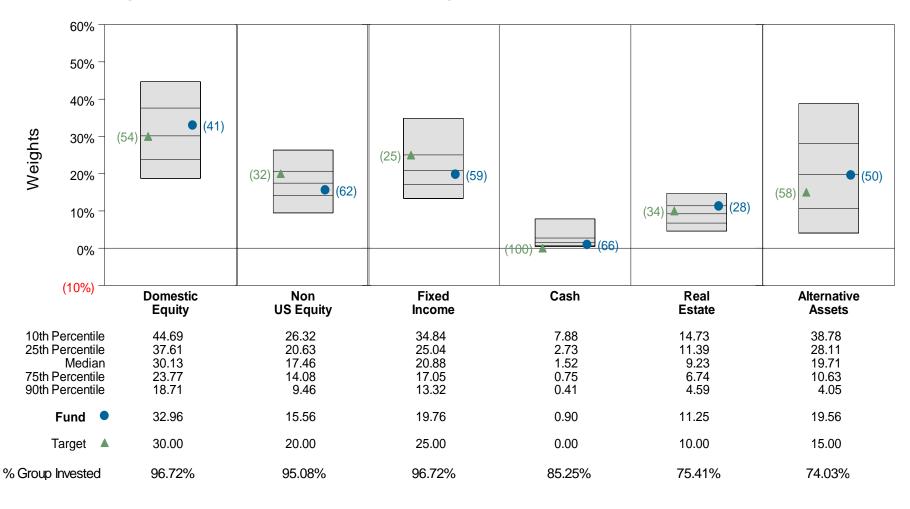
^{**}The United States equity portion of the Walter Scott Global Equity fund is allocated to the Domestic Equity composite.



Total Fund

Actual Asset Allocation vs. Large Public DB Plan (>\$1B) Peer Group, as of June 30, 2023

Asset Class Weights vs Callan Public Fund Spons - Large (>1B)



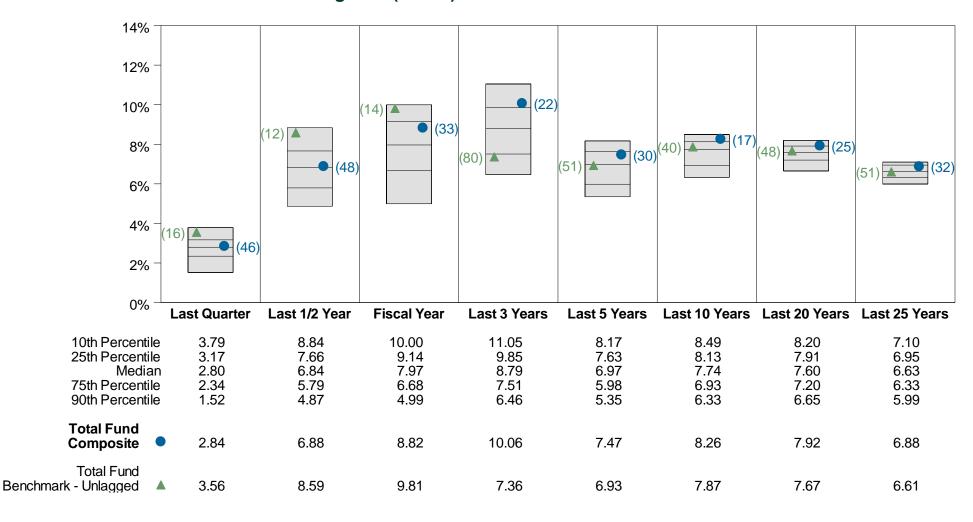
^{*}Current Quarter Target = 30% Russell 3000 Index, 25% Bloomberg Universal, 20% MSCI ACWI ex US, 10% NCREIF NFI-ODCE Val Wt Net, 10% Russell 3000 Index +2.0%, 2.5% Bloomberg HY Corp +1.0%, and 2.5% Mstar LSTA Lev Loan 100 +1.0%.



Total Fund Performance – Gross of Investment Management Fees

Performance vs. Large Public DB Plan (>\$1B) Peers, as of June 30, 2023

Performance vs Callan Public Fund Large DB (Gross)



Note: Investment results are shown gross of investment management fees versus corresponding peer group.

^{*}Current Quarter Target = 30% Russell 3000 Index, 25% Bloomberg Universal, 20% MSCI ACWI ex US, 10% NCREIF NFI-ODCE Val Wt Net, 10% Russell 3000 Index +2.0%, 2.5% Bloomberg HY Corp +1.0%, and 2.5% Mstar LSTA Lev Loan 100 +1.0%.



INVESTMENT EXPENSES BY ASSET CLASS

Investment activity fees and other related expenses: For the Quarter and Fiscal Year to Date through 6/30/23 (in thousands)

Cash Basis	Assets Under Management	Fees (Quarter)	Fees (FYTD)
Equity Investments			
Domestic (U.S.)	3,754,602	2,595	9,940
Non-U.S.	1,772,720	2,406	9,680
Fixed Income Investments	2,251,265	1,447	5,749
Alternative Investments	2,228,344	7,496	28,354
Real Estate Investments	1,281,586	3,376	13,465
Cash	103,085		
Subtotal Gross Investment Mgt Fees		17,320	67,187
Custodial Fees		164	448
Brokerage Fees		414	1,502
Investment Advisor Fees		163	650
Investment Professional Fees		143	261
Investment Staff Administrative Expense		251	920
Subtotal Investment Servicing Fees		1,135	3,782
TOTAL GROSS INVESTMENT EXPENSES	11,391,602	18,455	70,969

Notes:

- 1. Fees for both the Quarter and the Fiscal Year to Date shown here are reported on a cash basis. For most fees, there is a lag between the service provided and payment of the fee.
- 2. Gross fees are those paid in the quarter for partnership operating costs.
- 3. Annual audited GAAP accrual fee amounts are included in the Annual Comprehensive Financial Report (ACFR), audited by the external auditor Plante Moran, as well as in the Comprehensive Annual Investment Report (CAIR). Both reports are available at https://www.nhrs.org/funding-and-investments/reports-valuations.
- 4. NHRS requires a "most favored nation" clause in investment contracts that states that if another comparable public plan invests in a fund at a lower fee structure, NHRS' fees will also be adjusted downward.

DEFINITION OF ASSET CLASSES

Domestic Equity: The allocation to domestic equity serves to expose the fund to the largest economy of the world. An allocation to domestic equity should allow for return enhancement and principal appreciation.

Non-U.S. Equity: The allocation to non-U.S. equity, both developed and emerging markets, will serve as potential for return enhancement and principal appreciation. A secondary consideration is the diversification it provides from the U.S. market. While the U.S. and non-U.S. markets are considerably correlated, they are not perfectly correlated. Assets that are not perfectly correlated serve to reduce volatility over the long term.

Fixed Income: The investment in fixed income will serve to reduce volatility experienced in the equity markets, as well as offer an opportunity for return enhancement by investment in selected securities (for example, investment grade corporates and high yield).

A portion of the fixed income allocation is expected to be invested in Treasury or other government-related issues, which will serve to reduce risk within the portfolio.

Alternative Investments: Alternative investments are nontraditional investments, not covered by another investment class. In general, alternative investments are incorporated into the NHRS asset allocation to enhance the portfolio's risk-adjusted return (private equity/private debt) or to diversify volatility (opportunistic strategies). While the risk associated with these types of investments is higher than that of other asset classes, the expected return is also higher.

Real Estate: The investment in real estate will serve as an inflation hedge, return enhancement opportunity, income generator, and diversification source and will include investments within core, value-added, and opportunistic opportunities.

Callan

September 30, 2023 **New Hampshire Retirement System Investment Measurement Service Monthly Review**

Asset Class Excess Returns September 30, 2023

The table below details the rates of return for the fund's asset classes over various time periods ended September 30, 2023. Negative manager excess returns are shown in red, positive excess returns in green. Returns for one year or greater are annualized.

	Net o	Net of Fees Returns for Periods Ended September 30, 2023							
Composite	Total Fund Weighting As of 9/30/2023	Last Month	Last 3 Months	FYTD	CYTD	LTM	3-YR	5-YR	10-YR
Total Domestic Equity	30.18%	-4.89%	-3.45%	-3.45%	9.16%	17.98%	10.21%	7.66%	10.09%
Domestic Equity Benchmark(1)		-4.76%	-3.25%	-3.25%	12.39%	20.46%	8.61%	8.99%	11.37%
Excess Return		-0.13%	-0.20%	-0.20%	-3.23%	-2.48%	1.60%	-1.33%	-1.28%
Total Non US Equity	17.86%	-4.35%	-4.52%	-4.52%	8.52%	24.08%	4.04%	2.82%	3.68%
Non US Equity Benchmark(2)		-3.16%	-3.77%	-3.77%	5.34%	20.39%	3.74%	2.58%	3.35%
Excess Return		-1.19%	-0.75%	-0.75%	3.18%	3.69%	0.30%	0.24%	0.33%
Total Fixed Income	19.77%	-2.40%	-2.86%	-2.86%	-0.12%	2.50%	-3.22%	0.97%	1.86%
Bloomberg Capital Universe Bond Index		-2.38%	-2.88%	-2.88%	-0.62%	1.61%	-4.68%	0.34%	1.43%
Excess Return		-0.02%	0.02%	0.02%	0.50%	0.89%	1.46%	0.63%	0.43%
Total Cash	0.80%	0.44%	1.34%	1.34%	3.76%	4.71%	1.79%	1.80%	1.20%
3-Month Treasury Bill		0.46%	1.31%	1.31%	3.60%	4.47%	1.70%	1.72%	1.11%
Excess Return		-0.01%	0.03%	0.03%	0.16%	0.24%	0.09%	0.08%	0.08%
Total Real Estate (Q2)*	11.47%	-1.14%	-0.17%	-0.17%	-8.34%	-7.06%	11.50%	9.00%	10.77%
Real Estate Benchmark(3)		-0.97%	-2.88%	-2.88%	-11.01%	-10.73%	7.04%	5.56%	7.81%
Excess Return		-0.18%	2.71%	2.71%	2.67%	3.68%	4.45%	3.44%	2.96%
Total Private Equity (Q2)*	14.89%	-0.70%	-0.02%	-0.02%	5.24%	3.15%	19.63%	13.70%	12.50%
Private Equity Benchmark(4)		6.91%	8.80%	8.80%	26.12%	21.50%	17.16%	15.41%	16.44%
Excess Return		-7.61%	-8.82%	-8.82%	-20.88%	-18.36%	2.48%	-1.71%	-3.94%
Total Private Debt (Q2)*	5.04%	-1.34%	-0.03%	-0.03%	3.54%	4.97%	8.48%	5.37%	6.70%
Private Debt Benchmark(5)		2.22%	2.77%	2.77%	10.90%	11.55%	4.59%	3.48%	6.74%
Excess Return		-3.56%	-2.81%	-2.81%	-7.36%	-6.57%	3.89%	1.88%	-0.04%
Total Fund Composite	100.00%	-3.05%	-2.45%	-2.45%	3.96%	9.18%	7.34%	6.11%	7.10%
Total Fund Benchmark(6)		-1.95%	-1.70%	-1.70%	6.54%	12.24%	5.13%	6.03%	7.22%
Excess Return		-1.10%	-0.75%	-0.75%	-2.58%	-3.05%	2.21%	0.08%	-0.12%

⁽¹⁾ The Domestic Equity Benchmark is the Russell 3000 Index as of 7/1/2021.

FYTD Fiscal Year to Date

CYTD Calendar Year to Date

LTM Last Twelve Months



⁽²⁾ The Non US Equity Index is the MSCI ACWI ex US Index as of 7/1/2003. Prior to 7/1/2003 it was the MSCI EAFE Index.

⁽³⁾ The Real Estate Benchmark is the NCREIF NFI-ODCE Value Weight Net Index lagged 1 quarter as of 7/1/2015.

⁽⁴⁾ The Private Equity Benchmark is the Russell 3000 Index + 2% lagged 1 quarter as of 7/1/2022.

⁽⁵⁾ The Private Debt Benchmark is (50% MStar LSTA Leveraged Loan 100 ldx + 50% Bloomberg High Yield Index) + 1% lagged 1 quarter as of 7/1/2022.

⁽⁶⁾ Current Month Target = 30.0% Russell 3000 Index, 25.0% Bloomberg Universal, 20.0% MSCI ACWI ex-US, 10.0% NCREIF NFI-ODCE Value Weight Net lagged 3 months, 10.0% Russell 3000 Index lagged 3 months+2.0%, 2.5% Bloomberg High Yield Corp lagged 3 months+1.0% and 2.5% MStar LSTA Lev Loan 100 lagged 3 months +1.0%.

⁽⁷⁾ For the trailing 25 year period ended 9/30/23, the Total Fund has returned 6.73% versus the Total Fund Custom Benchmark return of 6.75%.

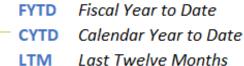
^{*}Real Estate and Alternatives market values reflect current custodian valuations, which are typically lagged approximately 1 quarter.

Domestic Equity Excess Returns

The table below details the rates of return for the fund's investment managers over various time periods ended September 30, 2023. Negative manager excess returns are shown in red, positive excess returns in green. Returns for one year or greater are annualized.

		Net of Fees Re	turns for Periods	s Ended Sep	tember 30, <u>202</u>	3			
Composite	Total Fund Weighting As of 9/30/2023		Last 3 Months	FYTD	CYTD	LTM	3-YR	5-YR	10-YR
Total Domestic Equity	30.18%	-4.89%	-3.45%	-3.45%	9.16%	17.98%	10.21%	7.66%	10.09%
Domestic Equity Benchmark(1)		-4.76%	-3.25%	-3.25%	12.39%	20.46%	8.61%	8.99%	11.37%
Excess Return		-0.13%	-0.20%	-0.20%	-3.23%	-2.48%	1.60%	-1.33%	-1.28%
Large Cap Domestic Equity	17.48%	-4.77%	-3.27%	-3.27%	12.91%	21.43%	10.07%	8.98%	10.98%
S&P 500 Index		-4.77%	-3.27%	-3.27%	13.07%	21.62%	10.15%	9.92%	11.91%
Excess Return		0.00%	0.01%	0.01%	-0.16%	-0.18%	-0.08%	-0.94%	-0.94%
BlackRock S&P 500	17.48%	-4.77%	-3.27%	-3.27%	12.91%	21.43%	10.07%	9.86%	11.88%
S&P 500 Index		-4.77%	-3.27%	-3.27%	13.07%	21.62%	10.15%	9.92%	11.91%
Excess Return		0.00%	0.01%	0.01%	-0.16%	-0.18%	-0.08%	-0.06%	-0.03%
Smid Cap Domestic Equity	5.53%	-5.30%	-3.96%	-3.96%	4.15%	12.75%	10.34%	4.54%	7.72%
Russell 2500 Index		-5.58%	-4.78%	-4.78%	3.59%	11.28%	8.39%	4.55%	7.90%
Excess Return		0.28%	0.82%	0.82%	0.56%	1.46%	1.95%	-0.01%	-0.18%
AllianceBernstein	3.37%	-6.39%	-5.33%	-5.33%	3.81%	11.10%	7.58%	4.48%	8.22%
Russell 2500 Index	0.0170	-5.58%	-4.78%	-4.78%	3.59%	11.28%	8.39%	4.55%	7.90%
Excess Return		-0.81%	-0.55%	-0.55%	0.22%	-0.18%	-0.81%	-0.07%	0.32%
TSW	2.15%	-3.54%	-1.73%	-1.73%	4.69%	15.42%	15.32%	4.69%	6.99%
TSW Blended Benchmark (2)	2.1070	-5.35%	-3.66%	-3.66%	1.95%	11.34%	13.32%	4.35%	7.80%
Excess Return		1.81%	1.93%	1.93%	2.74%	4.08%	2.00%	0.34%	-0.81%
Small Cap Domestic Equity	7.17%	-4.89%	-3.50%	-3.50%	3.86%	13.52%	11.09%	6.93%	9.17%
Russell 2000 Index	1111,0	-5.89%	-5.13%	-5.13%	2.54%	8.93%	7.16%	2.40%	6.65%
Excess Return		1.00%	1.63%	1.63%	1.32%	4.59%	3.92%	4.54%	2.53%
Boston Trust	1.90%	-5.25%	-4.02%	-4.02%	0.21%	11.56%	14.30%	7.55%	8.93%
Russell 2000 Index		-5.89%	-5.13%	-5.13%	2.54%	8.93%	7.16%	2.40%	6.65%
Excess Return		0.64%	1.11%	1.11%	-2.33%	2.63%	7.13%	5.16%	2.29%
Segall Bryant & Hamill	1.98%	-4.39%	-2.91%	-2.91%	2.43%	14.33%	11.07%	7.25%	8.67%
Russell 2000 Index		-5.89%	-5.13%	-5.13%	2.54%	8.93%	7.16%	2.40%	6.65%
Excess Return		1.49%	2.22%	2.22%	-0.12%	5.40%	3.90%	4.86%	2.02%
Wellington	3.29%	-4.97%	-3.56%	-3.56%	7.01%	14.19%	9.40%	6.39%	9.64%
Russell 2000 Index		-5.89%	-5.13%	-5.13%	2.54%	8.93%	7.16%	2.40%	6.65%
Excess Return		0.91%	1.57%	1.57%	4.47%	5.26%	2.23%	4.00%	2.99%

⁽¹⁾ The Domestic Equity Benchmark is the Russell 3000 Index as of 7/1/2021.



⁽²⁾ TSW Blended Benchmark is the Russell 2500 Value Index as of 7/1/2019. Prior to 7/1/2019 it was the Russell 2500.

Non-US Equity Excess Returns

The table below details the rates of return for the fund's investment managers over various time periods ended September 30, 2023. Negative manager excess returns are shown in red, positive excess returns in green. Returns for one year or greater are annualized.

			 							
	Net of Fees Returns for Periods Ended September 30, 2023									
	Total Fund									
Composite	Weighting As of 9/30/2023	Last Month	Last 3 Months	FYTD	CYTD	LTM	3-YR	5-YR	10-YR	
otal Non US Equity	17.86%	-4.35%	-4.52%	-4.52%	8.52%	24.08%	4.04%	2.82%	3.68%	
lon US Equity Benchmark (1)		-3.16%	-3.77%	-3.77%	5.34%	20.39%	3.74%	2.58%	3.35%	
Excess Return		-1.19%	-0.75%	-0.75%	3.18%	3.69%	0.30%	0.24%	0.33%	
Core Non US Equity	10.92%	-4.02%	-3.95%	-3.95%	9.57%	28.23%	6.29%	2.88%	3.18%	
Core Non US Benchmark (2)		-3.16%	-3.77%	-3.77%	5.34%	20.39%	3.74%	2.58%	3.35%	
Excess Return		-0.86%	-0.18%	-0.18%	4.23%	7.84%	2.56%	0.30%	-0.16%	
Aristotle	1.41%	-3.86%	-4.46%	-4.46%	7.71%	22.18%	-	-	-	
MSCI EAFE		-3.42%	-4.11%	-4.11%	7.08%	25.65%	-	-	-	
Excess Return		-0.44%	-0.35%	-0.35%	0.63%	-3.47%	-	-	-	
Artisan Partners	3.08%	-4.69%	-4.13%	-4.13%	5.86%	22.87%	0.63%	2.87%	_	
MSCI EAFE	2.0070	-3.42%	-4.11%	-4.11%	7.08%	25.65%	5.75%	3.24%	_	
Excess Return		-1.27%	-0.02%	-0.02%	-1.22%	-2.78%	-5.13%	-0.37%	-	
BlackRock SuperFund	1.55%	-3.12%	-3.74%	-3.74%	-	-	-	-	_	
MSCI ACWI Ex-US	11.0070	-3.16%	-3.77%	-3.77%	_	-	-	-	_	
Excess Return		0.04%	0.03%	0.03%	-	-	-	-	-	
Causeway Capital	3.54%	-3.90%	-3.04%	-3.04%	16.76%	41.26%	14.75%	5.39%	_	
MSCI EAFE	3.3470	-3.42%	-4.11%	-4.11%	7.08%	25.65%	5.75%	3.24%	_	
Excess Return		-0.49%	1.07%	1.07%	9.68%	15.61%	9.00%	2.15%	-	
Lazard	1.33%	-4.02%	-5.61%	-5.61%	5.91%	20.75%	-	_	_	
MSCI EAFE	11.0070	-3.42%	-4.11%	-4.11%	7.08%	25.65%	-	-	_	
Excess Return		-0.60%	-1.50%	-1.50%	-1.17%	-4.90%	-	-	-	
Emerging Markets	1.42%	-3.76%	-3.58%	-3.58%	2.61%	11.63%	-4.00%	-0.45%	1.10%	
MSCI EM	1.42/0	-2.62%	-2.93%	-2.93%	1.82%	11.70%	-1.73%	0.56%	2.07%	
Excess Return		-1.14%	-0.65%	-0.65%	0.79%	-0.07%	-2.28%	-1.00%	-0.97%	
Wellington Emerging Markets	1.42%	-3.76%	-3.58%	-3.58%	0.39%	9.02%	-4.02%	-0.14%	2.48%	
MSCI EM	11-12-70	-2.62%	-2.93%	-2.93%	1.82%	11.70%	-1.73%	0.56%	2.07%	
Excess Return		-1.14%	-0.65%	-0.65%	-1.43%	-2.68%	-2.29%	-0.70%	0.41%	
Non US Small Cap	1.08%	-4.64%	-4.38%	-4.38%	3.34%	19.25%	-0.41%	-4.41%	-0.64%	
MSCI EAFE Small Cap	110070	-4.42%	-3.51%	-3.51%	1.82%	17.90%	1.10%	0.76%	4.30%	
Excess Return		-0.21%	-0.88%	-0.88%	1.51%	1.35%	-1.51%	-5.17%	-4.94%	
Wellington Int'l Small Cap Research	1.08%	-4.64%	-4.38%	-4.38%	3.34%	19.25%	-	-	_	
MSCI EAFE Small Cap	110070	-4.42%	-3.51%	-3.51%	1.82%	17.90%	-	-	-	
Excess Return		-0.21%	-0.88%	-0.88%	1.51%	1.35%	-	-	-	
Global Equity	4.44%	-5.26%	-6.21%	-6.21%	10.47%	24.47%	6.46%	7.63%	9.52%	
MSCI ACWI net	71-1-70	-4.14%	-3.40%	-3.40%	10.06%	20.80%	6.89%	6.46%	7.56%	
Excess Return		-1.13%	-2.81%	-2.81%	0.41%	3.67%	-0.44%	1.17%	1.96%	
Walter Scott Global Equity	4.44%	-5.26%	-6.21%	-6.21%	10.47%	24.47%	6.46%	7.63%	9.52%	
Walter Scott Global Equity Walter Scott Blended Benchmark (3)	7.77/0	-4.14%	-3.40%	-3.40%	10.06%	20.80%	6.89%	6.46%	7.56%	
Excess Return		-1.13%	-2.81%	-2.81%	0.41%	3.67%	-0.44%	1.17%	1.96%	
_,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1	1.1070	2.0170	2.0170	U. F170	0.0170	U. 1770	1.1170	1.0070	

⁽¹⁾ The Non US Equity Index is the MSCI ACWI ex US Index as of 7/1/2003. Prior to 7/1/2003 it was the MSCI EAFE Index.

⁽³⁾ The Walter Scott Blended Benchmark is the MSCI ACWI Index as 5/1/2008. Prior to 5/1/2008 it was the MSCI EAFE Index.



FYTD Fiscal Year to Date

CYTD Calendar Year to Date

LTM Last Twelve Months

⁽²⁾ The Core Non US Equity Index is the MSCI ACWI ex US as of 7/1/2007. Prior to 7/1/2007 it was the MSCI EAFE Index.

Fixed Income Excess Returns

The table below details the rates of return for the fund's investment managers over various time periods ended September 30, 2023. Negative manager excess returns are shown in red, positive excess returns in green. Returns for one year or greater are annualized.

	Ne	et of Fees Ret	urns for Periods I	Ended Septe	mber 30, 2023				
Composite	Total Fund Weighting As of 9/30/2023	Last Month	Last 3 Months	FYTD	CYTD	LTM	3-YR	5-YR	10-YR
Total Fixed Income	19.77%	-2.40%	-2.86%	-2.86%	-0.12%	2.50%	-3.22%	0.97%	1.86%
Fixed Income Benchmark (1)		-2.38%	-2.88%	-2.88%	-0.62%	1.61%	-4.68%	0.34%	1.43%
Excess Return		-0.02%	0.02%	0.02%	0.50%	0.89%	1.46%	0.63%	0.43%
BlackRock SIO Bond Fund	2.28%	-0.89%	-0.17%	-0.17%	1.82%	3.48%	0.53%	-	-
BlackRock Custom Benchmark (2)		0.43%	1.34%	1.34%	3.78%	4.73%	1.88%	-	-
Excess Return		-1.32%	-1.50%	-1.50%	-1.96%	-1.25%	-1.34%	-	-
Brandywine Asset Mgmt	1.92%	-4.99%	-7.34%	-7.34%	-4.32%	2.33%	-5.55%	-1.53%	0.32%
Brandywine Custom Benchmark (3)		-3.40%	-4.50%	-4.50%	-2.77%	0.98%	-8.81%	-2.63%	-1.22%
Excess Return		-1.59%	-2.83%	-2.83%	-1.55%	1.34%	3.26%	1.10%	1.55%
FIAM (Fidelity) Tactical Bond	3.16%	-2.61%	-3.13%	-3.13%	-0.10%	2.62%	-1.73%	-	_
Bloomberg Aggregate		-2.54%	-3.23%	-3.23%	-1.21%	0.64%	-5.21%	-	-
Excess Return		-0.06%	0.10%	0.10%	1.11%	1.97%	3.48%	-	-
Income Research & Management	6.66%	-2.39%	-2.93%	-2.93%	-0.25%	1.25%	-5.13%	0.81%	1.70%
Bloomberg Gov/Credit		-2.34%	-3.00%	-3.00%	-0.85%	0.93%	-5.32%	0.41%	1.31%
Excess Return		-0.04%	0.07%	0.07%	0.61%	0.33%	0.19%	0.40%	0.39%
Loomis Sayles	2.41%	-1.66%	-1.25%	-1.25%	1.37%	4.09%	-1.25%	2.42%	3.11%
Loomis Sayles Custom Benchmark (4)		-2.07%	-1.95%	-1.95%	1.23%	3.95%	-2.79%	1.17%	2.26%
Excess Return		0.40%	0.70%	0.70%	0.14%	0.14%	1.54%	1.25%	0.85%
Manulife Strategic Fixed Income	1.82%	-2.01%	-2.22%	-2.22%	1.07%	4.30%	-1.72%	1.48%	-
Bloomberg Multiverse		-2.87%	-3.46%	-3.46%	-1.92%	2.69%	-6.62%	-1.48%	_
Excess Return		0.86%	1.24%	1.24%	2.99%	1.61%	4.90%	2.96%	-
Mellon US Agg Bond Index	1.51%	-2.55%	-3.24%	-3.24%	-	-	-	-	-
Bloomberg Aggregate Bond Index		-2.54%	-3.23%	-3.23%	-	-	-	-	-
Excess Return		0.00%	-0.01%	-0.01%	-	-	-	-	-
Total Cash	0.80%	0.44%	1.34%	1.34%	3.76%	4.71%	1.79%	1.80%	1.20%
3-month Treasury Bill		0.46%	1.31%	1.31%	3.60%	4.47%	1.70%	1.72%	1.11%
Excess Return		-0.01%	0.03%	0.03%	0.16%	0.24%	0.09%	0.08%	0.08%
Total Marketable Assets	68.61%	-3.98%	-3.50%	-3.50%	6.12%	14.35%	4.43%	4.42%	5.98%
Total Marketable Index (5)		-3.54%	-3.24%	-3.24%	6.14%	14.10%	3.00%	4.68%	6.22%
Excess Return		-0.43%	-0.26%	-0.26%	-0.03%	0.24%	1.44%	-0.26%	-0.25%

⁽¹⁾ The Fixed Income Benchmark is the Bloomberg Universal Bond Index as of 7/1/2007.

⁽⁵⁾ Marketable Assets Index is 40% Russell 3000, 26.7% MSCI ACWI ex US, and 33.3% Bloomberg Universal as of 7/1/2021.



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LTM Last Twelve Months

⁽²⁾ The BlackRock Custom Benchmark is 3 Month SOFR compounded in arrears as of 1/1/2022.

⁽³⁾ The Brandywine Blended Benchmark is the FTSE WGBI Ex-China Index as of 11/1/2021.

⁽⁴⁾ The Loomis Sayles Custom Benchmark is 65% Bloomberg Aggregate and 35% Bloomberg High Yield.

Alternatives Excess Returns September 30, 2023

The table below details the rates of return for the fund's investment managers over various time periods ended September 30, 2023. Negative manager excess returns are shown in red, positive excess returns in green. Returns for one year or greater are annualized.

	Net o	of Fees Returr	s for Periods En	ded Septen	nber 30, 202	23			
Composite	Total Fund Weighting As of 9/30/2023	Last Month	Last 3 Months	FYTD	CYTD	LTM	3-YR	5-YR	10-YR
Total Real Estate (Q2)* (5)	11.47%	-1.14%	-0.17%	-0.17%	-8.34%	-7.06%	11.50%	9.00%	10.77%
Real Estate Benchmark (1)		-0.97%	-2.88%	-2.88%	-11.01%	-10.73%	7.04%	5.56%	7.81%
Excess Return		-0.18%	2.71%	2.71%	2.67%	3.68%	4.45%	3.44%	2.96%
Strategic Core Real Estate (Q2)*	7.16%	-1.50%	-0.09%	-0.09%	-12.55%	-11.12%	9.05%	7.50%	9.40%
Real Estate Benchmark (1)		-0.97%	-2.88%	-2.88%	-11.01%	-10.73%	7.04%	5.56%	7.81%
Excess Return		-0.53%	2.79%	2.79%	-1.53%	-0.38%	2.01%	1.94%	1.59%
Tactical Non-Core Real Estate (Q2)*	4.31%	-0.54%	-0.31%	-0.31%	0.11%	1.04%	15.88%	11.76%	13.20%
Real Estate Benchmark (1)		-0.97%	-2.88%	-2.88%	-11.01%	-10.73%	7.04%	5.56%	7.81%
Excess Return		0.43%	2.57%	2.57%	11.12%	11.77%	8.84%	6.20%	5.39%
Total Alternative Assets (Q2)*	19.92%	-0.86%	-0.02%	-0.02%	4.80%	3.61%	16.23%	11.03%	9.66%
Alternative Assets Benchmark (2)		5.35%	6.78%	6.78%	20.93%	18.22%	13.00%	11.18%	12.14%
Excess Return		-6.21%	-6.81%	-6.81%	-16.13%	-14.62%	3.23%	-0.15%	-2.48%
Total Private Equity (Q2)*	14.89%	-0.70%	-0.02%	-0.02%	5.24%	3.15%	19.63%	13.70%	12.50%
Private Equity Benchmark (3)		6.91%	8.80%	8.80%	26.12%	21.50%	17.16%	15.41%	16.44%
Excess Return		-7.61%	-8.82%	-8.82%	-20.88%	-18.36%	2.48%	-1.71%	-3.94%
Total Private Debt (Q2)*	5.04%	-1.34%	-0.03%	-0.03%	3.54%	4.97%	8.48%	5.37%	6.70%
Private Debt Benchmark (4)		2.22%	2.77%	2.77%	10.90%	11.55%	4.59%	3.48%	6.74%
Excess Return		-3.56%	-2.81%	-2.81%	-7.36%	-6.57%	3.89%	1.88%	-0.04%

⁽¹⁾ The Real Estate Benchmark is the NCREIF NFI-ODCE Value Weight Net Index lagged 1 quarter as of 7/1/2015.

FYTD Fiscal Year to Date

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LTM Last Twelve Months

⁽²⁾ The Alternative Assets Benchmark is 66.7% Russell 3000 Index + 2% lagged 1 quarter and 33.3% ((50% S&P LSTA Leveraged Loan 100 Index + 50% Bloomberg High Yield Index) + 1%) lagged 1 quarter as of 7/1/2022.

⁽³⁾ The Private Equity Benchmark is the Russell 3000 Index + 2% lagged 1 quarter as of 7/1/2022.

⁽⁴⁾ The Private Debt Benchmark is (50% MStar LSTA Leveraged Loan 100 Index / 50% Bloomberg High Yield Index) + 1% lagged 1 quarter as of 7/1/2022.

⁽⁵⁾ Total Real Estate returns includes Townsend discretionary fee as of 7/1/2022.

^{*}Real Estate and Alternatives market values reflect current custodian valuations, which are typically lagged approximately 1 quarter.

Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of September 30, 2023, with the distribution as of August 31, 2023. The change in asset distribution is broken down into the dollar change due to Net New Investment and the dollar change due to Investment Return.

Asset Distribution Across Investment Managers

	September 3	0, 2023			August 31,	2023
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
Total Domestic Equity	\$3,341,644,686	30.18%	\$0	\$(171,166,989)	\$3,512,811,675	30.70%
Large Cap Domestic Equity	\$1,935,613,066	17.48%	\$0	\$(96,886,115)	\$2,032,499,181	17.76%
Blackrock S&P 500	1,935,613,066	17.48%	0	(96,886,115)	2,032,499,181	17.76%
SMid Cap Domestic Equity	\$611,803,668	5.53%	\$0	\$(33,950,973)	\$645,754,640	5.64%
AllianceBernstein	373,417,661	3.37%	0	(25,312,732)	398,730,393	3.48%
TSW	238,386,007	2.15%	0	(8,638,240)	247,024,247	2.16%
Small Cap Domestic Equity	\$794,227,953	7.17%	\$0	\$(40,329,902)	\$834,557,855	7.29%
Boston Trust	210,038,968	1.90%	0	(11,543,819)	221,582,786	1.94%
Segall Bryant & Hamill	219,617,698	1.98%	0	(9,936,292)	229,553,991	2.01%
Wellington	364,571,287	3.29%	0	(18,849,791)	383,421,078	3.35%
Total Non US Equity	\$1,977,834,164	17.86%	\$0	\$(89,008,686)	\$2,066,842,850	18.06%
Core Non US Equity (1)	\$1,209,436,400	10.92%	\$0	\$(50,198,834)	\$1,259,635,234	11.01%
Aristotle	156,533,810	1.41%	0	(6,223,796)	162,757,606	1.42%
Artisan Partners	340,838,723	3.08%	0	(16,568,195)	357,406,918	3.12%
BlackRock Superfund	171,855,968	1.55%	0	(5,529,990)	177,385,958	1.55%
•	392,406,678	3.54%	0		408,171,850	3.57%
Causeway Capital Lazard		1.33%	0	(15,765,172)		1.34%
Lazard	147,132,498	1.33%	U	(6,094,864)	153,227,362	1.34%
Emerging Markets	\$157,268,749	1.42%	\$0	\$(6,000,779)	\$163,269,528	1.43%
Wellington Emerging Markets	157,268,749	1.42%	0	(6,000,779)	163,269,528	1.43%
Non US Small Cap	\$119,565,062	1.08%	\$0	\$(5,737,040)	\$125,302,102	1.10%
Wellington Int'l Small Cap Research	119,565,062	1.08%	0	(5,737,040)	125,302,102	1.10%
Global Equity	\$491,563,953	4.44%	\$0	\$(27,072,033)	\$518,635,986	4.53%
Walter Scott Global Equity	491,563,953	4.44%	0	(27,072,033)	518,635,986	4.53%
Total Fixed Income	\$2,188,383,430	19.77%	\$0	\$(53,348,976)	\$2,241,732,406	19.59%
BlackRock SIO Bond Fund	252,016,802	2.28%	0	(2,163,241)	254,180,043	2.22%
Brandywine Asset Mgmt	212,212,886	1.92%	Õ	(11,088,636)	223,301,523	1.95%
FIAM (Fidelity) Tactical Bond	350,096,425	3.16%	0	(9,272,418)	359,368,843	3.14%
Income Research & Management	737,749,165	6.66%	0	(17,920,251)	755,669,416	6.60%
Loomis Sayles	266,839,188	2.41%	0	(4,440,242)	271,279,430	2.37%
		1.82%	0			1.80%
Manulife Strategic Fixed Income Mellon US Agg Bond Index	201,801,127 167,667,836	1.51%	0	(4,087,111) (4,377,077)	205,888,239 172,044,913	1.50%
Total Cash	\$88,111,316	0.80%	\$(19,360,032)	\$444,030	\$107,027,317	0.94%
Total Marketable Assets	\$7,595,973,596	68.61%	\$(19,360,032)	\$(313,080,621)	\$7,928,414,248	69.29%
	,,		*(,***,******	*(***,****,****,*****,*****,*****	4 .,,	
Total Real Estate	\$1,269,767,688	11.47%	\$3,846,686	\$(14,197,023)	\$1,280,118,025	11.19%
Strategic Core Real Estate	792,998,719	7.16%	(2,588,131)	(11,656,376)	807,243,226	7.05%
Tactical Non-Core Real Estate	476,768,969	4.31%	6,434,817	(2,540,647)	472,874,798	4.13%
Total Alternative Assets	\$2,205,681,460	19.92%	\$(12,101,791)	\$(15,972,112)	\$2,233,755,363	19.52%
Private Equity	1,648,028,961	14.89%	(11,709,718)	(9,210,845)	1,668,949,523	14.59%
Private Debt	557,652,500	5.04%	(392,073)	(6,761,268)	564,805,840	4.94%
Total Fund Composite	\$11,071,422,744	100.0%	\$(29,199,031)	\$(341,665,861)	\$11,442,287,636	100.0%

⁽¹⁾ Includes \$668,723 in legacy assets that are not actively managed and in liquidation following the termination of Fisher Investments.



⁻Alternatives market values reflect current custodian valuations, which may not be up to date.

June 30, 2023 **New Hampshire Retirement System Investment Measurement Service Annual Review**

	N	et of Fees Retur	ns for Period	s Ended Jun	e 30, 2023				
Composite	Total Fund Weighting As of 6/30/2023	Last Month	QTD	FYTD	CYTD	LTM	3-YR	5-YR	10-YR
Total Domestic Equity	30.36%	7.15%	6.81%	17.25%	13.06%	17.25%	14.21%	9.65%	11.18%
Domestic Equity Benchmark(1)		6.83%	8.39%	18.95%	16.17%	18.95%	12.99%	11.36%	12.43%
Excess Return		0.32%	-1.57%	-1.70%	-3.11%	-1.70%	1.22%	-1.71%	-1.24%
Total Non US Equity	18.16%	5.14%	3.98%	19.01%	13.66%	19.01%	7.75%	3.97%	4.99%
Non US Equity Benchmark(2)		4.49%	2.44%	12.72%	9.47%	12.72%	7.22%	3.52%	4.75%
Excess Return		0.65%	1.54%	6.30%	4.19%	6.30%	0.52%	0.46%	0.24%
Total Fixed Income	19.76%	0.23%	-0.38%	1.43%	2.82%	1.43%	-1.51%	1.60%	2.24%
Bloomberg Capital Universe Bond Index		-0.16%	-0.59%	-0.04%	2.32%	-0.04%	-3.43%	0.98%	1.80%
Excess Return		0.39%	0.21%	1.47%	0.49%	1.47%	1.92%	0.62%	0.44%
Total Cash	0.90%	0.42%	1.22%	3.85%	2.39%	3.85%	1.34%	1.64%	1.06%
3-Month Treasury Bill		0.46%	1.17%	3.59%	2.25%	3.59%	1.27%	1.55%	0.98%
Excess Return		-0.04%	0.06%	0.26%	0.13%	0.26%	0.07%	0.08%	0.08%
Total Real Estate (Q2)*	11.25%	-4.64%	-5.08%	-7.24%	-8.18%	-7.24%	11.62%	9.04%	10.84%
Real Estate Benchmark(3)		-0.97%	-2.88%	-10.73%	-6.16%	-10.73%	7.04%	5.56%	7.78%
Excess Return		-3.67%	-2.20%	3.50%	-2.02%	3.50%	4.57%	3.48%	3.07%
Total Private Equity (Q2)*	14.56%	4.16%	3.89%	3.11%	5.27%	3.11%	19.67%	13.69%	12.50%
Private Equity Benchmark(4)	110070	6.91%	8.80%	21.50%	17.09%	21.50%	17.64%	15.69%	16.58%
Excess Return		-2.75%	-4.91%	-18.39%	-11.83%	-18.39%	2.04%	-2.00%	-4.08%
Total Private Debt (Q2)*	5.00%	2.02%	2.25%	4.96%	3.57%	4.96%	8.53%	5.37%	6.70%
Private Debt Benchmark(5)		2.22%	2.77%	11.55%	6.40%	11.55%	4.59%	3.48%	6.74%
Excess Return		-0.20%	-0.53%	-6.58%	-2.83%	-6.58%	3.95%	1.89%	-0.04%
Total Fund Composite	100.00%	3.19%	2.68%	8.18%	6.56%	8.18%	9.56%	7.06%	7.87%
Total Fund Benchmark(6)		3.61%	3.56%	9.81%	8.59%	9.81%	7.36%	6.93%	7.87%
Excess Return		-0.43%	-0.88%	-1.63%	-2.02%	-1.63%	2.20%	0.13%	0.01%

⁽¹⁾ The Domestic Equity Benchmark is the Russell 3000 Index as of 7/1/2021.



Fiscal Year to Date
Calendar Year to Date
Last Twelve Months



⁽²⁾ The Non US Equity Index is the MSCI ACWI ex US Index as of 7/1/2003. Prior to 7/1/2003 it was the MSCI EAFE Index.

⁽³⁾ The Real Estate Benchmark is the NCREIF NFI-ODCE Value Weight Net Index as of 7/1/2015.

⁽⁴⁾ The Private Equity Benchmark is the Russell 3000 Index + 2% as of 7/1/2022.

⁽⁵⁾ The Private Debt Benchmark is (50% MStar LSTA Leveraged Loan 100 ldx + 50% Bloomberg High Yield Index) + 1% as of 7/1/2022.

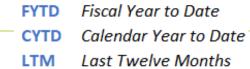
⁽⁶⁾ Current Month Target = 30.0% Russell 3000 Index, 25.0% Bloomberg Universal, 20.0% MSCI ACWI ex-US, 10.0% NCREIF NFI-ODCE Value Weight Net, 10.0% Russell 3000 Index +2.0%, 2.5% Bloomberg High Yield Corp +1.0% and 2.5% MStar LSTA Lev Loan 100+ 1.0%.

⁽⁷⁾ For the trailing 25 year period ended 6/30/23, the Total Fund has returned 6.52% versus the Total Fund Custom Benchmark return of 6.61%.

^{*}Real Estate and Alternatives market values are not lagged and reflect custodian valuations through FYE (2Q23).

		Net of Fees R	eturns for Pe	riods Ended J	une 30, 2023				
Composite	Total Fund Weighting As of 6/30/2023	Last Month	QTD	FYTD	CYTD	LTM	3-YR	5-YR	10-YR
Total Domestic Equity	30.36%	7.15%	6.81%	17.25%	13.06%	17.25%	14.21%	9.65%	11.18%
Domestic Equity Benchmark(1)		6.83%	8.39%	18.95%	16.17%	18.95%	12.99%	11.36%	12.43%
Excess Return		0.32%	-1.57%	-1.70%	-3.11%	-1.70%	1.22%	-1.71%	-1.24%
Large Cap Domestic Equity	17.56%	6.60%	8.60%	19.41%	16.72%	19.41%	14.35%	11.20%	11.93%
S&P 500 Index		6.61%	8.74%	19.59%	16.89%	19.59%	14.60%	12.31%	12.86%
Excess Return		0.00%	-0.14%	-0.19%	-0.18%	-0.19%	-0.25%	-1.11%	-0.94%
BlackRock S&P 500	17.56%	6.60%	8.60%	19.41%	16.72%	19.41%	14.51%	12.25%	12.83%
S&P 500 Index		6.61%	8.74%	19.59%	16.89%	19.59%	14.60%	12.31%	12.86%
Excess Return		0.00%	-0.14%	-0.19%	-0.18%	-0.19%	-0.09%	-0.06%	-0.04%
Smid Cap Domestic Equity	5.58%	8.19%	5.10%	12.87%	8.45%	12.87%	14.13%	6.10%	9.28%
Russell 2500 Index		8.52%	5.22%	13.58%	8.79%	13.58%	12.29%	6.55%	9.38%
Excess Return		-0.33%	-0.12%	-0.71%	-0.35%	-0.71%	1.84%	-0.45%	-0.10%
AllianceBernstein	3.46%	8.95%	5.11%	14.38%	9.66%	14.38%	12.00%	6.54%	9.94%
Russell 2500 Index		8.52%	5.22%	13.58%	8.79%	13.58%	12.29%	6.55%	9.38%
Excess Return		0.43%	-0.12%	0.80%	0.86%	0.80%	-0.29%	0.00%	0.56%
TSW	2.13%	6.98%	5.10%	10.49%	6.53%	10.49%	17.97%	5.32%	8.28%
TSW Blended Benchmark (2)		8.89%	4.37%	10.37%	5.83%	10.37%	16.07%	6.11%	9.15%
Excess Return		-1.91%	0.72%	0.12%	0.71%	0.12%	1.89%	-0.78%	-0.87%
Small Cap Domestic Equity	7.21%	7.71%	3.61%	15.23%	7.63%	15.23%	14.38%	8.82%	10.57%
Russell 2000 Index		8.13%	5.21%	12.31%	8.09%	12.31%	10.82%	4.21%	8.26%
Excess Return		-0.42%	-1.60%	2.92%	-0.45%	2.92%	3.56%	4.61%	2.32%
Boston Trust	1.92%	6.88%	0.79%	12.01%	4.41%	12.01%	16.64%	9.71%	10.32%
Russell 2000 Index		8.13%	5.21%	12.31%	8.09%	12.31%	10.82%	4.21%	8.26%
Excess Return		-1.25%	-4.41%	-0.30%	-3.67%	-0.30%	5.82%	5.50%	2.07%
Segall Bryant & Hamill	1.98%	8.15%	2.62%	16.50%	5.49%	16.50%	13.86%	9.54%	9.94%
Russell 2000 Index		8.13%	5.21%	12.31%	8.09%	12.31%	10.82%	4.21%	8.26%
Excess Return		0.02%	-2.58%	4.19%	-2.59%	4.19%	3.03%	5.33%	1.69%
Wellington	3.31%	7.93%	5.93%	16.41%	10.96%	16.41%	13.45%	7.98%	11.13%
Russell 2000 Index		8.13%	5.21%	12.31%	8.09%	12.31%	10.82%	4.21%	8.26%
Excess Return		-0.20%	0.72%	4.11%	2.87%	4.11%	2.62%	3.77%	2.87%

⁽¹⁾ The Domestic Equity Benchmark is the Russell 3000 Index as of 7/1/2021.



⁽²⁾ TSW Blended Benchmark is the Russell 2500 Value Index as of 7/1/2019. Prior to 7/1/2019 it was the Russell 2500.

		Net of	Fees Returns fo	r Periods Ended	June 30, 2023				
Composite	Total Fund Weighting As of 6/30/2023	Last Month	QTD	FYTD	СҮТД	LTM	3-YR	5-YR	10-YR
Total Non US Equity	18.16%	5.14%	3.98%	19.01%	13.66%	19.01%	7.75%	3.97%	4.99%
Non US Equity Benchmark (1)		4.49%	2.44%	12.72%	9.47%	12.72%	7.22%	3.52%	4.75%
Excess Return		0.65%	1.54%	6.30%	4.19%	6.30%	0.52%	0.46%	0.24%
Core Non US Equity	11.04%	4.72%	3.53%	21.53%	14.08%	21.53%	9.12%	4.11%	4.57%
Core Non US Benchmark (2)		4.49%	2.44%	12.72%	9.47%	12.72%	7.22%	3.52%	4.75%
Excess Return		0.24%	1.09%	8.81%	4.61%	8.81%	1.90%	0.59%	-0.18%
Aristotle	1.44%	4.60%	4.88%	17.96%	12.74%	17.96%	_	-	-
MSCI EAFE	1.4470	4.55%	2.95%	18.77%	11.67%	18.77%	_	_	_
Excess Return		0.05%	1.92%	-0.81%	1.07%	-0.81%	-	-	-
Artisan Partners	3.12%	4.74%	1.46%	18.04%	10.42%	18.04%	4.33%	4.40%	_
MSCI EAFE	3.12%	4.74%	2.95%	18.77%	11.67%	18.77%	8.93%	4.40%	- -
Excess Return		0.19%	-1.49%	-0.73%	-1.25%	-0.73%	-4.60%	0.01%	-
	4 570/								
BlackRock SuperFund	1.57%	4.54%	2.62%	-	<u>-</u>	<u>-</u>	-	-	-
MSCI ACWI Ex-US Excess Return		4.49% 0.06%	2.44% 0.18%	-	-	<u>-</u>	-	-	-
					_	-	-	_	
Causeway Capital	3.55%	4.92%	5.11%	30.62%	20.42%	30.62%	16.54%	6.37%	-
MSCI EAFE		4.55%	2.95%	18.77%	11.67%	18.77%	8.93%	4.39%	-
Excess Return		0.37%	2.16%	11.84%	8.75%	11.84%	7.61%	1.98%	-
Lazard	1.37%	4.50%	3.99%	15.80%	12.21%	15.80%	-	-	-
MSCI EAFE		4.55%	2.95%	18.77%	11.67%	18.77%	-	-	-
Excess Return		-0.05%	1.04%	-2.97%	0.54%	-2.97%	-	-	-
Emerging Markets	1.43%	6.12%	2.48%	5.64%	6.42%	5.64%	-0.27%	-0.99%	1.67%
MSCI EM		3.80%	0.90%	1.75%	4.89%	1.75%	2.32%	0.93%	2.95%
Excess Return		2.32%	1.58%	3.89%	1.53%	3.89%	-2.58%	-1.92%	-1.28%
Wellington Emerging Markets	1.43%	5.55%	1.90%	5.08%	4.12%	5.08%	-0.18%	-0.84%	2.73%
MSCI EM	11-1070	3.80%	0.90%	1.75%	4.89%	1.75%	2.32%	0.93%	2.95%
Excess Return		1.76%	1.00%	3.33%	-0.77%	3.33%	-2.50%	-1.77%	-0.22%
Non US Small Cap	1.10%	3.85%	1.47%	14.86%	8.07%	14.86%	3.69%	-3.91%	0.96%
MSCI EAFE Small Cap	1.10/0	2.89%	0.58%	10.18%	5.53%	10.18%	5.70%	1.31%	6.19%
Excess Return		0.95%	0.89%	4.68%	2.55%	4.68%	-2.01%	-5.22%	-5.23%
	4.400/								
Wellington Int'l Small Cap Research MSCI EAFE Small Cap	1.10%	3.85% 2.89%	1.47% 0.58%	14.86% 10.18%	8.07% 5.53%	14.86% 10.18%	<u>-</u>	-	-
Excess Return		0.95%	0.89%	4.68%	2.55%	4.68%	-	-	-
Global Equity	4.59%	6.16%	6.24%	23.21%	17.78%	23.21%	11.70%	10.66%	11.14%
MSCI ACWI net		5.81%	6.18%	16.53%	13.93%	16.53%	10.99%	8.10%	8.76%
Excess Return		0.35%	0.07%	6.69%	3.85%	6.69%	0.71%	2.55%	2.38%
Walter Scott Global Equity	4.59%	6.16%	6.24%	23.21%	17.78%	23.21%	11.70%	10.66%	11.14%
Walter Scott Blended Benchmark (3)		5.81%	6.18%	16.53%	13.93%	16.53%	10.99%	8.10%	8.76%
Excess Return		0.35%	0.07%	6.69%	3.85%	6.69%	0.71%	2.55%	2.38%

⁽¹⁾ The Non US Equity Index is the MSCI ACWI ex US Index as of 7/1/2003. Prior to 7/1/2003 it was the MSCI EAFE Index.

⁽³⁾ The Walter Scott Blended Benchmark is the MSCI ACWI Index as 5/1/2008. Prior to 5/1/2008 it was the MSCI EAFE Index.



FYTD Fiscal Year to Date
CYTD Calendar Year to Date
LTM Last Twelve Months

⁽²⁾ The Core Non US Equity Index is the MSCI ACWI ex US as of 7/1/2007. Prior to 7/1/2007 it was the MSCI EAFE Index.

		Net of Fees Re	turns for Peri	ods Ended Jui	ne 30, 2023				
Composite	Total Fund Weighting As of 6/30/2023	Last Month	QTD	FYTD	CYTD	LTM	3-YR	5-YR	10-YR
Total Fixed Income	19.76%	0.23%	-0.38%	1.43%	2.82%	1.43%	-1.51%	1.60%	2.24%
Fixed Income Benchmark (1)		-0.16%	-0.59%	-0.04%	2.32%	-0.04%	-3.43%	0.98%	1.80%
Excess Return		0.39%	0.21%	1.47%	0.49%	1.47%	1.92%	0.62%	0.44%
BlackRock SIO Bond Fund	2.21%	0.32%	0.39%	1.91%	1.99%	1.91%	1.45%	-	-
BlackRock Custom Benchmark (2)		0.42%	1.27%	3.92%	2.41%	3.92%	1.46%	-	-
Excess Return		-0.10%	-0.88%	-2.01%	-0.43%	-2.01%	-0.01%	-	-
Brandywine Asset Mgmt	2.01%	1.27%	-0.62%	0.93%	3.26%	0.93%	-1.92%	-0.18%	1.14%
Brandywine Custom Benchmark (3)		0.07%	-1.70%	-2.40%	1.82%	-2.40%	-6.50%	-2.04%	-0.49%
Excess Return		1.20%	1.08%	3.32%	1.44%	3.32%	4.58%	1.86%	1.63%
FIAM (Fidelity) Tactical Bond	3.17%	0.46%	-0.15%	3.12%	3.13%	3.12%	0.23%	-	_
Bloomberg Aggregate		-0.36%	-0.84%	-0.94%	2.09%	-0.94%	-3.96%	-	-
Excess Return		0.82%	0.70%	4.05%	1.04%	4.05%	4.20%	-	-
Income Research & Management	6.67%	-0.20%	-0.73%	-0.38%	2.76%	-0.38%	-3.78%	1.42%	2.04%
Bloomberg Gov/Credit		-0.32%	-0.93%	-0.70%	2.21%	-0.70%	-4.11%	1.03%	1.66%
Excess Return		0.11%	0.20%	0.32%	0.55%	0.32%	0.32%	0.39%	0.38%
Loomis Sayles	2.37%	0.34%	-0.39%	2.61%	2.66%	2.61%	0.19%	2.96%	3.45%
Loomis Sayles Custom Benchmark (4)		0.35%	0.06%	2.50%	3.24%	2.50%	-1.50%	1.74%	2.58%
Excess Return		-0.02%	-0.45%	0.11%	-0.59%	0.11%	1.68%	1.21%	0.87%
Manulife Strategic Fixed Income	1.81%	0.56%	0.01%	4.01%	3.36%	4.01%	0.00%	2.09%	-
Bloomberg Multiverse		0.12%	-1.39%	-0.82%	1.59%	-0.82%	-4.67%	-0.94%	-
Excess Return		0.44%	1.40%	4.83%	1.77%	4.83%	4.67%	3.03%	-
Mellon US Agg Bond Index	1.52%	-0.35%	-	-	-	-	-	-	_
Bloomberg Aggregate Bond Index		-0.36%	-	_	-	-	-	-	-
Excess Return		0.01%	-	-	-	-	-	-	-
otal Cash	0.90%	0.42%	1.22%	3.85%	2.39%	3.85%	1.34%	1.64%	1.06%
-month Treasury Bill		0.46%	1.17%	3.59%	2.25%	3.59%	1.27%	1.55%	0.98%
xcess Return		-0.04%	0.06%	0.26%	0.13%	0.26%	0.07%	0.08%	0.08%
otal Marketable Assets	69.19%	4.46%	3.84%	12.65%	9.96%	12.65%	7.50%	5.74%	6.92%
Fotal Marketable Index (5)		3.88%	3.79%	11.00%	9.69%	11.00%	6.04%	6.06%	7.16%
Excess Return		0.58%	0.04%	1.64%	0.27%	1.64%	1.46%	-0.33%	-0.23%

⁽¹⁾ The Fixed Income Benchmark is the Bloomberg Universal Bond Index as of 7/1/2007.

⁽⁵⁾ Marketable Assets Index is 40% Russell 3000, 26.7% MSCI ACWI ex US, and 33.3% Bloomberg Universal as of 7/1/2021.



FYTD Fiscal Year to Date

CYTD Calendar Year to Date

LTM Last Twelve Months

⁽²⁾ The BlackRock Custom Benchmark is 3 Month SOFR compounded in arrears as of 1/1/2022.

⁽³⁾ The Brandywine Blended Benchmark is the FTSE WGBI Ex-China Index as of 11/1/2021.

⁽⁴⁾ The Loomis Sayles Custom Benchmark is 65% Bloomberg Aggregate and 35% Bloomberg High Yield.

	N	et of Fees Retur	ns for Period	s Ended Jun	e 30, 2023				
Composite	Total Fund Weighting As of 6/30/2023	Last Month	QTD	FYTD	CYTD	LTM	3-YR	5-YR	10-YR
Total Real Estate (Q2)* (5)	11.25%	-4.64%	-5.08%	-7.24%	-8.18%	-7.24%	11.62%	9.04%	10.84%
Real Estate Benchmark (1)		-0.97%	-2.88%	-10.73%	-6.16%	-10.73%	7.04%	5.56%	7.78%
Excess Return		-3.67%	-2.20%	3.50%	-2.02%	3.50%	4.57%	3.48%	3.07%
Strategic Core Real Estate (Q2)*	7.12%	-7.87%	-8.38%	-11.04%	-12.46%	-11.04%	9.08%	7.52%	9.42%
Real Estate Benchmark (1)		-0.97%	-2.88%	-10.73%	-6.16%	-10.73%	7.04%	5.56%	7.78%
Excess Return		-6.90%	-5.50%	-0.30%	-6.30%	-0.30%	2.04%	1.96%	1.65%
Tactical Non-Core Real Estate (Q2)*	4.13%	1.51%	1.23%	0.24%	0.42%	0.24%	16.18%	11.82%	13.29%
Real Estate Benchmark (1)		-0.97%	-2.88%	-10.73%	-6.16%	-10.73%	7.04%	5.56%	7.78%
Excess Return		2.48%	4.12%	10.97%	6.58%	10.97%	9.14%	6.26%	5.51%
Total Alternative Assets (Q2)*	19.56%	3.60%	3.46%	3.58%	4.83%	3.58%	16.27%	11.05%	9.77%
Alternative Assets Benchmark (2)		5.35%	6.78%	18.22%	13.46%	18.22%	13.57%	11.51%	12.39%
Excess Return		-1.75%	-3.32%	-14.65%	-8.63%	-14.65%	2.71%	-0.47%	-2.62%
Total Private Equity (Q2)*	14.56%	4.16%	3.89%	3.11%	5.27%	3.11%	19.67%	13.69%	12.50%
Private Equity Benchmark (3)		6.91%	8.80%	21.50%	17.09%	21.50%	17.64%	15.69%	16.58%
Excess Return		-2.75%	-4.91%	-18.39%	-11.83%	-18.39%	2.04%	-2.00%	-4.08%
Total Private Debt (Q2)*	5.00%	2.02%	2.25%	4.96%	3.57%	4.96%	8.53%	5.37%	6.70%
Private Debt Benchmark (4)		2.22%	2.77%	11.55%	6.40%	11.55%	4.59%	3.48%	6.74%
Excess Return		-0.20%	-0.53%	-6.58%	-2.83%	-6.58%	3.95%	1.89%	-0.04%

⁽¹⁾ The Real Estate Benchmark is the NCREIF NFI-ODCE Value Weight Net Index as of 7/1/2015.

FYTD Fiscal Year to Date

LTM

CYTD Calendar Year to Date

Last Twelve Months



⁽²⁾ The Alternative Assets Benchmark is 66.7% Russell 3000 Index + 2% and 33.3% ((50% MStar LSTA Leveraged Loan 100 Index + 50% Bloomberg High Yield Index) + 1%) as of 7/1/2022.

⁽³⁾ The Private Equity Benchmark is the Russell 3000 Index + 2% as of 7/1/2022.

⁽⁴⁾ The Private Debt Benchmark is (50% MStar LSTA Leveraged Loan 100 Index / 50% Bloomberg High Yield Index) + 1% as of 7/1/2022.

⁽⁵⁾ Total Real Estate returns includes Townsend discretionary fee as of 7/1/2022.

^{*}Real Estate and Alternatives market values are not lagged and reflect custodian valuations through FYE (2Q23).

Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of June 30, 2023, with the distribution as of May 31, 2023. The change in asset distribution is broken down into the dollar change due to Net New Investment and the dollar change due to Investment Return.

Asset Distribution Across Investment Managers

	June 30, 2023				May 31, 2	U Z 3
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
Total Domestic Equity	\$3,458,714,586	30.36%	\$0	\$231,581,206	\$3,227,133,380	29.20%
Large Cap Domestic Equity	\$2,000,916,361	17.56%	\$0	\$123,966,631	\$1,876,949,730	16.98%
Blackrock S&P 500	2,000,916,361	17.56%	0	123,966,631	1,876,949,730	16.98%
SMid Cap Domestic Equity	\$636,144,797	5.58%	\$0	\$48,402,279	\$587,742,518	5.32%
AllianceBernstein	393,913,798	3.46%	0	32,503,755	361,410,043	3.27%
TSW	242,230,999	2.13%	0	15,898,524	226,332,476	2.05%
Small Cap Domestic Equity	\$821,653,428	7.21%	\$0	\$59,212,295	\$762,441,132	6.90%
Boston Trust	218,581,646	1.92%	0	14,145,993	204,435,653	1.85%
Segall Bryant & Hamill	225,735,035	1.98%	0	17,151,770	208,583,264	1.89%
Wellington	377,336,747	3.31%	0	27,914,532	349,422,215	3.16%
Total Non US Equity	\$2,068,607,480	18.16%	\$(18,476)	\$101,864,275	\$1,966,761,681	17.80%
Core Non US Equity (1)	\$1,257,685,405	11.04%	\$(18,469)	\$57,181,657	\$1,200,522,218	10.86%
Aristotle	163,657,086	1.44%	Ó	7,259,962	156,397,124	1.42%
Artisan Partners	354,943,424	3.12%	0	16,247,957	338,695,467	3.06%
BlackRock Superfund	178,541,447	1.57%	0	7,758,054	170,783,393	1.55%
Causeway Capital	404,172,744	3.55%	0	19,126,347	385,046,397	3.48%
Lazard	155,681,568	1.37%	0	6,770,453	148,911,115	1.35%
Emerging Markets	\$162,689,144	1.43%	\$(7)	\$9,499,873	\$153,189,279	1.39%
Wellington Emerging Markets	162,689,144	1.43%	Ó	8,682,435	154,006,708	1.39%
Non US Small Cap	\$124,816,978	1.10%	\$0	\$4,623,068	\$120,193,910	1.09%
Wellington Int'l Small Cap Research	124,816,978	1.10%	0	4,623,068	120,193,910	1.09%
Global Equity	\$523,415,953	4.59%	\$0	\$30,559,678	\$492,856,275	4.46%
Walter Scott Global Equity	523,415,953	4.59%	0	30,559,678	492,856,275	4.46%
Total Fixed Income	\$2,251,265,208	19.76%	\$0	\$5,712,488	\$2,245,552,721	20.32%
BlackRock SIO Bond Fund	252,131,560	2.21%	0	913,223	251,218,337	2.27%
Brandywine Asset Mgmt	228,830,232	2.01%	0	2,925,911	225,904,321	2.04%
FIAM (Fidelity) Tactical Bond	361,123,084	3.17%	0	1,754,241	359,368,843	3.25%
Income Research & Management	759,675,580	6.67%	0	(1,445,534)	761,121,114	6.89%
Loomis Sayles	270,008,060	2.37%	0	979,780	269,028,280	2.43%
Manulife Strategic Fixed Income	206,228,831	1.81%	0	1,192,074	205,036,757	1.86%
Mellon US Agg Bond Index	173,267,861	1.52%	0	(607,208)	173,875,069	1.57%
Total Cash	\$103,085,375	0.90%	\$(39,357,065)	\$535,078	\$141,907,362	1.28%
Total Marketable Assets	\$7,881,672,649	69.19%	\$(39,375,541)	\$339,693,046	\$7,581,355,144	68.60%
Total Real Estate	\$1,281,585,654	11.25%	\$1,446,712	\$(62,465,635)	\$1,342,604,577	12.15%
Strategic Core Real Estate	810,671,639	7.12%	(3,140,499)	(69,462,366)	883,274,504	7.99%
Tactical Non-Core Real Estate	470,914,014	4.13%	4,587,210	6,996,730	459,330,073	4.16%
Total Alternative Assets	\$2,228,343,876	19.56%	\$17,861,799	\$82,493,383	\$2,127,988,693	19.25%
Private Equity	1,658,441,594	14.56%	20,970,805	68,026,598	1,569,444,192	14.20%
Private Debt	569,902,281	5.00%	(3,109,006)	14,466,786	558,544,502	5.05%
Total Fund Composite	\$11,391,602,179	100.0%	\$(22,436,228)	\$362,089,993	\$11,051,948,414	100.0%

⁽¹⁾ Includes \$689,136 in legacy assets that are not actively managed and in liquidation following the termination of Fisher Investments.



⁻Alternatives market values reflect current custodian valuations, which may not be up to date.

New Hampshire Retirement System

A Component Unit of the State of New Hampshire

Comprehensive Annual Investment Report

For the Fiscal Year Ended June 30, 2023



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December 12, 2023

The Honorable Christopher Sununu, Governor
The Honorable Jeb Bradley, President of the Senate
The Honorable Sherman Packard, Speaker of the House of Representatives

Annual Report for Fiscal Year 2023

The Independent Investment Committee (Investment Committee) of the New Hampshire Retirement System (NHRS, System) is pleased to present the Comprehensive Annual Investment Report for the Fiscal Year ended June 30, 2023, in accordance with the provisions of the Revised Statutes Annotated (RSA) 100-A:15, VII of the State of New Hampshire.

Asset Allocation & Summary of Results

Total assets at the end of Fiscal Year 2023 were \$11.4 billion, reflecting a \$0.7 billion increase compared to \$10.7 billion the prior year. The System's investment portfolio is prudently managed for the long-term in order to generate adequate returns to support benefit payments promised to members. To achieve that goal, investments are broadly diversified across the following asset classes: domestic (U.S.) and non-U.S. stocks, bonds, real estate, and alternative investments.

The target allocation and range for each asset class shown below was adopted by the Board of Trustees on May 14, 2019, based on a recommendation of the Investment Committee.

Asset Class	Target Allocation	Allocation Range	Actual Allocation at June 30, 2023*
U.S. Equity	30%	20 - 40%	33.0%
Non-U.S. Equity	20%	15 - 25%	15.6%
Fixed Income	25%	20 - 30%	20.7%
Real Estate	10%	5 - 20%	11.3%
Alternative Investments	15%	5 - 25%	19.6%

^{*} U.S. Equity and Non-U.S. Equity have been adjusted to reflect a global equity portfolio which may opportunistically invest in each of these asset classes. Fixed Income includes cash. Refer to Appendix C for additional detail.

As illustrated in the table, as of June 30, 2023 all asset classes were within the allocation ranges.

The NHRS return was 8.2% net of fees for the Fiscal Year ended June 30, 2023 compared to the benchmark return of 9.8%. The five-year annualized net of fees return was 7.1% compared to the benchmark return of 6.9%. The ten-year annualized net of fees return was 7.9% compared to the benchmark return of 7.9%. Note that these benchmarks do not include any management fees which would be incurred if NHRS invested in the underlying indices. Compared to our peers, NHRS ranked in the top 30% and 17% for the five and ten-year trailing periods, respectively. These rankings are based on the Callan Public Fund Large Defined Benefit Gross Universe.

Over the long-term, the 25-year annualized net of fees return was 6.5%. The System's actuarial assumed rate of return is 6.75%.

Please refer to Appendix A for a detailed review of investment performance as well as market commentary.

The Investment Committee

The Investment Committee is responsible for investing in accordance with policies established by the NHRS Board of Trustees (Board), and making recommendations to the Board regarding asset allocation, investment consultants, and other investment policy matters. In addition, the Investment Committee is responsible for selecting investment managers, agents, and custodial banks; and reviewing performance.

The Investment Committee meets monthly and is comprised of six members: three independent voting members and an active non-voting member of the retirement system appointed by the Governor and Executive Council; and two voting members of the Board of Trustees appointed by the Chair of the Board. All members are required by statute to have significant experience in institutional investing or finance. As of June 30, 2023, the independent member was Christine Clinton, CFA; and the active member was Michael McMahon.

The two Board members serving on the Investment Committee were Maureen Kelliher, CFA (Chair); and Paul Provost, CFP ®. Brian Bickford was appointed to the Investment Committee as

an independent voting member in June 2023 and began serving in July 2023. One vacancy remains for an independent voting member. Brief biographies and photographs of the Investment Committee members as of June 30, 2023 follow this report.

The Committee would like recognize a prior Committee member, Tim Lesko, for his contributions and dedicated service. Mr. Lesko served on the Committee over 5 years between January 2018 and December 2022. Mr. Lesko continues his service to the New Hampshire Retirement System as Chair of its Board of Trustees.

Investment Manual

The NHRS Investment Manual provides governance and oversight of the pension fund assets and is presented in Appendix C of this report. Highlights are listed below:

- The Investment Policy and Accountability Matrix provide a description of the roles and responsibilities of the Board, the Investment Committee, NHRS Staff, and the System's service providers;
- The Proxy Voting Policy and Securities Lending Policy provide specific guidance on these individual topics;
- The program's benchmarks and asset allocation policy are detailed along with discussions of risk management, liquidity, rebalancing and portfolio monitoring controls;
- Various considerations related to the oversight of investments are described, including the selection of service providers and use of active or passive strategies; and
- Asset class guidelines detail portfolio construction, permissible and prohibited investment vehicles, as well as concentration limits

The Board sets the assumed rate of return based on the recommendations of the System's actuary, NHRS Staff, the Investment Committee, and analysis provided by the investment consultant and other industry experts. A written opinion letter on this subject is included in this report as Appendix B.

Governance, Benchmarks and Measurement of Outcomes

The management and administration of the pension trust is a complex effort involving multiple stakeholders with distinct roles and responsibilities as described in the Investment Manual and in statute. At each regular meeting of the Board or Investment Committee, status reports are provided regarding the outcomes of various investment initiatives. Additionally, performance is reviewed versus benchmarks at the manager-level, asset class-level, and portfolio-level on a monthly and quarterly basis, as appropriate, and over various time-periods since the inception of a particular investment mandate or strategy to continually evaluate the portfolio.

NHRS continuously monitors the investment fees paid to managers and discloses alternative investment fees on an aggregate basis each quarter in compliance with the New Hampshire House Bill (HB) 173 passed in 2021. NHRS has a procedure to monitor Environmental, Social, and Governance factors for all marketable managers.

Administrative Comments

The Investment Committee meets at the System's offices monthly. Notice is provided regarding the time, agenda and location of these meetings pursuant to RSA 91-A:2, II. The Investment Committee promotes transparency regarding the investment program through these public meetings, investment materials and reports. Meeting minutes are posted on the NHRS website. Certain investment matters may require discussion in non-public session in accordance with statute. On a regular basis, the Investment Committee receives presentations from investment managers currently retained by NHRS as well as from prospective managers.

Raynald D. Leveque was the System's Chief Investment Officer for the Fiscal Year ending June 30, 2023. In this capacity, Mr. Leveque served as the primary staff liaison on investment matters. In addition, he directed all aspects of the System's investment program including the development of recommendations regarding the System's overall investment strategy and asset allocation; oversight of external portfolio managers; and promoting productive relationships with investment consultants and service providers. A biography of Mr. Leveque follows this report.

Each fiscal year, NHRS produces an Annual Comprehensive Financial Report (ACFR), which details the operation and financial condition of the retirement system. This report also includes a

financial section which outlines the funded status and unfunded actuarial accrued liability, in addition to other actuarial statistics. ACFR reports are available on the System's website, www.nhrs.org.

Overview of Significant Investment Committee Initiatives during the 2023 Fiscal Year:

- Reviewed capital market expectations and asset allocation in conjunction with an asset/liability study underway
- Hired passive non-U.S. equity and fixed income managers for rebalancing and asset allocation decisions
 - Completed rebalance of the non-U.S. equity and fixed income portfolios by allocating to the passive managers
- Reviewed the long-term performance of all current marketable investment managers against their respective benchmarks and renewed their contracts, where appropriate
 - Updated public market manager contract terms from two years to five years going forward
- Approved NHRS Investment Staff's (Staff's) proposal for a Staff-driven investment manager recommendation process
- Reviewed and renewed, where appropriate, service provider/other contracts:
 - Renewed the custodial bank agreement with BNY Mellon for an additional twoyear period and incorporated a private markets transparency service offered through BNY Mellon
- Approved a revised proxy voting policy which was subsequently approved by the NHRS Board of Trustees
- Reviewed and discussed the structure of the public markets portfolio
- Continued the expansion of the alternative investments program; new commitments of \$130 million in aggregate were made to three private equity investment strategies.

- Performed a comprehensive review of all private debt and equity commitments made since the program's restart in 2009 and adopted an annual private debt and equity strategic plan
- Adopted an annual real estate investment plan

The Investment Committee is dedicated to achieving the best long-term investment results possible within acceptable levels of risk and consistent with prudent policies and practices.

Respectfully submitted,

Maureen Kelliher, Chair Christine Clinton Paul Provost Michael McMahon Jan Goodwin, Executive Director Raynald Leveque, Chief Investment Officer











Maureen Kelliher has more than four decades of investment management experience. She has served as cochief and chief investment officer for trust and investment management firms as well as money desk manager for several banks. She holds the Chartered Financial Analyst® (CFA®) designation and is a member of the CFA Institute. She lives in Dover.

Christine Clinton has been working in the investment management industry for more than two decades after cofounding Bluestone Wealth Management LLC. Prior to Bluestone, she worked as a Corporate Controller for several high-tech start-ups in the communications, finance and biotech industries in the Boston area. Christine is a CPA as well as a Chartered Financial Analyst® (CFA) charterholder. She is a member of the CFA Institute and Boston Securities Analysts Society. She lives in Dublin.

Paul Provost is a 30-year veteran of the wealth management and trust business, he has led the wealth management businesses for local community banks in New Hampshire since 2002. He is the president of New Hampshire Trust Company (NHTrust), a subsidiary of New Hampshire Mutual Bancorp headquartered in Concord. Paul earned a bachelor's degree from the University of Vermont and a master's degree in Administrative Management from Saint Michael's College. He is a Certified Financial Planner. He also serves on the boards of the New Hampshire Higher Education Loan Corporation and the Concord Hospital Trust. He previously served as a board chair for the NH Charitable Foundation, Capital Region, and the Central New Hampshire Boys & Girls Club. He lives in Concord.

Mike McMahon has been a member of Hampton Fire Rescue for nearly 30 years, where he currently serves as Fire Chief. During this time, he has served in a variety of financial and investment roles. He has spent over two decades in credit union leadership and is currently a director at Service Credit Union. Mike was a member of the 2017 Decennial Retirement Commission and serves in many other community leadership roles.

Raynald Leveque is the Chief Investment Officer for the New Hampshire Retirement System. Before joining New Hampshire in 2022, Raynald was the Deputy Chief Investment Officer for the State of Connecticut's \$41 billion Retirement Plans and Trust Funds. Prior to the State of Connecticut, Raynald held leadership roles in strategic asset allocation, risk management and quantitative portfolio management at the \$254 billion New York State Common Retirement Fund, and Invesco (formerly OppenheimerFunds). Raynald earned his master's degree in finance from Fordham University and a bachelor's degree in computer engineering from the Rochester Institute of Technology.

Appendix A

Investment Consultant's Letter

Investment Performance Review & Market Commentary

Investment Reports

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October 31, 2023

Board of Trustees
Investment Committee
Executive Director
The New Hampshire Retirement System
54 Regional Drive
Concord, NH 03301-8507

Callan LLC 1 Deforest Avenue Suite 101 Summit, NJ 07901



Dear NHRS Fiduciaries:

Callan LLC (Callan) is pleased to provide an overview of the New Hampshire Retirement System (NHRS) investment program for the fiscal year ended June 30, 2023. Fiscal year 2023 was a very strong performing, yet volatile year for the capital markets due to a variety of factors. Recessionary fears were prevalent as the yield curve remained inverted throughout the majority of the fiscal year and inflation reached levels not seen since the early 1980's. The Federal Reserve hiked interest rates relatively aggressively in an effort to contain inflationary pressures. Investors continue to monitor the potential unintended consequences of the Fed's current Monetary Policy, including its impact on the real economy and the possibility of a recession. The regional banking crisis that took place during the third quarter of the fiscal year (March 2023) serves as an example of some of the unintended consequences of the current policy. In addition, geopolitical events, such as China's decision to move away from "zero-COVID" policies, the ongoing war in Ukraine, and the U.S. debt ceiling, for example, contributed to higher volatility in the capital markets. Despite these events, U.S. GDP rose during each quarter of the fiscal year and the labor market remained robust with unemployment at a generational low. Furthermore, inflation dropped significantly during the second half of the fiscal year, ending at nearly 3%, due mostly to having better balance between supply and demand dynamics in the current environment, falling food and energy prices, and the incremental impact of the Fed's Monetary Policy. The capital markets, particularly broad global equities, were resilient over the fiscal year, rising by double digits. Bond indices produced mixed results, while commodities and other alternatives asset classes fared relatively poorly.

NHRS follows an investment strategy designed to meet its funding requirements over the long-term. Assets are allocated efficiently to ensure that beneficiaries will receive the benefits they were promised. The Fund is managed on a total return basis, while recognizing the importance of capital preservation and prudent risk management. Additionally, the Independent Investment Committee (IIC) administers the Fund in accordance with sound fiduciary standards and industry best practices. The Fund's strategic asset allocation and related objectives, parameters and specific delegation of responsibilities are explicitly defined in the Investment Policy Statement. The IIC manages the investment program pursuant to the investment policy, develops asset class guidelines, monitors and evaluates performance, and makes decisions regarding the retention or termination of asset managers. The investment manual includes all investment policies and asset class guidelines and may be obtained from the NHRS website at www.nhrs.org. The following pages report on the performance and attributes of the investment program for fiscal year 2023.



Market Review for the Year Ended June 30, 2023

The market volatility experienced over the fiscal year reflected fluctuations in risk sentiment amid an array of systemic risk factors, including yields, inflation, China's "zero-COVID" policies, the U.S. debt ceiling, the implications of the war between Russia and Ukraine, as well as other issues impacting the global markets. Risk assets performed poorly over the first quarter of the fiscal year, but rebounded strongly during the final three quarters. U.S. GDP readings were positive throughout the fiscal year, rising 3.2%, 2.6%, 2.0% and 2.4% over the first, second, third, and fourth quarters, respectively. Strong GDP growth results were driven by a robust labor market as well as a significant decline in inflationary pressures. Price reductions have been broad-based in the U.S., but primarily driven by the food and energy sectors. U.S. equities outperformed developed non-U.S. equities over the fiscal year. The S&P 500 Index rose 19.6% over the fiscal year while the MSCI EAFE Index rose 18.8%. Emerging markets equities, as measured by the MSCI Emerging Markets Index, returned 1.8%, underperforming both U.S. and non-U.S. developed markets equities. Within emerging markets, China detracted the most as concerns surrounding China's real estate sector and poor economic data impacted investor sentiment. Fixed income markets were challenged, as inflation drove the 10-year U.S. Treasury yield over 4% for the first time since 2011. The Bloomberg U.S. Aggregate Bond Index returned -0.9% over the fiscal year.

NHRS Investment Portfolio Review

For the fiscal year ended June 30, 2023, the NHRS Total Fund returned 8.2%, net of investment management fees (or "net"), and underperformed the Total Fund Benchmark return of 9.8%. The Fund posted a return of 8.8%, gross of investment management fees (or "gross"), ranking in the 33rd percentile relative to peers in Callan's Large Defined Benefit Public Fund Universe, which consisted of 85 constituents as of June 30, 2023. The Fund's domestic equity and alternatives portfolios underperformed their respective benchmarks. From an asset allocation standpoint, given the "denominator effect" institutional investors experienced over the last fiscal year, an underweight to domestic equity and non-US equity as well as an overweight to real estate detracted from performance. For the trailing three-year period, the Fund returned 9.6% (net), ranking in the 22nd percentile of its peers (peer group rankings are measured gross of investment management fees). For the trailing five-year period, the Fund returned 7.1% (net), ranking in the top third of the peer group (30th percentile). For the trailing ten-year period, the Fund returned 7.9% (net), ranking in the 17th percentile of its peers, and for the trailing twenty-five year period, the Fund returned 6.5% (net), below the current assumed rate of return of 6.75% but ranked in the 32nd percentile of its peers.

During fiscal year 2023, the IIC engaged in the following activities:

- Asset Allocation: Reevaluated the Fund's strategic asset allocation, with an emphasis on understanding the impact of increasing exposure to alternatives given liquidity concerns;
- Rebalancing: NHRS Staff worked with the IIC to rebalance the portfolio, with an emphasis on the Fund's
 fixed income and non-U.S. positions to bring the allocations back within acceptable IPS parameters;
- Structural modifications: NHRS Staff introduced two passive exposures (BlackRock Superfund Non-U.S. Equity and Mellon U.S. Aggregate Bond Index Fixed Income) and terminated one of the emerging markets active managers due to performance concerns Neuberger Berman;
- Alternative Assets Portfolio Pacing and Implementation: Continued to implement the approved allocations within the Alternative Assets portfolio.

Callan LLC provides NHRS with strategic planning, implementation, performance monitoring services, and on-going research and education on a variety of relevant topics for institutional investors. The investment performance analysis produced by Callan has been developed using performance evaluation methodologies that are consistent with industry best practices. The performance results presented in this letter are calculated using a time-weighted returns and are reported both net of investment management fees, as well as gross of fees.

Sincerely,

Ang/el Haddad

Senior Vice President

Britton M. Murdoch

Vice President



Investment Performance Review - Fiscal Year 2023

Overview

For the fiscal year ended June 30, 2023, the NHRS Total Fund returned 8.2%, net of investment management fees (or "net"), and underperformed the Total Fund Benchmark return of 9.8%. The Fund posted a return of 8.8%, gross of investment management fees (or "gross"), ranking in the 33rd percentile relative to peers in Callan's Large Defined Benefit Public Fund Universe, which consisted of 85 constituents as of June 30, 2023. With the positive momentum experienced in the capital markets, the overall portfolio (the "Fund") performed well on an absolute basis but underperformed its total fund target. The Fund's domestic equity and alternatives portfolios underperformed their respective benchmarks. From a strategic asset allocation standpoint, given the "denominator effect" institutional investors experienced over the last fiscal year, an underweight to domestic equity and non-US equity as well as an overweight to real estate detracted from performance.

U.S. Equity Markets

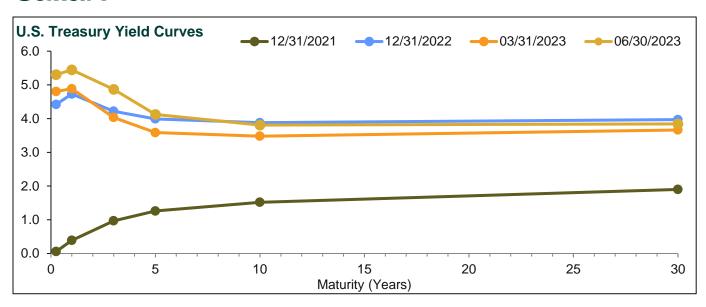
U.S. stocks registered a return of 19.6% over the fiscal year, as measured by the S&P 500 Index. The annualized return over the past 10 years was 12.9%. Most of the sectors represented in the index produced positive returns over the fiscal year, led by the Information Technology, Industrials, and Consumer Discretionary sectors. Real Estate and Utilities were the only sectors to produce negative returns over the fiscal year. Growth stocks outperformed value stocks over the period, with value slightly in favor over the first half of the fiscal year and growth stocks heavily in favor over the second half. Small cap stocks produced strong absolute returns but underperformed large cap stocks over the period, returning 12.3%, as measured by the Russell 2000 Index.

Non-U.S. Equities

Developed non-U.S. equities and emerging market equities produced positive returns during the fiscal year. The strong U.S. dollar began to depreciate versus other currencies starting in September 2022, contributing to strong non-U.S. equity performance. For the fiscal year, developed non-U.S. equities significantly outperformed emerging markets. China posted particularly weak returns over the fiscal year, -16.8% as measured by the MSCI China Index, due to multiple challenges including deteriorating exports, a high youth unemployment rate, a distressed property market, and languishing domestic demand. For the one-year period ended June 30, 2023, developed non-U.S. equity markets, as measured by the MSCI EAFE Index, posted a return of 18.8% and emerging markets, as measured by MSCI Emerging Markets Index, posted a return of 1.8%.

Fixed Income

The fiscal year began with heightened inflation levels near 9%, spurring the Fed to raise interest rates at near historic levels and contributing to systematic issues such as regional banking failures in the U.S. The rising rate environment proved challenging for fixed income investing over the fiscal year with the Bloomberg Aggregate declining 0.9%. However, negative returns were limited to higher quality U.S. securities with high yield and global bond indices producing positive performance. The 10-year U.S. Treasury yield remained at high levels relative to recent history during fiscal year 2023, beginning at 3.01% as of June 30, 2022, and ending at 3.81% as of June 30, 2023. The yield curve remained inverted throughout the vast majority of the fiscal year signaling potential recession.



Real Estate and Alternative Investments

The real estate market returned -10.5% for the fiscal year, as measured by the NCREIF ODCE Index, with depreciation of 13% and income returns of 2.5%. During the fiscal year, ODCE redemption queues steadily increased and transaction volume steadily decreased each quarter. Real estate valuations are reflective of higher interest rates, which have put upward pressure on capitalization rate and discount rate assumptions. Income returns remained positive throughout each quarter of the fiscal year across all sectors. Underperformance was broadly spread across region and property types. The Office sector performed the worst, depreciating close to 20% while Hotels were the only sector to produce positive performance over the fiscal year.

Alternative investments posted positive returns for the fiscal year. After experiencing severe declines in public equity performance during fiscal year 2022, private equity investors were bracing for and experienced a more challenging return environment compared to the public markets. Broad private equity returns were positive for the last two quarters of the fiscal year, with buyout gains offsetting VC losses. Fundraising over the first half of 2023 was behind levels reached during the first half of 2022 by approximately 62% in venture capital and 26% in buyouts.

NHRS Asset Class Highlights

NHRS Asset Class	FY 2023 Return (Net of Fees)
Total Fund	8.18%
Total Fund Custom Index	9.81%
Total Domestic Equity	17.25%
US Equity Index	18.95%
Total Non-US Equity	19.01%
Non-US Equity Index	12.72%
Total Fixed Income	1.43%
Fixed Income Benchmark	-0.04%
Total Real Estate	-7.24%
Real Estate Benchmark	-10.73%
Total Alternatives	3.58%
Alternative Assets Benchmark	18.22%

The NHRS Total Domestic Equity portfolio, comprised of both passive and actively managed portfolios, returned 17.3% (net), underperforming the strategic benchmark (Russell 3000 Index) by 170 basis points over fiscal year

2023. The Domestic Equity portfolio's passive large cap exposure had a 19.4% return compared to 12.9% for the small/mid-cap composite and 15.2% for the small cap composite. The small/mid-cap composite outperformed its Russell 2500 benchmark and the small cap composite underperformed its Russell 2000 benchmark.

The NHRS Total Non-U.S. Equity portfolio, which is comprised of both passive and actively managed portfolios with exposures to both developed and emerging markets, returned 19.0% (net). The Non-U.S. Equity portfolio outperformed its benchmark by 629 basis points during the fiscal year as all active core non-US equity, emerging market equities, and non-US small cap equity managers outperformed their respective benchmarks.

The NHRS Total Fixed Income portfolio is comprised of passive and broadly diversified actively managed portfolios, including domestic and international exposures. This aggregate portfolio had a 1.4% return (net), outperforming the Total Fixed Income Index return by 147 basis points. An overweight to lower quality and higher yielding issues relative to the Bloomberg Universal Index had a positive impact on relative performance. Exposure to non-U.S. issues also impacted relative performance, as non-U.S. bonds outperformed their U.S. counterparts over the fiscal year.

The NHRS Real Estate portfolio returned -7.2% (net), outperforming its benchmark return of -10.7%. Outperformance was driven by the Tactical Non-Core Real Estate allocation within the portfolio; the Strategic Core portfolio slightly detracted from relative results.

Lastly, for fiscal year 2023, the Alternative Investments portfolio generated a return of 3.6% (net) while its benchmark returned 18.2%. Underperformance was driven by both the private equity and private debt allocations within the portfolio, given more modest valuations for alternative investments in 2023.

Investment Market Update (by asset type)

Index Summary (6/30/23)	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Equity Indices				
S&P 500 Index	19.6%	14.6%	12.3%	12.9%
Russell 1000 Index	19.4%	14.1%	11.9%	12.6%
Russell 1000 Growth Index	27.1%	13.7%	15.1%	15.7%
Russell 1000 Value Index	11.5%	14.3%	8.1%	9.2%
Russell 2000 Index	12.3%	10.8%	4.2%	8.3%
Russell 2000 Growth Index	18.5%	6.1%	4.2%	8.8%
Russell 2000 Value Index	6.0%	15.4%	3.5%	7.3%
Russell 2500 Index	13.6%	12.3%	6.6%	9.4%
Russell 3000 Index	19.0%	13.9%	11.4%	12.3%
MSCI ACWI Index	16.5%	11.0%	8.1%	8.8%
MSCI ACWI ex US Index	12.7%	7.2%	3.5%	4.8%
MSCI EAFE Index	18.8%	8.9%	4.4%	5.4%
MSCI EAFE Growth Index	20.2%	6.3%	5.4%	6.4%
MSCI EAFE Value Index	17.4%	11.3%	2.9%	4.2%
MSCI Europe Index	21.8%	10.7%	5.2%	5.7%
MSCI Japan Index	18.1%	5.7%	3.1%	5.2%
MSCI Pacific ex JPN Index	5.9%	6.5%	2.7%	4.3%
MSCI EM Index	1.8%	2.3%	0.9%	3.0%
Fixed Income Indices				
Bloomberg Aggregate Index	-0.9%	-4.0%	0.8%	1.5%
Bloomberg Gov't/Credit Index	-0.7%	-4.1%	1.0%	1.7%
Bloomberg TIPS Index	-1.4%	-0.1%	2.5%	2.1%
Bloomberg High Yield Corporate Index	9.1%	3.1%	3.4%	4.4%
S&P LSTA Leveraged Loan 100 Index	11.8%	5.4%	4.0%	3.7%
Bloomberg Global Aggregate Index	-1.3%	-5.0%	-1.1%	0.2%
Bloomberg High Yield Muni Index	2.9%	1.8%	2.8%	4.2%
JPM EMBI Global Diversified Index	7.4%	-3.1%	0.6%	2.8%
JPM GBI-EM Global Diversified Index	11.4%	-1.4%	0.3%	-0.6%
Other Indices				
Bloomberg Commodity Price Index	-13.3%	16.0%	3.0%	-2.0%
S&P GSCI Index	-14.2%	25.1%	2.8%	-3.5%
Alerian MLP Index	30.5%	30.7%	6.2%	0.9%
FTSE NAREIT Composite Index	-4.3%	6.2%	4.4%	6.6%
NCREIF NFI-ODCE Equal Weight Net Index	-10.5%	7.6%	6.1%	8.1%

Investment Market Update (sorted by best to worst 1-year performance)

Index Summary (6/30/23)	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Alerian MLP Index	30.5%	30.7%	6.2%	0.9%
Russell 1000 Growth Index	27.1%	13.7%	15.1%	15.7%
MSCI Europe Index	21.8%	10.7%	5.2%	5.7%
MSCI EAFE Growth Index	20.2%	6.3%	5.4%	6.4%
S&P 500 Index	19.6%	14.6%	12.3%	12.9%
Russell 1000 Index	19.4%	14.1%	11.9%	12.6%
Russell 3000 Index	19.0%	13.9%	11.4%	12.3%
MSCI EAFE Index	18.8%	8.9%	4.4%	5.4%
Russell 2000 Growth Index	18.5%	6.1%	4.2%	8.8%
MSCI Japan Index	18.1%	5.7%	3.1%	5.2%
MSCI EAFE Value Index	17.4%	11.3%	2.9%	4.2%
MSCI ACWI Index	16.5%	11.0%	8.1%	8.8%
Russell 2500 Index	13.6%	12.3%	6.6%	9.4%
MSCI ACWI ex US Index	12.7%	7.2%	3.5%	4.8%
Russell 2000 Index	12.3%	10.8%	4.2%	8.3%
S&P LSTA Leveraged Loan 100 Index	11.8%	5.4%	4.0%	3.7%
Russell 1000 Value Index	11.5%	14.3%	8.1%	9.2%
JPM GBI-EM Global Diversified Index	11.4%	-1.4%	0.3%	-0.6%
Bloomberg High Yield Corporate Index	9.1%	3.1%	3.4%	4.4%
JPM EMBI Global Diversified Index	7.4%	-3.1%	0.6%	2.8%
Russell 2000 Value Index	6.0%	15.4%	3.5%	7.3%
MSCI Pacific ex JPN Index	5.9%	6.5%	2.7%	4.3%
Bloomberg High Yield Muni Index	2.9%	1.8%	2.8%	4.2%
MSCI EM Index	1.8%	2.3%	0.9%	3.0%
Bloomberg Gov't/Credit Index	-0.7%	-4.1%	1.0%	1.7%
Bloomberg Aggregate Index	-0.9%	-4.0%	0.8%	1.5%
Bloomberg Global Aggregate Index	-1.3%	-5.0%	-1.1%	0.2%
Bloomberg TIPS Index	-1.4%	-0.1%	2.5%	2.1%
FTSE NAREIT Composite Index	-4.3%	6.2%	4.4%	6.6%
NCREIF NFI-ODCE Equal Weight Net Index	-10.5%	7.6%	6.1%	8.1%
Bloomberg Commodity Price Index	-13.3%	16.0%	3.0%	-2.0%
S&P GSCI Index	-14.2%	25.1%	2.8%	-3.5%

S&P 500 Sectors (sorted by best to worst 1-year performance)

Sector	Benchmark Weight (%) as of 6/30/23	Benchmark Return (%) as of 6/30/23
Information Technology	28.3%	40.3%
Industrials	8.5%	25.2%
Consumer Discretionary	10.7%	24.7%
Energy	4.1%	18.8%
Communication Services	8.4%	17.3%
Materials	2.5%	15.1%
Financial	12.4%	9.5%
Consumer Staples	6.7%	6.6%
Health Care	13.4%	5.4%
Utilities	2.6%	-3.7%
Real Estate	2.5%	-4.1%

Note: Figures may not add up to exactly 100% due to rounding.

Summary

Consistent with Callan's most recent asset allocation study, we believe that the Fund's current asset allocation target is appropriate to meet its long-term return objectives. However, as part of its on-going monitoring process, NHRS Staff is evaluating opportunities to diversify away from equity beta risk in an effort to enhance risk-adjusted returns going forward. To this end, NHRS Staff is reevaluating the Fund's strategic asset allocation for the Board's review. The overall manager structure of the portfolio is stable and will be evaluated by Staff in the future. Overall, the Fund exhibits competitive performance relative to objectives over the long-term.

Appendix B

Gabriel Roeder Smith & Company Actuarial Opinion Letter

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September 29, 2023

Board of Trustees New Hampshire Retirement System 54 Regional Drive Concord, New Hampshire 03301

Re: Reasonableness of the Assumed Rate of Return

Dear Board Members:

The purpose of this letter is to provide our actuarial opinion regarding the reasonableness of the assumed rate of return for the New Hampshire Retirement System and to address any differences between the assumed rate of return and the expected rate of return under the System's investment policy statement as required under New Hampshire statute.

Background:

The requirement under New Hampshire statute is as follows:

RSA 100-A:15 VII.

- (c) An annual investment policy statement which shall incorporate the following:
 - (1) A clear statement of investment objectives including the adoption of a reasonable and sound expected rate of return the retirement system is attempting to earn. The expected rate of return utilized for the statement of investment objectives shall bear some reasonable relationship to the assumed rate of return set by the trustees for the biennial actuarial calculation. The retirement system's actuaries shall issue a written opinion in regard to the reasonableness of the assumed rate of return that shall address any difference between the assumed rate of return and the expected rate of return.

Board of Trustees September 29, 2023 Page 2

We understand the current asset allocation targets and ranges, adopted by the Board of Trustees in September 2012, are based on asset liability modeling and asset allocation recommendations from investment consultants. The Independent Investment Committee reviewed, in March of this year, the results of asset/liability and asset allocation studies and confirmed the asset allocation targets and ranges remain appropriate. Based on the 2023 capital market assumptions, Callan has indicated the following expectations for NHRS' current asset allocation:

- During the next 10-year period:
 - The expected rate of return is 7.25% per year;
 - The standard deviation is 13.05% per year; and
 - The implicit price inflation rate is 2.50% per year.
- During the next 30-year period:
 - The expected rate of return is 7.80% per year;
 - The standard deviation is 13.05% per year; and
 - The implicit price inflation rate is 2.50% per year.

In determining the assumed rate of return for the actuarial valuation, we abide by Actuarial Standard of Practice (ASOP) No. 27, Selection of Economic Assumptions for Measuring Pension Obligations, as adopted by the Actuarial Standards Board.

Under ASOP No. 27, we determine a reasonable assumption for each economic assumption. The reasonable assumption must be appropriate for the purpose of the measurement, reflect the actuary's professional judgement, take into account relevant historical and current demographic data, reflect the actuary's estimate of future experience or the estimates inherent in the market data and have no significant bias. For the investment return assumption, our analysis is based on forward-looking measures of expected investment return outcomes for the asset classes in the System's current investment policy.

For purposes of this analysis, we have analyzed the System's investment policy with the capital market assumptions from twelve nationally recognized investment firms and the 2023 GRS Capital Market Assumption Modeler (CMAM). The capital market assumptions in the 2023 CMAM are from the following investment firms (in alphabetical order): Aon Hewitt, Blackrock, BNY Mellon, Callan, Cambridge, JPMorgan, Meketa, Mercer, NEPC, RVK, Verus, and Wilshire. Eleven of these firms provide capital market expectations for a 10-year horizon, seven of them provide expectations for longer horizons of 20-30 years. Capital market expectations can vary significantly from year to year and often are contrarian. The financial markets at the end of 2022 were not particularly strong resulting in higher expectations in 2023 than in prior years. To adjust for year-to-year fluctuations, we also compare results to the three-year average of GRS CMAMs.



Board of Trustees September 29, 2023 Page 3

Our analysis is based on the GRS 2023 CMAM. The purpose of the CMAM is to assess the reasonability of the assumed rate of return for use in the actuarial valuations for the plan. In our professional judgment, the CMAM has the capability to provide results that are consistent with this purpose. We performed tests to ensure that the model reasonably represents that which is intended to be modeled. We are relying on the GRS actuaries and Internal Software, Training, and Processes Team who developed and maintain the model.

Actuarial Opinion:

For the June 30, 2023 valuation, the actuarial assumed rate of return is made up of a price inflation assumption of 2.00% and a real rate of return assumption of 4.75% for a total of 6.75% per year, net of investment expenses. This assumption was adopted by the Board to be effective in the June 30, 2019 valuation based on the 2015-2019 Experience Study.

Based on our independent analysis using NHRS' target asset allocation and the 2023 CMAM, the median rate of return is 6.60% over a 10-year horizon. As discussed, this year's expectations are higher than prior years. The three-year average median over a 10-year horizon is 5.67%.

Over the longer horizon of 20-30 years, the median rate of return is 6.78%. The 3-year average median over the longer horizon is 6.46%. The current NHRS net investment rate assumption of 6.75% is reasonable when compared to our 2023 CMAM medians of 6.60% - 6.78% and Callan's 7.25% - 7.80% current estimates for the expected rate of return.

It should be noted that due to the methods utilized by the GRS CMAM, differences in the underlying inflation assumption between the actuarial valuation (2.0%) and Callan's (2.50%) result in expected returns that may not be directly comparable. For example, if Callan's inflation assumption of 2.50% was used in our analysis, the expected returns discussed above based on the 2023 GRS CMAM would be approximately 0.50% higher.

Differences between the expected rate of return in the System's Investment Policy and the actuarial assumed rate of return are attributable in part to the different objectives of the measurement. Key differences are:

- The Investment Policy focuses on asset allocation decisions and establishes benchmarks for manager performance. The assumed rate of return is a long-term assumption for funding policy.
- The Investment Horizon of 10 years in the Investment Policy is based on a shorter time frame than used to determine the assumed rate of return which can be 20-30 years or longer. When focusing on the 20-30-year time horizon, the policy and the actuarial assumption produce similar expected returns.



Board of Trustees September 29, 2023 Page 4

Given the purpose and use of the different assumptions, different results are not uncommon. Under the current actuarial standard of practice, the current assumed rate of return for valuation purposes is reasonable and, therefore, meets the requirements of those standards.

Governmental Accounting Standards Board (GASB) Statement No. 67:

The statutory funding requirements of RSA 100-A:16 and the NHRS' Actuarial Funding Policy call for the NHRS pension unfunded actuarial accrued liability as of June 30, 2017 to be amortized through 2039. Each subsequent change in liability as calculated in odd-numbered years shall be separately amortized over a fixed period of no longer than 20 years. Based on this, the GASB discount rate will be equal to the assumed rate of investment return of 6.75%.

Jeffrey T. Tebeau, Heidi G. Barry, and Casey T. Ahlbrandt-Rains are independent of the plan sponsor, are Members of the American Academy of Actuaries (MAAA), and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

Respectfully submitted, Gabriel, Roeder, Smith & Company

Jeffrey T. Tebeau, FSA, EA, FCA, MAAA

Heidi G. Barry, ASA, FCA, MAAA

any T. Albrott Pars

Casey T. Ahlbrandt-Rains, ASA, MAAA

JTT/HGB/CTA:di



Appendix C

Investment Manual

NHRS Investment Philosophy

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The NHRS Investment Manual can be accessed by clicking here.





Changes to the NHRS Investment Policy

This document outlines changes to the NHRS Investment Policy since the founding of the Independent Investment Committee (IIC) under RSA 100-A:14-b, on January 1, 2009.

Assumed Rate of Return

The Board of Trustees (Board) approved the following based on recommendations of the IIC. All changes were effective starting July 1 of the fiscal year subsequent to approval.

May 10, 2011: 8.50% to 7.75%
May 10, 2016: 7.75% to 7.25%
June 9, 2020: 7.25% to 6.75%

Asset Allocation Targets and Ranges

The Board adopted the following changes based on recommendations of the IIC. All changes were effective at the start of the month subsequent to approval.

- July 13, 2010:
 - O Domestic Equity allocation range changed from 26 43% to 20 50%.
 - Non-U.S. Equity target allocation increased from 15% to 20% and the 5% target allocation to Global Equity was removed. The Non-U.S. Equity allocation range changed from 11 19% to 15 25%.
 - o Fixed Income allocation range changed from 26 34% to 25 35%.
 - Real Estate range changed from 5 15% to 0 15%.
- September 11, 2012:
 - Fixed income target allocation was reduced from 30% to 25%. The allocation range changed from 25 35% to 20 30%.
 - O Alternative Investments target allocation was increased from 10% to 15%. The allocation range changed from 0 15% to 0 20%.
- June 9, 2015:
 - Real Estate allocation range changed from 0 15% to 5 20%.
 - Alternative Investments allocation range changed from 0 20% to 5 25%.
- May 14, 2019:
 - o U.S. Equity allocation range changed from 20 50% to 20 40%.

Benchmark Changes

The IIC approved the following changes which were subsequently reviewed by the Board. All changes were effective starting July 1 of the fiscal year subsequent to approval.

- April 24, 2015:
 - o The U.S. Equity benchmark changed from the Russell 3000 Index to the S&P 500 Index.
 - The Real Estate benchmark changed from the NCREIF Property Index + 50 basis points to the NCREIF NFI-ODCE Index.
 - The Alternative Investments benchmark changed from the S&P 500 Index + 5% or Consumer Price Index + 5% to the following:
 - 33.3% Private Equity: S&P 500 Index + 3%.
 - 33.3% Private Debt: S&P/LSTA U.S. Leveraged Loan 100 Index.
 - 33.3% Opportunistic:1-month LIBID + 5%.
- May 14, 2019:
 - O The Opportunistic benchmark was eliminated and the Alternative Investments benchmark was changed to the following:
 - 66.7% Private Equity (S&P 500 Index + 3%).
 - 33.3% Private Debt (S&P LSTA Leveraged Loan 100 Index).
- June 18, 2021:
 - The U.S. Equity benchmark changed from the S&P 500 Index to the Russell 3000 Index.
- June 14, 2022:
 - \circ The Private Equity benchmark was updated from the S&P 500 + 3% to the Russell 3000 + 2%.
 - The Private Debt benchmark was updated from the S&P/LSTA U.S. Leveraged Loan 100 Index to a blend of (50% S&P/LSTA 100 Index and 50% Bloomberg High Yield Index) + 1%.

NHRS Investment Philosophy:

Adopted by the Investment Committee at the July 17, 2009 meeting

Purpose: The New Hampshire Retirement System ("NHRS" or "System") Investment Philosophy sets forth guiding principles for the management of the investment program.

Description of the Fund: The NHRS is a defined-benefit pension plan. Contributions to the plan are made by employees and employers participating in the System. These contributions are invested to support the payment of plan benefits and to pay reasonable expenses of administering the System.

The System's assets are invested pursuant to the Constitution of the State of New Hampshire and all applicable statutes and are managed in accordance with the NHRS Statement of Investment Policy for the exclusive purpose of providing plan benefits to members and beneficiaries. NHRS plan fiduciaries are beholden to a duty of loyalty and a standard of care as described in RSA 100-A:15. The Board of Trustees ("Board") and the Investment Committee ("Committee") seek the advice and assistance of internal and external professionals and shall exercise conscious discretion when making investment decisions. The Committee members recognize their fiduciary duty to invest the System's funds prudently and in continued recognition of the fundamental long-term nature of the System.

The NHRS investment program has a distinctive profile. The objective of supporting plan benefits is one primary differentiator from the goals of other types of institutional investors, for example, endowments or foundations. The NHRS also differs from other public pension plans because each plan has its own distinctive characteristics such as benefit structures and legislative mandates. The System has a high proportion of retirees relative to actively-contributing members. The demographics of a mature plan require more liquidity from the investment program because contributions into the plan do not fully offset the benefits paid. Additionally, the size of the NHRS investment program provides the System with the ability to invest in certain opportunities but may not provide the scale necessary to gain access to other opportunities. All of these factors guide the design of the NHRS investment program.

Investment Objectives: The NHRS pursues an investment strategy designed to support the long-term funding obligations of the plan. The Board adopts an assumed rate of return and sets asset-allocation policy. The Committee manages the components of the investment program with the goal of achieving the plan's objectives with a comprehensive understanding of risk. This involves designing a program that balances expected return and risk over long time periods through a range of market conditions. For the reasons previously mentioned, peer performance or universe comparisons are not the most appropriate measurements of the effectiveness of the NHRS investment program. Performance comparisons within the context of the stated investment objectives will promote alignment with the System's mission.

The primary objective of the Committee is to manage the investment program to support the payment of plan benefits over the long-term. A secondary objective is to exceed the policy benchmark on a net-of-fees basis over a three to five-year period.

NHRS Investment Philosophy:

Market View and Context: The Committee believes that financial markets are largely, but not entirely, efficient. This means that there is a central tendency to the markets and that in some developed and accessible segments it is difficult to gain an advantage relative to other investors. However, there are areas of the market in which inefficiencies exist due to more limited access, information, coverage, or other factors; and investors can benefit from participation in these areas. Investment opportunities emerge and evolve over time and the NHRS Committee, staff, and consultants will remain vigilant concerning market developments in order to identify these opportunities and to build a sustainable advantage.

Diversification: The Board and the Committee recognize that it is necessary to maintain broad diversification both among and within various asset classes. The asset allocation of the investment program will be reviewed monthly by staff relative to the asset-class policy targets and ranges established by the Board in the Statement of Investment Policy. Staff shall strive to maintain the System's asset allocation within policy ranges. When rebalancing assets already within ranges, staff will give due consideration to market conditions, costs and risks of implementation, potential impacts on manager-level performance, and other relevant factors.

Portfolio Structure and Implementation: The Committee may utilize a combination of passive and active management strategies. The goal of passive management is to gain diversified exposure to the desired asset class while incurring minimal expense and seeking performance returns comparable to the asset class benchmark. The goal of active management is to exceed the performance of the appropriate benchmark on a net-of-fees basis, measured across market cycles, at a commensurate level of risk. The Committee will structure the program and implement its philosophy through the use of external investment management firms.

Performance Measurement: The ultimate measurement of the pension plan is how well it achieves its funding objectives and supports plan benefits. This is a shared responsibility between the Board who set the assumed rate of return and also determines the contribution rates and the Committee who seek to augment those contributions with investment returns over the long term. Achievement of the plan objectives in absolute terms is contingent on sound return assumptions and the execution of a clear investment process which recognizes that market conditions will vary over time.

Relative investment performance can be an important measurement tool. The Board adopts specific benchmarks which represent the standards of measurement used for the various asset classes utilized by the NHRS. Individual managers are also measured relative to benchmarks. As a model for performance measurement of the investment program, the NHRS uses a planlevel policy benchmark comprised of index returns (or proxy asset returns in the case of illiquid assets) weighted to reflect the asset-allocation policy targets set by the Board. This provides insight into the ways in which the actual portfolio performs relative to a passively-managed representation of plan policy during various market conditions.

Since investment returns will vary under different economic conditions and market cycles, an optimal period for effectively measuring performance would span three to five years or more. NHRS returns are expected to exceed the relevant benchmark on a net-of-fees basis over time.

NHRS Investment Philosophy:

Risk: Risk must be viewed within the context of the total portfolio. Since most risks are not readily quantifiable, defining the appropriate level of risk and creating a portfolio that reflects a reasonable balance between potential risk and return is a matter of judgment. Risk comes in a variety of forms including the risk of the unknown, liquidity risk, valuation risk, regulatory risk, geopolitical risk, and volatility risk as well as excessive diversification, fraud, inconsistency of investment discipline, and the risk of the destruction of capital. The Committee takes a broad view of risk in its oversight and endeavors to mitigate risk through rebalancing, monitoring managers, and conducting strategic reviews of the portfolio.

LEGISLATIVE COMMITTEE

Oral Presentation Only

2024 LSR titles

As of 11/3/23

2024-2116-HB: Relative to payment by the state of a portion of retirement system contributions of political subdivision employers. Sponsors: (Prime) Michael Edgar

2024-2227-HB: Relative to group II membership in the retirement system for certain firefighter educators. Sponsors: (Prime) Douglas Trottier

2024-2047-HB: Relative to prohibiting environmental, social, and governance standards in the selection of government investments. Sponsors: (Prime) Mike Belcher

2024-2262-HB: Relative to eligibility for retirement benefits for employees injured on the job. Sponsors: (Prime) Hope Damon

2024-2376-HB: Relative to part-time employment of a retirement system retiree. Sponsors: (Prime) Mark Proulx

2024-2412-HB: Relative to agents for investment services in the New Hampshire retirement system. Sponsors: (Prime) Stephen Pearson

2024-2469-HB: Relative to the definition of part-time teachers.

Sponsors: (Prime) Glenn Cordelli

2024-2565-HB: Relative to retirement system allowances for former spouses of retirees. Sponsors: (Prime) Barbara Comtois

2024-2637-HB: Relative to mandatory overtime and the calculation of base rate of compensation. Sponsors: (Prime) Carol McGuire

2024-2668-HB: Relative to average final compensation for certain group II members. Sponsors: (Prime) Kevin Pratt

2024-2729-HB: Relative to determination of earnable compensation for certain group II retirement system members. Sponsors: (Prime) Kevin Pratt

2024-3092-SB: Relative to the vesting period for members of the state retirement system. Sponsors: (Prime) Donna Soucy

2024-3132-SB: Relative to the definition of "teacher."

Sponsors: (Prime) Shannon Chandley

WITHDRAWN

2024-2619-HB: Relative to group II retirement system membership for emergency medical services personnel. Sponsors: (Prime) Anita Burroughs

BENEFITS COMMITTEE

PERSONNEL PERFORMANCE & COMPENSATION COMMITTEE

Oral Presentation Only

GRS ACTUARIAL PRESENTATION



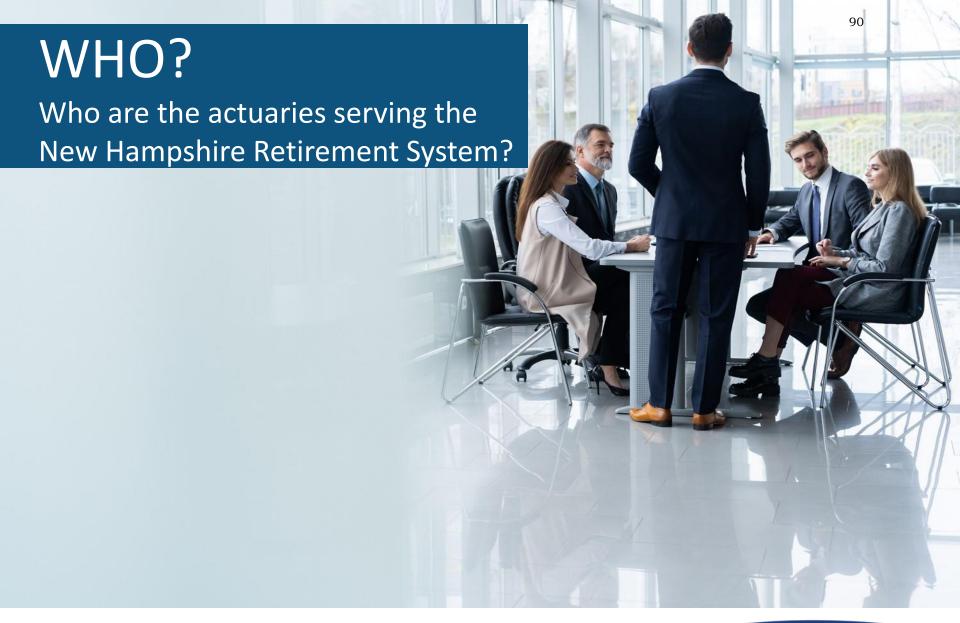
New Hampshire Retirement System FY 2023 Actuarial Overview

November 14, 2023 Heidi Barry, ASA, FCA, MAAA Jeffrey Tebeau, FSA, EA, FCA, MAAA

Today's Topics

- Who?
 - Who are the actuaries serving NHRS?
- What?
 - What will the actuaries provide to NHRS trustees?
- How?
 - How do the actuaries do it? (Actuarial 101)
 - ASOP 4 Revisions
- When?
 - When can trustees expect employer contribution rates and other information?







GRS Actuaries Serving NHRS



Heidi Barry has served NHRS for 14 years



 Jeffrey Tebeau has been with GRS for more than 15 years and has recently joined the NHRS actuarial team



 Casey Ahlbrandt-Rains has served NHRS for more than 5 years

WHAT?

What will the actuaries provide to NHRS trustees?





Actuarial Reports Prepared for the Board

- Presented at the December 2023 Board meeting
 - Annual Comprehensive Financial Report
 - Actuarial information necessary for plan financials
 - GASB Statement No. 67 pension disclosures
 - GASB Statement No. 74 medical subsidy disclosures
 - Other information regarding plan funded status
- To be presented in the Spring/Summer of 2024
 - Experience Study
 - Covering July 1, 2019 through June 30, 2023
 - Funding Report
 - Issued during odd valuation years
 - Employer contribution requirements for the 2026-27 biennium
 - Funding information



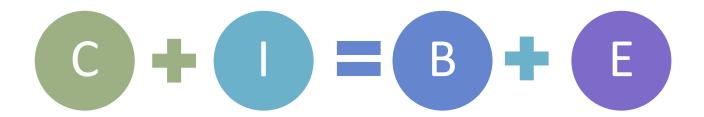


HOW?

How do the actuaries do it? (Actuarial 101)



Basic Retirement Funding Equation



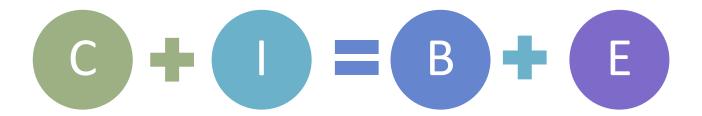
Where:

- C is Contribution Income
- I is Investment Return
- B is Benefits Paid
- E is Expenses

"Money In = Money Out"



Basic Retirement Funding Equation



- B depends on
 - Plan Provisions
 - Experience
- C depends on

Short Term: Actuarial Assumptions

Actuarial Cost Method

Long Term: I, B, E



The Concept of Present Value

- Actuarial calculations almost always begin with the calculation of a present value
- The present value of an amount of money payable in the future is the amount of money that, if we had it today, would accumulate to the amount that will be paid in the future



The Concept of Present Value

- Present value calculations are part of:
 - The Actuarial Valuation
 - Retirement Benefit Calculations
 - Cost Estimates of Plan Changes
 - Other



Funding a Member's \$10,000 Annual Pension

Allocated to Past and Future Service

- Actuarial Accrued Liability: \$17,000
- Present Value of Future Normal Costs: \$8,000



Present Value of Benefits at

Retirement: \$90,000

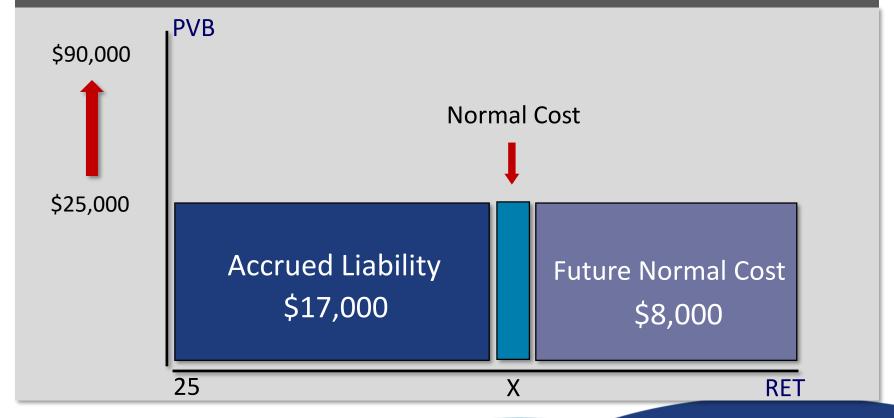


Present Value of Benefits at Valuation

Date: \$25,000

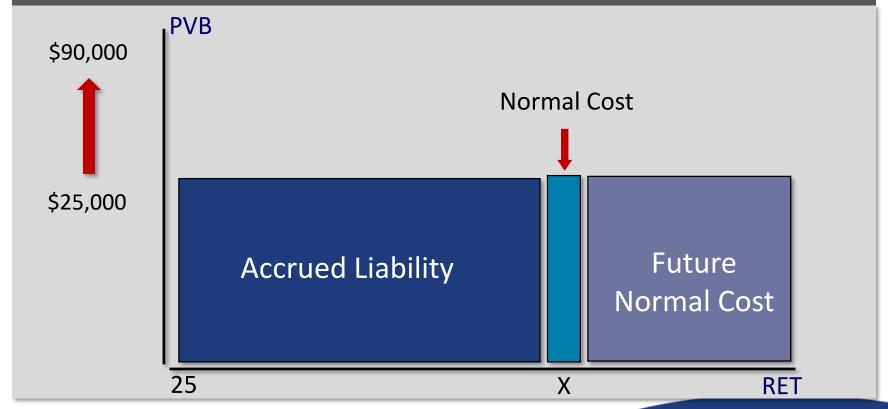


As the member ages, the boxes grow upward until the PVB becomes \$90,000. At the same time, the normal cost layer moves to the right. At retirement, there is one big square box; the accrued liability and the PVB are both \$90,000, and the Future Normal Cost is \$0.



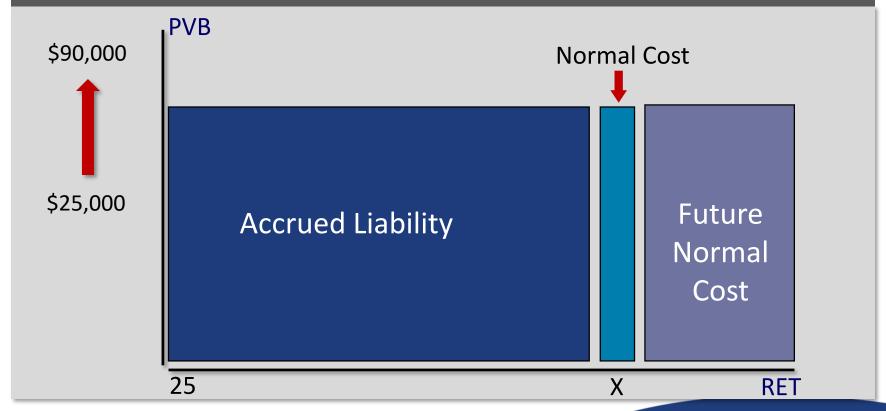


As the member ages, the boxes grow Northward until the PVB becomes \$90,000. At the same time, the normal cost layer moves to the right. At retirement, there is one big square box; the accrued liability and the PVB are both \$90,000, and the Future Normal Cost is \$0.



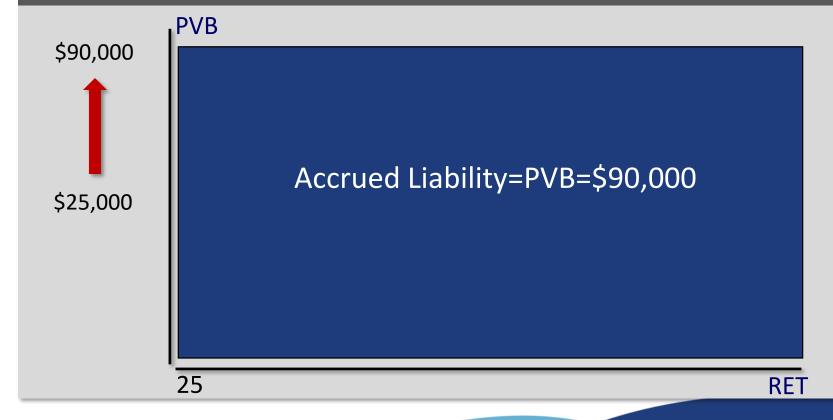


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Reaching the Funding Target



- Actuarial Accrued Liability is the funding target
- To the extent that assets are less than the Actuarial Accrued Liability, there is an Unfunded Actuarial Accrued Liability



Overview of Methodology

- Employer contribution rates are determined in accordance with statute and the NHRS Actuarial Funding Policy
- Components of pension funding
 - Entry Age Normal Cost Method
 - Asset Smoothing Method
 - Unfunded Actuarial Accrued Liability
 - Amortization Method
- Contributions for the Medical Subsidy are based on solvency requirements



Entry Age Normal Cost Method

- The Statutory Funding Method is Entry Age Normal (RSA 100-A:16)
- Entry Age Normal is designed to determine level percent-of-payroll contributions to fund pension benefits over members' careers
- This method determines the Actuarial Accrued Liability and Normal Cost



Entry Age Normal Cost Method

- Features of Entry Age Normal
 - The Normal Cost for an individual is the annual cost of benefits determined as a level percent of payroll
 - The Normal Cost rate varies for each individual based on:
 - Demographics (e.g., age, service, pay, gender)
 - Plan Provisions (e.g., Group I, Group II, tier, etc.)
 - Actuarial Assumptions (e.g., pay growth, rates of turnover, disability, retirement and mortality)



Entry Age Normal Cost Method

Normal Cost for NHRS

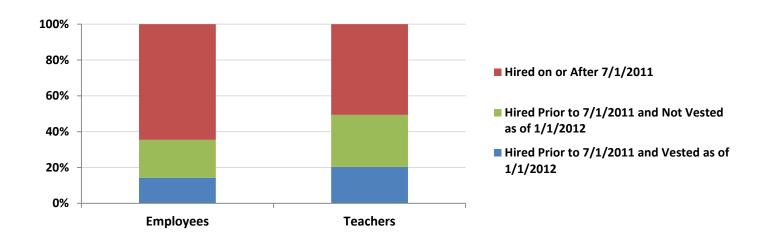
- Total Normal Cost is determined as a percent of payroll for four member classifications
- Normal Cost for individuals hired on or after
 July 1, 2011 is lower than for those hired before
 that date due to different benefit provisions
- Total Normal Cost will decline as a percent of payroll over time as new hires replace outgoing members



Proportion of Active Population by Benefit Structure as of June 30, 2023 – Group I

Hired Prior to 7/1/2011 and Vested as of 1/1/2012 Hired Prior to 7/1/2011 and Not Vested as of 1/1/2012 Hired on or After 7/1/2011 Total

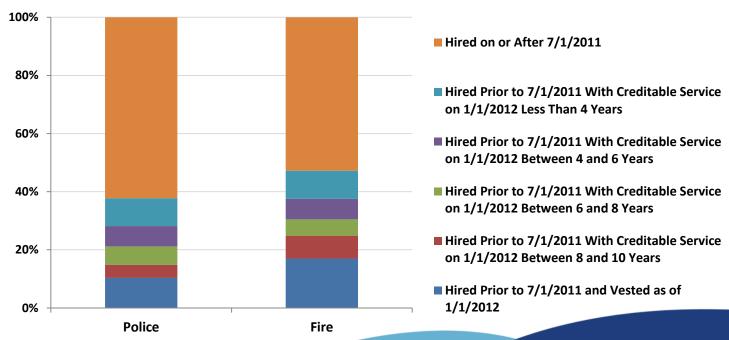
Employees	Teachers
3,525	3,694
5,220	5,265
15,895	9,182
24,640	18,141





Proportion of Active Population by Benefit Structure as of June 30, 2023 – Group II

	Police	Fire
Hired Prior to 7/1/2011 and Vested as of 1/1/2012	417	300
Hired Prior to 7/1/2011 With Creditable Service on 1/1/2012 Between 8 and 10 Years	181	139
Hired Prior to 7/1/2011 With Creditable Service on 1/1/2012 Between 6 and 8 Years	259	99
Hired Prior to 7/1/2011 With Creditable Service on 1/1/2012 Between 4 and 6 Years	281	125
Hired Prior to 7/1/2011 With Creditable Service on 1/1/2012 Less Than 4 Years	387	171
Hired on or After 7/1/2011	2,517	932
Total	4,042	1,766





Entry Age Normal Cost Method

- The Actuarial Accrued Liability (AAL) under Entry Age Normal is:
 - The accumulated amount of Normal Costs for past service for active members
 - The present value of benefits for retirees,
 beneficiaries, and terminated vested members
 - The theoretical amount of assets needed as of the valuation date to provide past service benefits under current actuarial assumptions



Asset Smoothing Method

- The Market Value of Assets can be volatile
- NHRS' Asset Smoothing Method
 - Objective is to smooth out volatility
 - Helps to identify trends in funded status
 - Helps to reduce contribution rate volatility
 - Smoothed assets are unbiased with respect to the market value
 - May be higher or lower in any given year
 - Expected to converge over time
 - Gains and losses are smoothed over five years
 - Restricted to a 20% "corridor" around market value



- The legislature adopted the use of a layered amortization approach
- The first layer is the amortization of the Initial UAAL (as of June 30, 2017) scheduled to be paid by 2039
- New layers as established in biennial valuations will be amortized over separate 20-year periods



Amortization Method (Initial UAAL)

- The outstanding UAAL balance as of June 30, 2017 is referred to hereafter as the "Initial UAAL"
- The remaining amortization period for the Initial UAAL is 14 years for FY 2026 and 13 years for FY 2027
- This will ensure that the Initial UAAL will be 100% funded by June 30, 2039
- The UAAL amortization rates will decrease sharply in FY 2040, but may or may not be zero



- The contribution rate for the UAAL
 - Is the level percent-of-payroll contribution necessary to pay off the UAAL in the years remaining
 - Assumes all actuarial assumptions are met
 - Actuarial value of assets earns 6.75% per year
 - Payroll grows at 2.75% per year (2.25% for Teachers)
 - All other actuarial assumptions



- With long amortization periods (such as 20 years) and a level percent-of-payroll amortization
 - The nominal amount of the UAAL may increase for a period of time
 - On a real basis, the UAAL is always expected to decrease
 - The funded ratio is expected to increase
 - Shorter periods expect declining nominal UAAL
- Since the Initial UAAL layer has 16 years remaining in FY 2024, it is projected to decrease each year



- Advantages to layered amortization
 - Separately tracks sources of the UAAL
 - May spread costs more evenly over time
 - Avoids some of the contribution rate volatility which may occur towards the end of one closed period
- Disadvantages to layered amortization
 - Can be complicated
 - Extended periods of gains or losses may create unexpected outcomes



Medical Subsidy Funding

- The medical subsidy contribution rates are:
 - Determined separately for the four plans
 - Expected to pay projected benefits promised
 - Expected to remain level as a percentage of payroll (or decline over time in line with benefits)
 - Projected to leave a margin of remaining end-of-year assets equal to at least 20% (50% for Teachers) of the following year's expected benefit payments for all future years
- The margins vary by plan and are projected to change each year





Actuarial Standard of Practice (ASOP) 4 Revisions



Actuarial Standards of Practice "ASOP's"

- Actuaries are required to follow ASOP's in performing their work
- ASOP's are revised from time to time to reflect emerging actuarial practice
- ASOP 4 is entitled "Measuring Pension Obligations and Determining Pension Plan Costs or Contributions"
- Recent revisions to ASOP 4 require some new material in our valuation reports



ASOP No. 4 Revisions

- Notable Changes
 - Low-Default-Risk Obligation Measure (LDROM)
 - Reasonable Actuarially Determined Contribution (ADC)
- Other changes will be less noticeable
 - More disclosures about assumptions
 - Gain/Loss analysis



LOW-DEFAULT-RISK OBLIGATION MEASURE

ASOP No. 4





Funding Objectives

- Level Funding Contributions to the plan should be approximately level as a % of payroll from generation to generation. This objective heavily influences the development of the funding policy and the actuarial assumptions.
- Benefit Security Everyone wants it, but how do we know if we can afford to provide it?



Low-Default-Risk Obligation Measure (LDROM)

- A new measure that actuaries must disclose in funding valuations
- The LDROM provides the approximate cost of securing benefits by investing in a low-defaultrisk fixed income portfolio whose cash flows are reasonably consistent with the pattern of benefits expected to be paid in the future
- It is based on the current structure of interest rates, not on a single discount rate that is assumed to be applicable to all future times



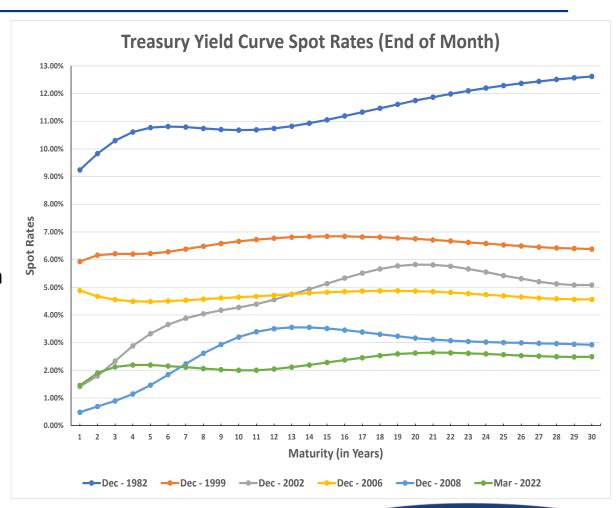
LDROM vs AAL

- If the assets are exactly equal to the AAL, accrued benefits are only secure if future experience (in particular, investment return) is in line with assumptions
 - The security of accrued benefits depends on future events
- If the assets are exactly equal to the LDROM, then those assets are approximately sufficient to be invested in a manner that provides full benefit security with very little, if any, future risk to those benefits
 - If the assets were so invested, the security of accrued benefits would not depend on future events



LDROM – Market Interest Rates

- The LDROM is very dependent upon market interest rates at the time of the LDROM measurement
- The lower the market interest rates, the higher the LDROM, and vice versa
 - Interest rates have been unusually low for an extended period
 - But they have been rising recently due to Federal Reserve action
- The graph shows the Treasury Yield Curve Spot Rates at various dates





LDROM – Sample Plan (not NHRS)

- The table below shows the Actuarial Accrued Liability (AAL) and the LDROM as of June 30, 2022 for a sample plan
 - Valuation discount rate is 6.50%; actuarial cost method is entry age normal; payroll is \$357M
 - LDROM is presented based upon interest rates as of two different dates: March 31, 2022 and December 31, 1999
 - LDROM results using December 31, 1999 Treasury rates are for illustration purposes only to show the sensitivity of the LDROM to various interest rates

as of June 30, 2022

			LDROM				
	ValuationAAL		March 2022 Treasury Rates		December 1999 Treasury Rates		
Type of Member							
Retirees	\$	2,952,150,155	\$	4,507,460,547	\$	2,931,348,653	
Deferreds		123,770,692		289,978,278		123,086,543	
Actives		1,334,764,200		2,621,004,099		1,304,891,493	
Totals	\$	4,410,685,047	\$	7,418,442,924	\$	4,359,326,689	



Risk of Misinterpretation

In the early debates about this measure some stakeholders were concerned that the LDROM would be considered the "right" liability and that it would be used to the detriment of plans.

- The Actuarial Standards Board anticipated this risk in the ASOP 4 Transmittal Memo:
 - "The calculation and disclosure of this additional measure [the LDROM] is not intended to suggest that this is the "right" liability measure for a pension plan."



What is the "Right" Liability?

There is no single number that tells you everything you need to know about a pension plan – there is no "right" liability

- The actuarial accrued liability provides information about funding progress in accordance with the funding policy
- The LDROM provides information related to the cost of benefit security
- The GASB TPL provides information for accounting



Summary of LDROM

- The LDROM is not a funding measure and should not be used as a measure of the financial health of the System
- The LDROM can be viewed as an illustration of expected taxpayer savings
 - The difference between the AAL and the LDROM represents the value-add associated with having a professionally managed, diversified portfolio







Looking Ahead

- Finalize ACFR/GASB Statement Nos. 67 & 74 Reports
 - December 2023
- Complete GASB Statement Nos. 68 and 75 Reports
 - Draft report January 2024
 - Final report February 2024
- Complete 4-year experience study covering the period from July 1, 2019 through June 30, 2023
- Certify Employer Contribution Rates for FY 2026/2027 Biennium





Questions



Disclaimers

- This presentation is one of many documents comprising the June 30, 2023 actuarial valuation of the New Hampshire Retirement System. This presentation should not be relied on for any purpose other than the purpose described in the valuation report.
- Future actuarial measurements may differ significantly from the current measurements presented in this presentation 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; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law.



Disclaimers

- This presentation shall not be construed to provide tax advice, legal advice or investment advice.
- Heidi Barry, Jeffrey Tebeau and Casey Ahlbrandt-Rains are independent of the plan sponsor, are Members of the American Academy of Actuaries, and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.



GROOM LAW GROUP FIDUCIARY TRAINING PRESENTATION

New Hampshire Retirement System: Fiduciary Training

David N. Levine
Principal
November 2023

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Today's Agenda

The Basics

NHRS' Fiduciary Framework

Current Events

The Basics

- "Fiduciary duties" are based in New Hampshire law
- Highest standard of conduct known to law
- A fiduciary is held to a standard stricter than the morals of the marketplace
- "It is not enough for [a fiduciary] merely to avoid fraud, or to protect the interests of his beneficiaries adequately within the technical letter of the law." <u>Appeal of Corp. of Portsmouth Sav. Bank</u>, 129 N.H. 183 (1987).
- Preparation and engagement is key

Core Legal Requirements

- New Hampshire Law: RSA 100-A:15, I-a, (a)
 - Solely in the interest of the participants and beneficiaries
 - For the exclusive purpose of providing benefits
 - With the care, skill, and caution under the circumstances then prevailing which a prudent person would use
- Internal Revenue Code
 - Section 401(a)(2): "Exclusive Benefit Rule" For exclusive benefit of plan participants and beneficiaries and payment of plan expenses
 - Section 503(b): "Prohibited Transactions" Must not engage in in a "prohibited transaction" that would result in a substantial diversion of trust assets to State of New Hampshire and/or contributing employers

- New Hampshire Constitution, Part I, Article 36-a:
 - "All of the assets and proceeds, and income therefrom, of the New Hampshire retirement system...shall be held, invested or disbursed as in trust **for the exclusive purpose** of providing for such benefits and shall not be encumbered for, or diverted to, any other purposes."
- The impact is that the Constitutional provision places a limit on the authority of the Legislature from diverting Plan assets to fund other state budgetary needs.

- Duty of Prudence: RSA 100-A:15, I-a, (a)(3)
 - Trustee and Independent Investment Committee members (or other fiduciaries) must act with "the care, skill, and caution under the circumstances then prevailing which a prudent person acting in a like capacity and familiar with those matters would use in the conduct of an activity of like character and purpose"
 - Substantive prudence refers to the merits of the decision
 - Procedural prudence refers to the course of action by which a prudent fiduciary makes administrative decisions ("due diligence")
 - A prudent fiduciary with experience dealing with similar enterprises
- Examples

- Duty of Loyalty: RSA 100-A:15, I-c
 - Trustees do not "represent" the positions/interests of any particular outside party, whether an appointing party or the constituent group party that elected her or him
 - The Board Members have a duty to all current participants (members, retirees and beneficiaries) of the Plan
 - This means that the Board cannot favor active members over retirees or vice-versa and the Board has an obligation to act to protect continuation of the Fund so that all participants will receive the benefits in which they are entitled
- Examples

- Duties: RSA 100-A:15; II and VII
 - Board retains authority to approve investment policy, including asset allocation, and to hire consultants
 - Example
- Prudence and loyalty standards apply to decisions rendered under this authority
- Prudence and loyalty are a common core

- Power to Delegate: RSA 100-A:15, II
 - The Board of Trustees has "the full power and authority to delegate to any agent providing services to the New Hampshire retirement system, within or without the state, the power and discretion to make any necessary decisions and to take any action necessary to effect decisions with the same legal effect as if performed by the board of trustees"
 - Unlike ERISA, however, New Hampshire law does not explicitly relieve trustees from liability for actions of delegatees, even though vendors may be deemed to be fiduciaries under RSA 100-A:15, I-b.

- Non-Investment Duties: RSA 100-A:15, I-a, (a)(4) and (a)(5)
 - Trustees and Independent Investment Committee members (or other fiduciaries) must carry out their duties impartially, taking into account any differing interests of members and beneficiaries
 - Trustees and Independent Investment Committee members (or other fiduciaries) must allow the system only to incur costs that are appropriate and reasonable
 - Should have a monitoring policy for all service contracts and conduct audits of system transactions, including expenses paid by NHRS
 - Should develop appropriate benchmarks to measure each contractor's performance
 - Examples

- Non-Investment Duties: RSA 100-A:15, I-a, (a)(6)
 - Trustees and Independent Investment Committee members (or other fiduciaries) are required to follow the terms of the plan and applicable law
 - Only paying benefits allowed by the Plan and making reasonable efforts to collect overpayments
 - May require taking action to collect contributions owed to the system
 - Under New Hampshire Constitution (Part I, Article 36-a) Trustees may also be required to challenge changes in funding that harm the actuarial soundness of the system

- Fiduciary Liability: Immunity, Indemnification and Insurance
 - Absent a waiver of sovereign immunity, NHRS "is immune from liability for torts committed by its officers and employees" and "immune from suit in [the State's] courts." *Claremont School District v. Governor*, 144 N.H. 590, 591 (1999)
 - However, Trustees may be sued for actions arising out of their performance of duties on behalf of NHRS members and beneficiaries
 - The doctrine of absolute quasi-judicial immunity protects trustees, administrative hearings examiners and government employers from claims for monetary damages grounded on their adjudicatory activities. *Shargal v. N.H. Bd. of Psychologists*, 135 N.H. 242, 245 (1992)

- Fiduciary Liability: I-I-I (Continued)
 - Statutory indemnification of Trustees and staff is available under RSA 100-A:15, I and IX ("powers, privileges and immunities of a corporation")
 - Board's indemnification policy protects Board members, Independent Investment Committee, and employees who (1) act in good faith, (2) reasonably believe their conduct was in the best interest of NHRS members and beneficiaries; and are not found guilty of criminal violations
 - Trustees and staff members are covered by a fiduciary insurance policy which insures against claims of fiduciary breaches and the associated attorney fees and costs

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- Conflicts of Interest: NHRS Ethics Policy
 - The NHRS Code of Ethics recognizes that every trustee "occupies a special position of trust and confidence so as to avoid at all times any conflict of interest or fiduciary breach of trust against the system, its members and beneficiaries." Part 401, Ret. 401.01
 - "Conflict of interest" is defined as "an interest that could influence a person to decide a matter, or provide a recommendation, for any reason other than the best interest of the system, its members and beneficiaries, including conferring a private benefit to any party or entity other than the members and beneficiaries of the system." Part 401, Ret. 401.02
 - Recusal available to avoid conflicts

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Current Events

- Pension Funding "Shortfalls"
 - In times of economic downturn, boards of city, county, and state pension funds face administrative and legislative efforts to address public pension alleged "shortfalls" through control and funding cuts
 - The New Hampshire Supreme Court upheld legislation approving increased member contributions and other pension reforms against constitutional attack. *Professional Fire Fighters of New Hampshire v. State of New Hampshire* (2014) and *AFT v. New Hampshire* (2015)
 - In an earlier decision, the New Hampshire Retirement System v. Sununu (1985) the Supreme Court held that the System was independent of the Executive Branch and was not required to submit personal service contracts to the state for its review and approval

Current Events

- Gratuities and Gifts
 - Trustees are often offered gratuities in the form of meals, travel, and entertainment and the consequences of accepting gratuities may be serious
 - Ret. 401.04(d) specifically restricts "gifts, entertainment or other gratuities from current or potential outside providers, or their agents" to a yearly aggregate total of \$250.
 - Travel Policy specifically states, "Third party payments by service providers for travel and lodging are not allowed"

Current Events

- In the ERISA world, there is a focus on:
 - Environmental, social and governance investing with ERISA diverging from some parts of the public plan world
 - Proxy voting guidance with a similar divergence as in ESG
 - Privacy and cybersecurity
 - Diversification of investments and investment classes beyond traditional investment options
 - Litigation over actuarial factors used to calculate benefit forms and early retirement distributions

Contact Information

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To:	Board of Trustees
From:	Jan Goodwin, Executive Director
Date:	October 31, 2023
Re:	Executive Director Operating Report
Item:	Action: Discussion: Informational:

Significant Developments and Priority Issues

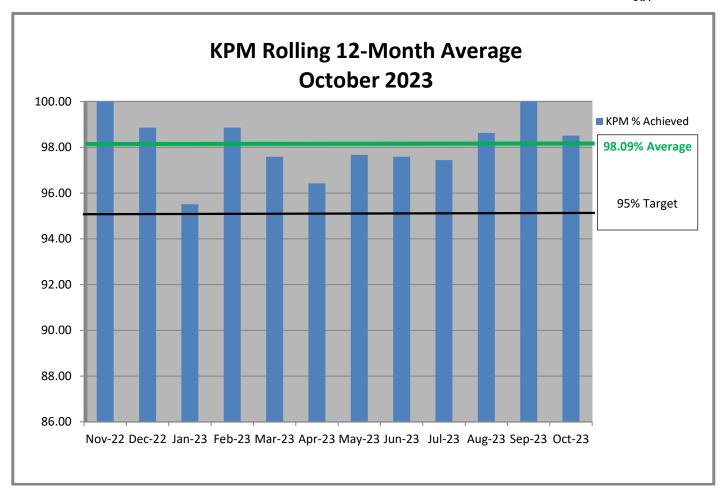
• COVID-19 Update: Maintaining status quo.

Current Month Highlights

- This month's KPM score was 98.51%. See 12-month rolling average chart, attached.
- PGV3 is 87% complete. We are about to begin our second and final month of parallel processing. There has been a significant amount of outreach to employers to assist them in setting up new accounts in our Data Reporting System and to follow-up with employers who have not yet submitted their October reports. LRS was on site for three weeks this month to assist with troubleshooting.
- Plante Moran was on site October 20-November 3 for the annual audit of our financials.
- All three of the ED's KPMs were achieved this month.

Upcoming Plans & Projects

- The NHRS legislative team has developed a plan to implement enacted legislation from the 2023 session that conforms with the PGV3 rollout and related activities.
- Staff has prepared and disseminated messaging materials to retirees, active members, and employers to let them know that some services will take longer than usual to complete due to staff priorities during parallel. There will be no delay in processing retirement applications or meeting any statutory deadlines. Staff is developing additional training materials for employers to assist them with their monthly filing requirements. We will continue the outreach and begin the training for the insurance carriers who provide health insurance to many of our retirees.
- We will continue to provide information on the actuarial impact of proposals being considered by the Retirement Benefits Commission.
- The E-Team is preparing a calendar of Board Action items for 2024, given the new bi-monthly meeting schedule.



PGV3 Status as of November 2, 2023

Project Schedule and Completion						
Task	Scheduled Start Date	Scheduled Finish Date	Baseline Finish Date	Actual Finish Date	Percent Complete	
NHRS Version 3	1/2/2019	12/2/2024	12/27/2023		87%	
Phase 1 - Project Initiating	1/2/2019	1/25/2019	1/25/2019	1/25/2019	100%	
Phase 2 - Project Planning	1/2/2019	2/14/2019	2/14/2019	2/14/2019	100%	
Phase 3 - Project Monitoring and Controlling	1/2/2019	1/22/2024	12/22/2022		92%	
Phase 4 - Project Executing	1/2/2019	1/29/2024	12/22/2022		95%	
Infrastructure	2/14/2019	8/10/2023	9/9/2022		100%	
Data Conversion	5/22/2019	11/30/2023	12/22/2022		99%	
Requirements Analysis	1/9/2019	7/12/2019	7/12/2019	7/12/2019	100%	
D1 - Member Basics and Service Purchases	6/6/2019	12/20/2019	12/11/2019	12/20/2019	100%	
D2 - Employer Reporting	10/31/2019	11/10/2020	9/11/2020	11/10/2020	100%	
D3 - Benefit Calculations	2/26/2020	9/28/2022	4/23/2021	9/28/2022	100%	
D4 - Benefit Maintenance and Insurance	7/9/2021	7/25/2022	8/27/2021	7/25/2022	100%	
D5 - Benefit Payroll	2/11/2022	7/26/2023	12/17/2021	7/26/2023	100%	
D6 - Year End Processes, Auditing and Security	6/13/2022	5/11/2023	5/11/2022	5/11/2023	100%	
D7 - MemberDirect	12/13/2022	10/26/2023	10/13/2022	10/26/2023	100%	
Parallel Processing (2 Months)	10/9/2023	12/11/2023	12/22/2022		42%	
Phase 5 - Closing	9/13/2023	12/2/2024	12/27/2023		0%	
Warranty Support (12 months)	12/4/2023	12/2/2024	12/27/2023		0%	

Our Mission: To provide secure retirement benefits and superior service.

October 2023

"No" answers <u>must</u> include a comment, whereas "Yes" answers can include a comment, but a comment is not required. N/A should be used only in cases where reporting is not required, i.e., task is quarterly (comment must so indicate).

		HIEV	ED	
	YES	NO	N/A	COMMENTS
Overall Score			Í	We achieved a 98.51% success ratio. We failed on one (1) KPM.
Executive				
 Distribute weekly email updates to all Trustees on or before the end of business on Friday of every week. 	X			
2. Distribute weekly email updates to all staff on or before the end of business on Monday of every week.	X			
3. Maintain expenditures at or less than Trust Fund Budget.	X			
IT				
1. All vital servers maintain an uptime of 99% or higher.	X			
2. All PensionGold requests are prioritized within thirty-one (31) calendar days.	X			
3. All TrackIT (help desk) requests are followed up with a conversation (phone/email) within four (4) business days.	X			
 Maintain help desk survey scores above satisfactory marks of 95% or higher. 	X			
5. All US-CERT email security advisories are placed into the help desk system to be addressed within two (2) business days.	X			
6. Respond to all phone calls within one (1) business day.	X			
7. Answer 95% of My Account hunt group (X3508) calls within sixty (60) seconds.	X			
8. Maintain expenditures at or less than IT budget as reported by Finance in the most recent manager's report (1-month lag).	X			
Finance				
1. Prepare the NHRS Annual Comprehensive Financial Report (ACFR): unaudited by October 31, and the audited ACFR by December 31, in accordance with generally accounting principles.	X			
in accordance with generally accepted accounting principles.	Λ			
2. Reconcile operating bank account within two (2) business days of receipt of bank statements.			X	Suspended due to PGV3 implementation.
1	-		^	Suspended due to PGVS implementation.
3. Produce and distribute monthly actual-to plan-budget reports within ten (10) business days from the end of the prior month.			X	Sugnanded due to DCV2 implementation
	-			Suspended due to PGV3 implementation.
4. Produce the monthly financial statements (FS) for the Board of			X	Suspended due to PGV3 implementation.

	ACHIEVED		ED	
	YES	NO	N/A	COMMENTS
Trustees meeting at least three (3) business days prior to the				
scheduled Board mailing.				
5. Post all cash receipts for a month, for which we have received the				
associated voucher, into the pension benefit system (PensionGold)				Suspended due to PGV3 implementation.
within ten (10) business days after the close of the month.			X	
6. Issue all NHRS annuitant pension payments timely and accurately.				
	X			
7. File annual payroll tax return (form 945) for the annuity payroll by				
January 31.			X	No return due.
8. Reconcile all employer accounts sufficiently to allow for interest				
posting for the reporting month within ninety (90) days of the end of				
the reporting month, for which we have received all payments and			**	a lata a paya i a la lata
back-up from employers.			X	Suspended due to PGV3 implementation.
9. Process all confirmed post-retirement electronic direct deposit change				
requests received by the date that the pre-note wizard is run in	v			
PensionGold and direct funds accordingly in the same month.	X			
10. Deposit all payments received at NHRS offices, with appropriate				
supporting documents, into local custodial bank within three (3) business days of receipt, with any payments secured on any				
intervening days.	X			
11. Annually for the preceding tax year, post electronic 1099-R forms to	Λ			
MyAccount by January 24 and mail hard copy 1099-R forms by				
January 31 of the subsequent year.			X	No filings due.
12. Answer 95% of Employer Exceptions hunt group (X3532) calls within			71	Tro mingo due.
sixty (60) seconds.			X	Suspended due to PGV3 implementation.
13. Maintain expenditures at or less than Finance Budget as reported in			Λ	Suspended due to 1 d v 3 implementation.
the most recent manager's report (1-month lag).				
the most recent manager's report (1-month lag).	X			
Investment				
1. Generate investment returns for three (3) and five (5) Year Total Fund				
Performance greater than the applicable Total Fund Benchmark	X			
measured quarterly.				
2. Generate investment returns for the long-term (25 years) Total Fund				
Performance greater than the applicable Actuarial Assumed Rate of			X	Reported June 30 th .
Return (6.75%) measured each June 30.			_	1
3. Generate investment returns for three (3) and five (5) Year Total Fund	37			
Performance greater than the applicable peer universe median	X			

		ACHIEVED		ED	
		YES	NO	N/A	COMMENTS
	measured quarterly.				
4.	Complete the IIC's Private Debt & Private Equity Strategic Plan for the calendar year.			X	Reported annually in February for CY 2024.
5.	Manage cash flow and make funds available for the payment of monthly retirement benefits, expenses and capital calls on or before the last business day of the month.	X			
	Manage continuously the asset allocation within approved ranges and rebalance as appropriate.	X			
7.	Maintain trading cost at or below median of applicable peer universe.	X			
	Ensure all proxies are voted consistent with the Board approved Proxy Policy.	X			
9.	Distribute complete and accurate Investment Committee materials to all members of the Investment Committee on the Friday before the regularly scheduled monthly Investment Committee meeting.	X			
10	. Maintain internal expenditures at or less than Investment Budget as reported by Finance in the most recent manager's report (1-month lag).	X			
Legal					
1.	Assure no instances of statutory or regulatory non-compliance.	X			
	Provide disability recommendations to the Board within sixty (60) calendar days of receipt in the Legal Dept.	X			
	Commence an adjudicative proceeding within sixty (60) calendar days of receipt of administrative appeal.	X			
	Present a recommended decision to the Board within seventy-five (75) calendar days after the close of the record in an appeal.	X			
	Perform employer compliance field audits; a rolling average of 2 audits per experienced auditor per month over the prior 12-month period.			X	Suspended due to PGV3 implementation.
	Present one (1) employer education session per quarter.	X			
	Answer 95% of Employer Audit/Compliance hunt group (X3681) calls within sixty (60) seconds.	X			
	Maintain expenditures at or less than Legal Budget as reported by Finance in the most recent manager's report (1-month lag).	X			
	per Services				
1.	Calculate all preliminary retirement benefits within thirty (30)	X			

	AC	HIEV	ED	
	YES	NO	N/A	COMMENTS
calendar days of member-requested date of retirement.				
2. Calculate 100% of final retirement benefits (EXCLUDING JULY			X	Suspended due to PGV3 Implementation.
applications) within seven (7) months of member requested date of				
retirement provided that all statutorily required documentation has				
been received and all wages have been reported.				
3. Calculate 100% of July final retirements within eight (8) months of			X	Suspended due to PGV3 Implementation.
member requested date of retirement provided that all statutorily				
required documentation has been received and all wages have been				
reported.				
4. Schedule member meetings with Benefit Specialists within ten (10)			X	Suspended due to PGV3 Implementation.
business days of request.				
5. Issue all member retirement benefit estimates within thirty (30)	X			
business days of receipt of request.				
6. Enter member enrollment form data into Pension Gold (PG) within	X			
fifteen (15) business days of receipt.				
7. Process member refund requests within ninety (90) calendar days of			X	Suspended due to PGV3 Implementation.
receipt of written request.				
8. Process service purchases within fifteen (15) business days of request				Suspended due to PGV3 Implementation.
receipt.			X	
9. Process additional contribution calculations within ninety (90)	X			
calendar days of receipt.				
10. Process all non-employer audit correction related employer			X	Suspended due to PGV3 Implementation.
contribution refunds within sixty (60) business days of receipt.				
11. Post all interest to member accounts within the month that Finance	X			
authorized the activity.				
12. Adhere to payroll "close" schedule for benefit setup balancing	X			
purposes.				
13. Process all pension changes within thirty (30) calendar days of			X	Suspended due to PGV3 Implementation.
receipt/notification.				
14. Process retiree death benefit refund payments within sixty (60)		-	X	Suspended due to PGV3 Implementation.
calendar days following receipt of all required paperwork.				
15. Establish survivorship benefit setup for payment within sixty (60)			X	Suspended due to PGV3 Implementation.
calendar days following receipt of all required death documentation				
and pension recoveries.				
16. Submit new recoupment cases to Recoupment Committee by next	X			
committee meeting following discovery.				
17. Initiate Recoupment/Benefits Committee recoupment decisions within	X			

	AC	ACHIEVED		
	YES	NO	N/A	COMMENTS
seven (7) business days of decision.				
18. Review and balance updates submitted by employers and TPAs to PG for insurance rate changes received by the first business day of each month within four (4) business days.			X	Suspended due to PGV3 Implementation.
19. Complete monthly insurance non-rate changes by processing all authorizations received by the date the annuity payroll is posted with zero carryovers.			X	Suspended due to PGV3 Implementation.
20. Render QDRO qualification determinations within federal time limit guidelines.	X			
21. Maintain expenditures at or less than Member Services Budget as reported by Finance in the most recent manager's report (1-month lag).	X			
Human Resources				
1. Ensure compliance with all Federal, State and CBA rules and regulations as measured by no notices of violation.	X			
2. Respond to all payroll errors within one (1) business day and correct all payroll errors within one pay cycle.	X			
3. Reduce recruitment time for open staff positions to no more than forty-five (45) business days and open management/executive positions to no more than ninety (90) business days.		X		Recruitment for an Investment Officer has taken longer than anticipated, finding the right fit is most important.
4. Maintain expenditures at or less than HR Budget as reported by Finance in the most recent manager's report (1-month lag).	X			
PIO				
Schedule a minimum of thirty (30) member/constituent education sessions in Concord and statewide each year.	X			
2. Achieve ninety-five percent (95%) rating of members attending a live education session that the session was "completely/moderately" easy to understand.	X			
3. Meet all deadlines in editorial calendar.	X			
4. Monitor media coverage of NHRS and provide articles to Board, IIC and Staff within two (2) business days.	X			
5. Post updated legislative summaries on www.nhrs.org by the end of business every Friday throughout the legislative session.			X	Legislation not in session.

		ACHIEVED		ED	
		YES	NO	N/A	COMMENTS
6.	Prepare and deliver Quarterly Report to the General Court by January 1, April 1, July 1 and October 1.	X		,	
	Maintain expenditures at or less than PIO Budget as reported by Finance in the most recent manager's report (1-month lag).	X			
Inter	nal Audit				
1.	Prepare a Risk Assessment and Fiscal Year Audit Plan for the approval of the Audit Committee annually.			X	Done in the spring.
	Execute and present an assurance audit to the Audit Committee every quarter.	X			
	On behalf of the external auditors, administer the GASB census data audits and provide the completed audits to the external auditors by the established due date.	X			
4.	Prepare the updated NHRS Audit Issues Tracking Report for the Audit Committee and Board of Trustees at least three (3) business days prior to the scheduled Board/Committee mailing.	X			
5.	Distribute complete and accurate Audit Committee materials to all members of the Audit Committee by the Thursday before the monthly meeting.	X			
	Prepare draft Audit Committee Meeting minutes for review within three (3) business day of the meeting.	X			
7.	Maintain expenditures at or less than Internal Audit Budget as reported by Finance in the most recent manager's report (1-month lag).	X			
Cont	act Center				
1.	Respond to all incoming emails within 24 business hours.	X			
	Maintain an average speed of answer within two (2) minutes.	X			We maintained an average of 0:20.00.
	Maintain a 95% call satisfaction rating for callers' experience with the Contact Center Representative (CCR).	X			We achieved a 99.21% satisfaction rate.
Admi	nistrative				
1.	Prepare and distribute monthly Board materials electronically by the Thursday before the Tuesday meeting.	X			
2.	Post Board and committee meeting notices according to 91-A:2.	X			
	Prepare minutes of Board and Board Committee meetings according to the timeliness guidelines in 91-A:2 and 91-A:3, with draft minutes for internal review ready by close-of-business on the Friday following the Board meeting.	X			
4.	Prepare draft MTeam minutes and forward to Executive Director for				

		AC	ACHIEVED		
		YES	NO	N/A	COMMENTS
	less days of meeting; to managers for review	X			
	ys of meeting; and post final minutes to the				
common drive by the	Friday following the meeting.				
5. Assure that formal co	omplaints are responded to within ten (10)	X			One complaint was registered and resolved
calendar days.					during the month.
6. Maintain expenditure	es at or less than Administration Budget as				
reported by Finance	n the most recent manager's report (1-month	X			
lag).					
	es at or less than Board of Trustees Budget as				
reported by Finance	n the most recent manager's report (1-month	X			
lag).					

Contact Center October 2023

Phone Calls

	Total	Percentage
Calls addressed by		
CCRs	2435	97.60%
Calls forwarded to		
SMEs	52	2.08%
Calls forwarded to		
SME Manager	8	0.32%
Total	2,495	100.00%

Post Call Surveys

	Total
Total Calls Handled	2,495
Surveys Completed	131
% of Total Calls Completion Rate	5.25%

Walk Ins

	Total
Number of Walk-Ins	214
Total Walk In Time	
(hours)	41.40
Average Walk In	
time (minutes)	255

Emails

	Total	Percentage
Emails addressed by CCRs	495	40.51%
Emails addressed by CCNs	433	40.31/6
Emails forwarded to SMEs	727	59.49%
Tatal	1 222	100.00%
Total	1,222	100.00%

Goal: Answer calls within 2 minutes with 5% abandon rate.

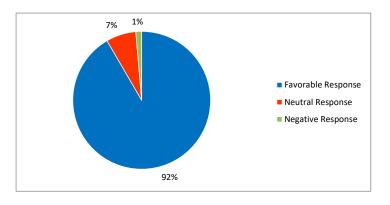
Queue Name	Calls Presented	Calls Handled	Percentage	Calls Abandoned	Percentage	Average Queue Time	Average Speed of Answer	Average Time to Abandon	Average Handle Time
Member	911	895	98.24%	16	1.76%	0:23:00	0:22:00	1:51:00	5:25:00
Reception	548	525	95.80%	14	2.55%	0:18:00	0:08:00	0:15:00	3:22:00
Retiree	1088	1075	98.81%	13	1.19%	0:32:00	0:30:00	3:09:00	4:19:00
Totals	2547	2495	97.96%	43	1.69%	0:24:20	0:20:00	1:45:00	4:22:00

Average

NHRS Board Monthly Reporting Package Process Improvement October 2023

Executive Director Telephone Survey Results

Executive Director Telephone Survey Results			_				
	Number of Names	Number of	Favorable Response	Neutral	Negative	Left VM	Bad Phone
	on Call List	Connections Made	(1)	Response	Response	No Call Back	Number/Not in
				(2)	(3)	(4)	Service/No VM
							(5)
202	3						
October	30	13	13	0	0	10	7
September	40		19	1	1	18	1
August	50	20	20	0	0	22	8
July	40	17	16	0	1	15	8
June	40	23	21	1	1	15	2
May	50		22	6	0	20	2
April	40		22	1	0	16	1
March	50	22	18	4	0	22	6
February	30	12	11	1	0	13	5
January	40	18	15	2	1	18	4
2023	2						
January - December	520	291	265	21	5	174	55
202	1						
January - December	130	73	64	8	1	42	15
2020	0						
January - December	100	50	47	2	1	37	13
201	9						
January - December	500	228	216	7	5	150	122
201	8						
January - December	490	227	217	8	2	183	80
201	7						
January - December	460	214	204	8	2	168	78
201	6						
January - December	520	258	230	25	3	189	73
201	5						
January - December	510	273	242	28	3	152	85
2014	4						
October - December	87	36	28	8	0	30	21
	3727	1847	1690	131	26	1294	586



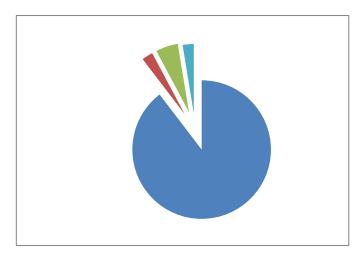
NHRS MEMBER SATISFACTION SURVEY SUMMARY Q1 Fiscal Year 2024

Overview

NHRS has been utilizing member satisfaction surveys since July 2013. The following summary provides a high-level overview of key survey results for Member Services. Negative comments are identified when responses are received and, in keeping with our mission to provide superior service, managers reach out to anyone who had an unsatisfactory experience and provided their name and/or contact information.

Active Members

Separate surveys are provided to members who are involved in the following interactions: (1) appointment with a benefits specialist; (2) request for a written pension estimate; (3) withdrawal or rollover of accumulated contributions; or (4) purchase of service credit. There are several common questions on each survey, and the responses to all of the common questions are aggregated below:



Question: Overall, how satisfied are you with your experience?

■ Very Satisfied 89.61% (69 responses)

Somewhat Satisfied 2.60% (2 responses)

■ Neutral 5.19% (4 response)

■ Somewhat Dissatisfied 0.00% (0 responses)

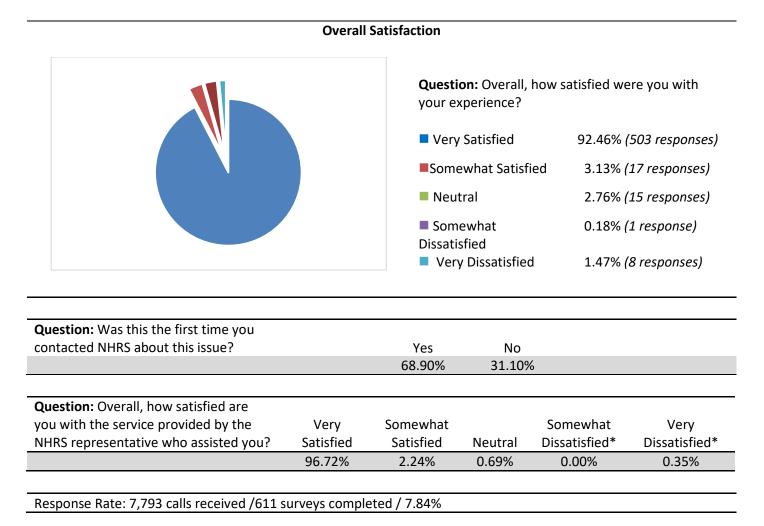
Very Dissatisfied
2.60% (2 responses)

Question: How satisfied are you with the	Very	Somewhat		Somewhat	Very
following?	Satisfied	Satisfied	Neutral	Dissatisfied	Dissatisfied
Phone system	72.22%	22.22%	5.56%	0.00%	0.00%
Email	80.00%	16.67%	0.00%	3.33%	0.00%
Initial contact with representative	96.00%	0.00%	4.00%	0.00%	0.00%

Question: How satisfied are you with the					
service provided by the NHRS	Very	Somewhat		Somewhat	Very
representative who assisted you?	Satisfied	Satisfied	Neutral	Dissatisfied	Dissatisfied
Friendliness / Professionalism / Courtesy	96.22%	1.89%	0.00%	0.00%	1.89%
Knowledge	92.45%	5.66%	0.00%	0.00%	1.89%
Clarity of verbal explanation	94.00%	2.00%	0.00%	2.00%	2.00%
Clarity of written materials	95.8%	2.08%	0.00%	0.00%	2.08%

Appointments: 120 sent/ 41 returned / 34.17%	Withdrawal / Rollover: 237 sent / 12 returned / 5.06%
Estimates: 372 sent / 24 returned / 6.45%	Service Credit: 52 sent / 0 returned / 0.00%

The contact center opened in December 2020 to transform member services operations to better meet the needs of our stakeholders. Callers reaching the contact center include active members and retirees. Callers are offered the option to stay on the line after their call is finished to complete a brief, three (3) question survey. The following summary provides a high-level overview of the results for this survey.



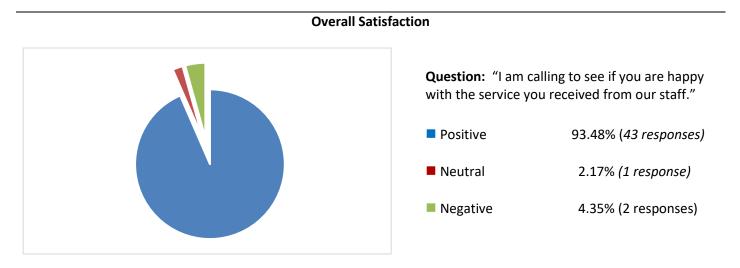
^{*} Contact center management reviews all 'somewhat dissatisfied' and 'very dissatisfied' calls to understand whether members were truly dissatisfied with their service or if they simply selected an incorrect response option. Since calls are recorded, every call in these two categories are listened to and a report is issued. These reports will be used to determine if our survey options need to be modified and also serve as a training tool for our contact center representatives.

ED Telephone Surveys

In October 2021, the Executive Director resumed making calls to stakeholders to inquire about their level of satisfaction with NHRS. These calls were discontinued in March 2020 at the onset on Covid-19. On a weekly basis, a list of ten (10)

members who have visited or called NHRS are selected at random and provided to the Executive Director.

The Executive Director, in turn, contacts or attempts to contact each member on the list to inquire about their satisfaction with the service received. Below are the results for the quarter.



Response rate: 130 calls made / 69 responses/ 53.08%

Division: Executive

Date: October 31, 2023

Approved: July 1, 2023

FY 2024 Action Plan Summary

ACTION	PM	DATE	STATUS/COMMENTS
1. Complete implementation of data security assessment recommendations and continue to enhance IT security.	JG/JL	6/30/24	Note: While most of the recommendations have been implemented, there are a few that are ongoing as part of the PGV3 implementation project.
2. Complete project plan milestones for LRS Pension Gold (PGV3) project.	JG/TK	6/30/24	This is a five-year project scheduled for completion in FY 24. Project modifications have added 6 months to the original completion date.
3. Identify areas for improved efficiencies across the organization, including assessing and improving employee engagement.	JG/All	6/30/24	
4. Enhance member, beneficiary, and employer education: identify/review industry best practices for education and engagement; adjust existing education programming, as needed.	JG/MK	6/30/24	
5. Implement agreed-upon elements of Vision for NHRS.	JG/All	6/30/24	



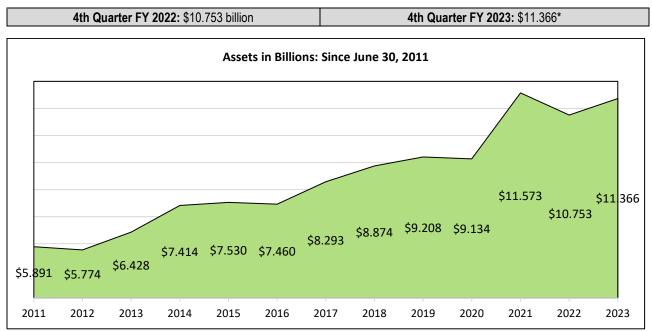


New Hampshire Retirement System 54 Regional Drive, Concord, NH 03301 Phone: (603) 410-3500 - Fax: (603) 410-3501 Website: www.nhrs.org - Email: info@nhrs.org

NHRS DASHBOARD: FY 2023 Fourth Quarter

For the period April 1, 2023, to June 30, 2023 Updated: August 2023

TRUST FUND



* Unaudited

INVESTMENT PERFORMANCE

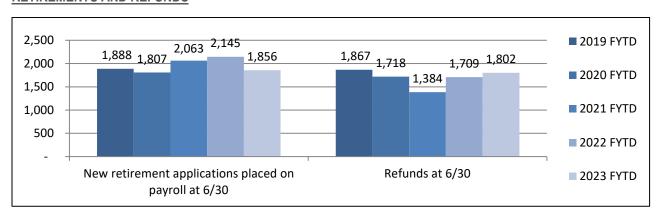
Net-of-fees returns	FYTD - 6/30/23*	1 yr. at 6/30/22	3 yr. at 6/30/22	5 yr. at 6/30/22	10 yr. at 6/30/22
Total Fund Composite	NA	-6.1%	7.1%	7.2%	8.5%
Peer comparison (percentile)	NA	34th	35th	36th	18th

Assumed Rate of Return: 6.75%; * 6/30/23 return unavailable pending valuation of real estate and alternative investments

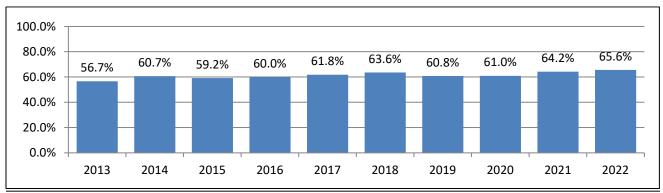
KEY PERFORMANCE MEASURES

Target: 95%

RETIREMENTS AND REFUNDS

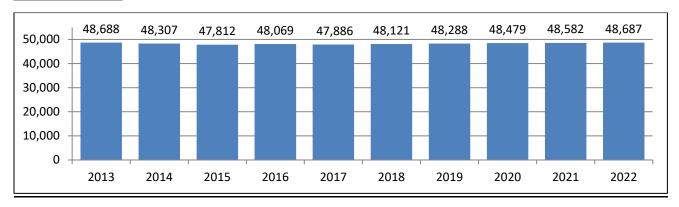


ACTUARIAL FUNDED RATIO

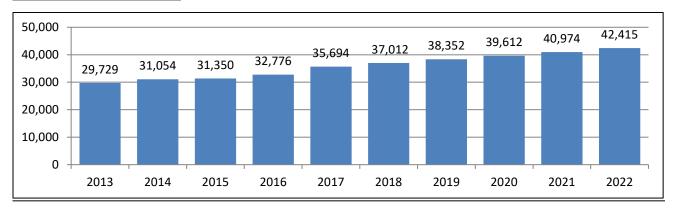


Funded ratio impacted by reductions to assumed rate of return and revised actuarial assumptions effective in 2015 and 2019

ACTIVE MEMBERS



RETIREES & BENEFICIARIES





To:	Board of Trustees				
From:	Rosamond Cain, Director of Human Resources				
Date:	November 3, 2023				
Re:	HR Operating Report				
Item:	Action: \square Discussion: \square Informational: \boxtimes				

Significant Developments and Priority Issues

- NHRS is currently recruiting for one staff opening an Employer Reporting Specialist. We have hired an Investment Officer and an Executive Assistant.
- We have begun using the ADP platform for health benefits tracking, and by using the platform, HR will not need to produce the individual ACA forms each year.

Current Month Highlights

- HR met all but one KMP last month. We were unable to hire an investment officer within the stated time frame.
- HR is now training on the ADP compensation and benefits modules.

Upcoming Plans & Projects

- We are continuing to evaluate our new staff training process. All training manuals will need to be updated to reflect processing in PGV3.
- HR is continuing to create an all-staff training plan for the remainder of FY 2024; it has been two years since we have had a full training schedule. We are planning two all-staff training sessions in the spring of 2024.
- Reminder -The 2024 succession planning has been postponed from September 2023 to February 2024 in consideration of PGV3 implementation.

Division: Human Resources (HR)

Date: November 1, 2023
Approved: July 1, 2023

FY 2024 Action Plan Summary

	ACTION	PM	DATE	STATUS/COMMENTS
1.	Plan, schedule, and present two trainings for our staff annual training plan.	RC/ED/ET/MT	6/30/24	In process.
2.	Maintain a management development program for middle managers and staff identified as possible managers.	RC/ED/ET/MT	6/30/24	In process. Currently, have four staff members pursuing a degree and we are working with four managers to create leadership development plans.
3.	Create, implement, and maintain electronic onboarding utilizing the ADP software.	RC/Janet G.	6/30/24	In process.
4.	Assist in monitoring and maintaining PGV3 staffing levels to keep the project on time and budget.	RC/ET/MT	6/30/24	Continuing.
5.	Monitor and maintain staffing levels for the NHRS Contact Center.	RC/ED/NC/DH	6/30/24	Continuing.
6.	Create, implement, and maintain electronic performance appraisals utilizing the ADP software.	RC/MT	6/30/24	Set to begin in September.
7.	Ensure compliance with all federal, state and CBA rules and regulations.	RC/Janet G./Legal	6/30/24	Continuing.
8.	HR Tech. to identify and enroll in a professional development program.	Janet G./RFC	12/31/23	In process.
9.	HR Mgr. to identify, enroll in, and complete a professional development program.	RFC/ED	12/31/23	In process.





To:	Board of Trustees
From:	Tim Crutchfield, Deputy Director and Chief Legal Counsel
Date:	November 2, 2023
Re:	Legal Team Operating Report
Item:	Action: Discussion: Informational:

Significant Developments and Priority Issues

- Based on the Board's consideration of delegating certain activities to its subcommittees, Legal staff presented delegation information and suggested revisions to the charters of the Benefits Committee and Governance Committee at the Governance Committee's October 31 meeting. The Committee's recommendations will be presented for the Board's consideration at this month's meeting.
- In October and November, the Employer Auditors are assisting the Finance Team by reaching out to employers regarding the new reporting functions during the PGV3 parallel process.
- Last week, NHRS received notice from the NH Supreme Court that it requires a certified copy of the record in the Board's initial decision in March and its reconsideration decision in July of this year in the Keene School District case regarding the exclusion of compensation paid more than 120 days following termination for eight teachers who retired between 2012 and 2018. The Court will provide the schedule for submitting briefs and oral arguments at a later date.

Current Month Highlights

- Over the past 12 months, the Employer Audit Team has completed 28 standard and 23 GASB audits. There are four standard audits in process.
- Legal achieved seven of its eight KPMs this month. The other KPM is on hold due to competing staff priorities with PGV3.
- 445 Gainful Occupation reports were mailed in early March. 410 have been returned and 402 of those have been processed.
- Legal staff will provide a final report on the ethics surveys to the Audit Committee at its November meeting.

Upcoming Plans and Projects

• Legal staff and the Executive Team are finalizing the 2024 Board Action Calendar and internal Compliance Calendar due to the Board's 2024 bi-monthly meeting schedule. The Board Action Calendar will be provided at the December Board meeting.

Administrative Appeals

Prior 12 months	Total Cases on Appeal at start of the month	New Appeals	Closed Appeals	Total Cases on Appeal end of the month
Oct. '23	6	2	0	8
Sept. '23	5	1	0	6
Aug. '23	6	1	2	5
July '23	6	1	1	6
June '23	6	0	0	6
May '23	7	0	1	6
April '23	7	0	0	7
Mar. '23	8	1	2	7
Feb. '23	10	1	3	8
Jan. '23	8	3	1	10
Dec. '22	8	2	2	8
Nov. '22	9	0	1	8
Totals		12	13	

Disability Appeals

Prior 12 months	Total Cases on Appeal at start of the month	New Appeals	Closed Appeals	Total Cases on Appeal end of the month
Oct. '23	2	0	0	2
Sept. '23	2	0	0	2
Aug. '23	2	0	0	2
July '23	2	0	0	2
June '23	2	0	0	2
May '23	2	0	0	2
April '23	2	0	0	2
Mar. '23	1	1	0	2
Feb. '23	1	0	0	1
Jan. '22	1	0	0	1
Dec. '22	1	0	0	1
Nov. '22	1	0	0	1
Totals		1	0	

Division: Legal/Compliance

Date: November 2, 2023
Approved: June 13, 2023

FY 2024 Action Plan Summary

ACTION	PM	DATE	STATUS/COMMENTS
1. Assist in the PGV3 implementation.	TC	12/31/23	In process.
2. Conduct and document annual review of NHRS legal and governance policies, procedures, and manuals to assure best practices.	TC/MC	12/31/23	In process.
3. Update the annual compliance calendar to ensure statutory compliance in all organizational areas.	TC	12/31/23	In process.
4. Ensure annual compliance with the Voluntary Correction Program Policy.	TC	3/31/24	
5. Assure legal compliance with all legislative proposals adopted and effective in 2023.	TC	6/30/24	In process.
6. Review NHRS website for legal compliance with updates as needed.	TC/MK	6/30/24	In process.
7. Identify, enroll, and complete a professional development program.	TC	6/30/24	





New Hampshire Retirement System 54 Regional Drive, Concord, NH 03301 Phone: (603) 410-3500 - Fax: (603) 410-3501 Website: www.nhrs.org - Email: info@nhrs.org

date

name address

Re: Board Decision on Application for Disability Retirement

Dear name:

It is my duty to inform you that on Tuesday, Board Meeting Date, the New Hampshire Retirement System's Board of Trustees voted to accept the recommendation of the Hearings Examiner in the matter of your application for accidental disability retirement. I have included a copy of the decision for your review.

If you disagree with the Board's decision, and are able to cite an error in the Board's application or interpretation of the relevant facts or laws, you may request reconsideration in writing within **30 days** of this notice, by (**date**), pursuant to Administrative Rule Ret 204.10. Absent a timely request for reconsideration, the Board's decision shall become final on (**date**).

Please feel free to contact me with any questions on this matter.

Sincerely,

Mark F. Cavanaugh, Esq. Associate Counsel and Compliance Officer 603-410-3592 Mark.cavanaugh@nhrs.org

Enclosure: Recommendation



To:	Board of Trustees
From:	Marty Karlon
Date:	November 1, 2023
Re:	Communications/Legislative Affairs Operating Report
Item:	Action: \square Discussion: \square Informational: \boxtimes

Significant Developments and Priority Issues

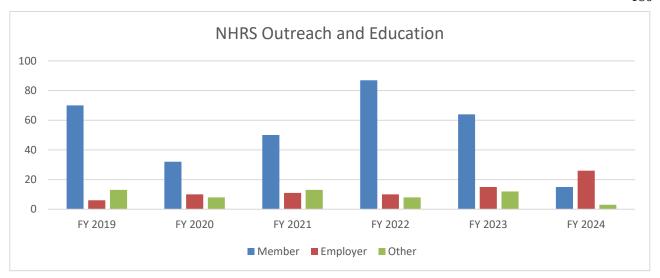
- The commission to study retirement benefits and retention of employees created in House Bill 2 (HB2) will wrap up and disband at the end of the month. NHRS has attended all sessions and provided actuarial data and testimony.
- PGV3 training for employers is ongoing, with insurance administration training under way. Training on retiree reporting will be offered in January.

Current Month Highlights

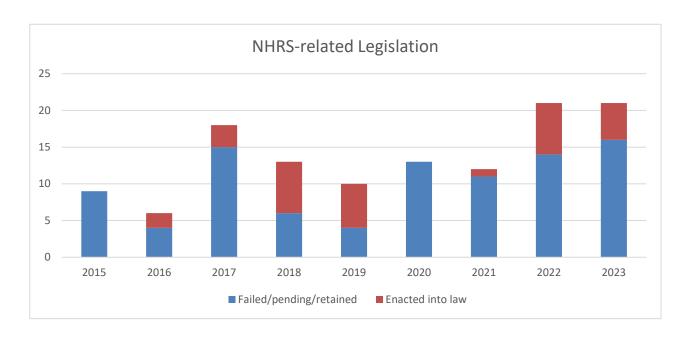
- Continuing to develop PGV3 training handouts related to *My Account* 2.0 and 2024 retiree reporting.
- Hosted or participated in four member education events, three employer education events, and one constituent event.
- Six of seven PIO met six of seven KPMs were met this month; one was not applicable.

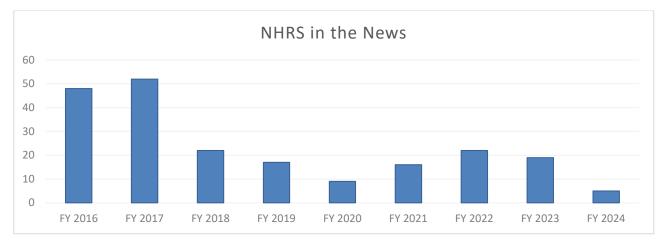
Upcoming Plans & Projects

- Monitoring 2024 Senate Legislative Service Requests (LSRs); preparing for 2024 session.
- Communications support during parallel processing.
- Scheduling member and employer education events for 2024.
- Scheduled to host or participate in nine member education events and seven employer education events in November.



"Other" events include presentations to member, employer, and retiree organizations.





News articles and commentary in NH and national media outlets in which NHRS is the primary subject.

Our Mission: To provide secure retirement benefits and superior service.

Division: Communications

Date: November 1, 2023
Approved: June 22, 2023

FY 2023 Action Plan Summary

	ACTION	PM	DATE	STATUS/COMMENTS
1.	In collaboration with the Finance team and PGV3 Project Manager, implement PGV3 employer training and communication plans. *	MK / PIO staff / Finance	1/31/24	In progress.
2.	Maintain ongoing internal and external communications for overall PGV3 project. *	MK	3/31/24	In progress.
	Develop and implement campaign to encourage members and retirees to sign up for MyAccount 2.0 *	MK / PIO staff	6/30/24	In progress.
4.	Coordinate NHRS interactions with and prepare materials for statutory commission to study retirement benefits and retention of employees scheduled to meet in the summer of 2023.	MK	11/30/23	In progress.
5.	Maintain positive and constructive working relationship with the NH Legislature. *	MK	6/30/24	In progress.
6.	Grow calendar year-over-year audience for social media channels by 10-15%.	MK / PIO staff	6/30/24	
	Develop member surveys assessing knowledge and comfort level with NHRS benefits and preferences for additional education efforts.	MK / PIO staff	6/30/24	Note: Survey will be released in FY 25.
8.	Update printed and recorded	MK / PIO	12/31/23	



member/retiree/employer	staff		
presentations impacted by recent			
legislation.			
9. Identify, enroll and complete a	MK	6/30/24	Scheduled to attend and present at
professional development		-	NCPERS Communications Summit in
opportunity.			January 2024.

^{* -} Aligns with initiatives listed on NHRS Three-Year Strategic Plan.





Item:	Action: \square Discussion: \square Informational: \boxtimes
Re:	Information Technology Operating Report
Date:	November 2, 2023
From:	John Laferriere, Director of Information Technology
To:	Board of Trustees

Significant Developments and Priority Issues

- Cybersecurity Awareness Phishing testing continues, and IT does not need to implement additional training.
- Phishing activity has increased in the last month.
- Security The onboarding process for the Managed Security Service Provider (MSSP) has been completed successfully.
- The MSSP had indicated no new vulnerabilities or threats.

Current Month Highlights

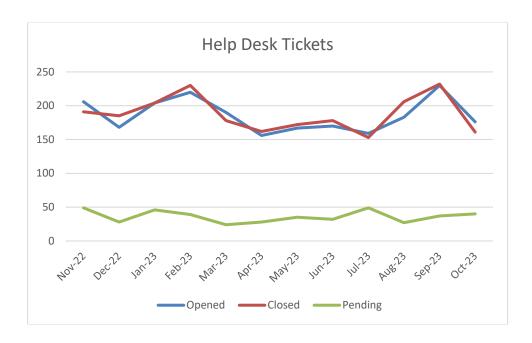
- IT Customer Satisfaction Score 100%.
- IT met all eight of its KPMs.
- Seventy-five change requests were approved and deployed into the production environment this month.
- Retired several security applications and physical hardware from the infrastructure.
- The new Enterprise network equipment is fully configured and operational. Migration from the old network has begun.
- Patching services for the desktop and server environment have been fully deployed.
- Established an AI governance and policy development group for AI use.
- Completed inventory system management evaluation.
- Completed build-out of the new ticket management system.

Upcoming Plans & Projects

- Deploy the new ticket management system.
- Continue evaluation of AI engines to meet Enterprise requirements.
- Complete network cutover.
- Begin early adoption and deployment into the Information Technology and Call Center groups.
- Begin phone system advance-features testing for the Call Center.
- Complete migration of fax services to the cloud.
- Complete workflow evaluation of the proposed document management system.
- Expand Multi-Factor Authentication (MFA) testing into the Information Technology group.

Our Mission: To provide secure retirement benefits and superior service.

NHRS Helpdesk Ticket Information by Month



NHRS Customer Satisfaction Scores by Month



Our Mission: To provide secure retirement benefits and superior service.

Division: Information Technology

Date: November 2, 2023 Approved: July 5, 2023

FY 2024 Action Plan Summary

ACTION	PM	DATE	STATUS/COMMENTS
1. Outsource security management to third-party provider.	JL	10/30/2023	Completed.
2. Upgrade networking infrastructure.	JL, JO	12/30/2023	Ongoing. New network operational and interconnected with existing network.
3. Perform and complete yearly staff permissions review.	JL	09/30/203	Started.
4. Upgrade firewall hardware.	JL, JO	09/30/2023	Completed.
5. Replace desktops and laptops with new laptops.	JL, JV	06/30/2024	Ongoing. Deployment to begin January 2.
6. Perform tasks associated with PensionGold Version 3 (PGV3) implementation, as per contractual implementation schedule.	JL, TK, AS, JO	06/30/2024	Ongoing.
7. Move 80% of the production applications to the cloud.	JL, JO	06/30/2024	Ongoing. Building of cloud environment continues.
8. Move physical data center to new location.	JL, JO	11/30/2023	Completed.
9. Replace existing phone system with a cloud-based phone system.	JL	06/30/2024	Ongoing. Pre-rollout testing begins January 11.
10. Identify, enroll, and complete a professional development program.	JO	02/28/2024	Ongoing.
11. Replace the existing emergency generator.	JL, CM	08/30/2023	Completed.
12. Install fault-tolerant internet connection.	JL, JO	08/30/2023	Completed.
13. Identify and install an enterprise document management system.	JL	06/30/2024	Ongoing. Workflow testing started.
14. Develop a secure Enterprise transmissions platform for all file transfers.	JO	06/30/2024	Completed.





From: Raynald Leveque, Chief Investment Officer

Date: November 6, 2023

Re: Investments Operating Report

Item: Action:

Discussion:

Informational:

Significant Developments and Priority Issues

• October Investment Committee (Committee) Meeting Recap:

- Staff presented an update on the monthly performance of the public market asset classes of the NHRS, rebalancing, holdings, the Work Plan, and the Proposed 2024 Investment Committee meeting schedule.
- o The Committee heard a capital market assumptions presentation from Callan.
- The Committee heard a presentation from private debt manager Strategic Value Partners (SVP) and unanimously voted to commit \$50 million to SVP Capital Solutions Fund II, subject to contract and legal review.
- The Investment Committee heard a presentation from an international small-cap equity manager, Wellington Management, in conjunction with the five-year contract renewal process.
- The Investment Committee reviewed the Draft GRS Letter, NHRS CAIR Transmittal Letter, and Callan Letter for the Comprehensive Annual Investment Report.

Current Month Highlights

• Preliminary Performance:

As of 9/30/2023	1 Month	Fiscal Year to Date	1-YR	3-YR	5-YR	10-YR
NHRS Total Fund Net Return	-3.05%	-2.45%	+9.18%	+7.34%	+6.11%	+7.10%
Policy Benchmark Return	-1.95%	-1.70%	+12.24%	+5.13%	+6.03%	+7.22%
Net Return Minus Benchmark (in basis points)	-110	-75	-305	+221	+8	-12

Source: Callan, NHRS

- KPM Performance for October 2023:
 - o Investments achieved eight of 10 KPMs; two are not applicable to this month's reporting.

Upcoming Plans & Projects

- November Committee Meeting:
 - o Staff will present an update on the monthly performance of the public market asset classes of the NHRS, holdings, and the Work Plan.
 - o The Committee will approve the 2024 Committee meeting schedule.
 - o The Committee will vote on a five-year contract renewal for the Wellington International SmallCap Research Equity mandate.
 - Staff will present to the Committee a recommendation for an update to the Strategic Asset Allocation portfolio.
 - The Investment Committee will discuss and approve the Comprehensive Annual Investment Report (CAIR) for Fiscal Year 2023. The CAIR will be submitted to the Board at its December meeting, with a recommendation for approval.

Securities Litigation Summary

Staff regularly monitors and participates in class action securities litigation to recover NHRS funds lost through investments in public securities. NHRS engages with our custodian bank to participate in standard US class action litigation (the current custodian is BNY Mellon). NHRS hired ISS in 2018 to provide litigation research and claims filing solutions for non-standard US class action and international securities litigation. The table below reports the annual historical recoveries for the NHRS.

Calendar Year	•	Amount
2005	\$	624,261
2006	\$	1,373,631
2007	\$	2,410,390
2008	\$	1,980,702
2009	\$	1,972,216
2010	\$	1,374,754
2011	\$	550,324
2012	\$	835,766
2013	\$	310,321
2014	\$	803,621
2015	\$	627,131
2016	\$	670,404
2017	\$	1,280,969
2018	\$	279,783
2019	\$	675,406
2020	\$	289,418
2021	\$	483,889
2022	\$	265,959
2023 through September 30	\$	521,075
Total:	\$	17,330,019

Source: BNY Mellon, ISS, NHRS, Northern Trust

Division: Investments

Date: November 6, 2023

Approved: July 5, 2023

FY 2024 Action Plan Summary

ACTION	PM	DATE	STATUS/COMMENTS
1. Assure compliance with all relevant statutory and regulatory requirements.	CIO/IIC/BOT	06/30/24	No exceptions have been identified.
2. Complete Private Debt/Equity Work Plan for Calendar Year (CY) 2024.	CIO/IIC	12/31/23	
3. Complete Real Estate Work Plan for CY 2024.	CIO/IIC	12/31/23	
4. Maintain investment expenses within budget.	CIO/IIC	06/30/24	Investment expenses are within budget.
5. Implement rebalancing, as necessary, to address deviations from policy targets.	CIO/IIC/BOT	06/30/24	
9. Complete a review of the Strategic Asset Allocation and, if necessary, recommend an update to the Strategic Asset Allocation Policy.	CIO/IIC/BOT	12/31/23	In process - presenting SAA review at the November IIC meeting.
7. Identify, enroll, and complete a professional development program for the Investment team.	CIO	12/31/23	Completed in September 2023.
8. Conduct an internal review of the NHRS total plan portfolio.	CIO/IIC	03/31/24	On hold – Staff is deciding on pursuing either a build or buy solution for NHRS total plan data.
9. Complete a five-year Strategic Plan for the Investments division at NHRS for approval by the IIC and the BOT.	CIO/IIC/BOT	12/31/23	In process.



New Hampshire Retirement System Board Meeting

Consent Agenda

Tuesday, November 14, 2023

Disability Application Recommendations

- 1. K.C. Grant ordinary disability retirement (ODR) to this group I member who worked for a political subdivision and has 17 years and 8 months of creditable service, based on medical evidence that supports her claim for permanent incapacity from her work duties due to a medical condition.
- 2. C.C. Grant ordinary disability retirement (ODR) to this group II member who worked for the State of New Hampshire and has 18 years of creditable service, based on medical evidence that supports her claim for permanent incapacity from her work duties due to a medical condition.
- 3. T.D. Grant accidental disability retirement (ADR) to this group II member who worked for a political subdivision and has 8 years and 7 months of creditable service, based on medical evidence that supports his claim for permanent incapacity from his work duties due to a medical condition.
- 4. R.G. Grant accidental disability retirement (ADR) to this group II member who worked for a political subdivision and has 11 years and 1 month of creditable service, based on medical evidence that supports his claim for permanent incapacity from his work duties due to a medical condition.
- 5. S.M. Grant accidental disability retirement (ADR) to this group I member who worked for the State of New Hampshire and has 4 years and 4 months of creditable service, based on medical evidence that supports her claim for permanent incapacity from her work duties due to a medical condition.
- 6. D.S. Grant ordinary disability retirement (ODR) to this group I member who worked for the State of New Hampshire and has 22 years and 10 months of creditable service, based on medical evidence that supports her claim for permanent incapacity from her work duties due to a medical condition.
- 7. P.Y. Grant ordinary disability retirement (ODR) to this group I member who worked for the State of New Hampshire and has 17 years and 7 months of creditable service, based on medical evidence that supports her claim for permanent incapacity from her work duties due to a medical condition.

Trustee Travel

No Travel Requests Submitted



To:	NHRS Board of Trustees	
From:	Jan Goodwin, Executive Director	
Date:	November 3, 2023	
Re:	October 10, 2023 - Action Items	
Item:	Action: Discussion: Informational:	
	ovide long-term fixed income information. tion: In process.	RL
	ng Fraud Policy revisions to the Board. tion: On the November Board agenda.	MC
	epare implementation of GO withholdings. tion: Scheduled for December and January payrolls.	MC
	tify parties of IRS PLR decision. tion: Completed.	MK/TC
	ovide the Board a template disability notice letter. tion: Included in the November Board materials.	TC
dis	nedule a Governance Committee meeting to review ability approval delegation to the Benefits Committee. tion: Committee meeting held October 31, 2023.	TC
	plement Board decisions on the Consent Agenda. tion: Completed.	DC

BOARD CHECKPOINT DISCUSSION

CY 2023 BOARD ACTION CALENDAR

JANUARY

Date		Requirement	Responsible Party
1/10/23	Annual IIC Private Equity/Debt update to the Board	Best Practice	IIC
	Report on Status of Statement of Financial Interests due to Secretary of State (Due Annually – 3 rd Friday in January)	RSA 15-A	Trustees & IIC Members
1/10/23	Annual Governance Manual revisions	Best Practice	Board of Trustees
1/10/23	Fiduciary Insurance Renewal	Best Practice	Board of Trustees

FEBRUARY

Date	Board Action Item	Requirement	Responsible Party
2/14 /23	Board and Audit Committee approval of FY21 GASB 68/75 Reports	Best Practice	Board of Trustees
2/14 /23	Trustee Education	Best Practice	

MARCH

Date	Board Action Item	Requirement	Responsible Party
3/14/23	Quarterly IIC report to the Board	RSA 100-A:15,II-a(c)	IIC
	Quarterly report to chairpersons of House & Senate ED&A Committees describing recent Board actions including any changes to actuarial		
3/14/23	assumptions and investment returns. Due 4/1/23.	RSA 100-A:14, VII-a	Board of Trustees

APRIL

Date Board Action Item		Requirement	Responsible Party
4/11/23 No compliance items this month.			
4/11/23	Trustee education	Best Practice	

MAY

Date	Board Action Item	Requirement Responsible Par	
5/9/23	Review annual Trust Fund Budget (non-statutory portion).	Best Practice	Board of Trustees

JUNE

Date	Board Action Item	Requirement	Responsible Party	
6/13/23	Approve annual Trust Fund Budget (non-statutory portion).	Best Practice	Board of Trustees	
6/13/23	Quarterly IIC report to the Board	RSA 100-A:15, II-a(c)	IIC	
6/13/23	Approve the Strategic Plan.	Best Practice	Board of Trustees	
6/13/23	Quarterly report to chairpersons of House & Senate ED&A Committees, describing recent Board actions including any changes to actuarial assumptions and investment returns. Due 7/1/23.	RSA 100-A:14, VII-a	Board of Trustees	

JULY

Date	Board Action Items	Requirement	Responsible Party
7/11/23	Annual IIC Real Estate update to the Board	Best Practice	IIC

AUGUST

Date	Board Action Items	Requirement	Responsible Party
8/8/23	No compliance items this month.	RSA 100-A:14, XIII	Board of Trustees

SEPTEMBER

Date	Board Action Items	Requirement	Responsible Party
9/12/23	9/12/23 Review charters for Board Committees.		Appropriate Board Committee
9/12/23	9/12/23 Annual Independent Medical Examiner (IME) Review		Board of Trustees
9/12/23 Set Board of Trustees meeting schedule for next calendar year.		Governance Manual	Board of Trustees
9/12/23	9/12/23 Annual Board Fiduciary Education		Board of Trustees
9/12/23	Quarterly report to chairpersons of House & Senate ED&A Committees, describing recent Board actions including any changes to actuarial assumptions and investment returns. Due 10/1/23.	RSA 100-A:14, VII-a	Board of Trustees

OCTOBER

Date	Board Action Items	Requirement	Responsible Party
10/10/23	Gainful Occupation Report		Board of Trustees
10/10/23	Office of Foreign Asset Control (OFAC) Compliance Report	Best Practice	Board of Trustees
10/10/23	Annual Comprehensive Financial Report (ACFR) deadline (within 120 days from 6/30/23).	RSA 100-A:15, VI	Board of Trustees
10/10/23	Quarterly IIC report to the Board	RSA 100-A:15, II-a(c)	IIC
10/10/23	Call Firefighter Report	Best Practice	Board of Trustees

NOVEMBER

Date	Board Action Items	Requirement	Responsible Party
11/14/23	IIC prepares Comprehensive Annual Investment Report (CAIR).	RSA 100-A:15, VII	IIC

DECEMBER

Date	Date Board Action Items		Responsible Party
12/12/23	Audited ACFR to Audit Committee	RSA 100-A:15, VI(a)	External Auditor
12/12/23	Audit Committee recommends that the Board approve and accept the audited ACFR.	RSA 100-A:15, VI(a)	Board of Trustees

12/12/23	The IIC recommends that the Board approve and accept the CAIR.	RSA 100-A:15, VII	Board of Trustees
12/12/23	The IIC recommends that the Board approve and accept the IIC meeting schedule for the next calendar year.	Best Practice	Board of Trustees
12/12/23	Quarterly report to chairpersons of House & Senate ED&A Committees describing recent Board actions including any changes to actuarial assumptions and investment returns. Due 1/2/23.	RSA 100-A:14, VII-a	Board of Trustees
12/12/23	Quarterly IIC report to the Board.	RSA 100-A:15,II-a(c)	IIC
12/31/23	Deadline for issuing member statements for fiscal year ending 6/30/23.	RSA 100-A:14, XI	Board of Trustees
12/31/23	ACFR and CAIR delivered per statute.	RSA 100-A:15, VI(c)	PIO

NHRS Board of Trustees Committee Membership List as of June 2023

Committee	Audit	Benefits	Governance	Legislative	PPCC	Investment
Staff Liaison	Heather	Timothy	Timothy	Marty	Rosamond	Raynald
	Hoffacker	Crutchfield/	Crutchfield	Karlon	Cain	Leveque
		Nancy Miller				
Frederick, Jon		X	X	X		
Hannan, Sue				X	X-Ch	
Henry, Jason	X	X				
Kelliher, Maureen	X					X-Ch
Lesko, Tim	X				X	
Maloney, Robert			X		X	
Martineau, Andrew		X		X		
Martins, Germano	X	X-Ch				
Merrifield, Ken				X-Ch	X	
Mezzapelle, Monica	X-Ch		X			
Provost, Paul			X			X
Quigley, Joshua				X	X	
Roy, Donald		X	X-Ch			
TOTAL MEMBERS	5/5	5/5	5/5	5/5	5/5	2/6*

^{*}Per RSA 100-A:14-b, I, the Independent Investment Committee shall consist of not more than 6 members, and up to 2 of whom shall be Trustees.

New Hampshire Retirement System Board of Trustees As of June 26, 2023

Jon Frederick, Jaffrey September 21, 2022, to September 5, 2025 NH Municipal Association

Sue Ellen Hannan, Derry July 27, 2018, to July 1, 2021 NH Education Association

Jason M. Henry, Brentwood May 17, 2023, to July 13, 2025 Association of Counties

Maureen Kelliher, Dover June 18, 2014, to July 13, 2025 Non-member Trustee

Tim Lesko, Concord January 24, 2018, to November 30, 2022 Non-member Trustee

Robert Maloney, Holderness July 27, 2018, to July 13, 2024 Non-member Trustee

Andrew Martineau, Bow December 18, 2020, to July 1, 2024 NH State Permanent Firemen's Association

Germano Martins, Hooksett August 18, 2021, to July 1, 2024 State Employees' Association

Kenneth Merrifield, Franklin March 24, 2021, to July 13, 2025 NH State Employer

Monica Mezzapelle, Concord January 6, 2021, to January 7, 2025 State Treasurer

Paul Provost, Concord November 2, 2022, to November 2, 2025 Non-member Trustee

Joshua Quigley, Bedford October 19, 2022, to July 1, 2024 NH Police Association

Donald M. Roy, Jr., North Hampton July 13, 2011, to July 13, 2025 NH School Boards Association

Educational Seminars for Board Members, as of October 17, 2023

Sponsor	Program	Description
(IFEBP) Int'l Foundation of Employee Benefit Plans www.ifebp.org	Trustees Institute Level I Core Concepts February 12-14, 2024 Orlando, FL	 Ideal for new Trustees to learn fiduciary responsibilities, and the technical aspects of serving as a Trustee. Topics include Trustee responsibility and legal environment, retirement plans, investing health and welfare pension assets, and governance.
	Trustees Institute Level II Concepts in Practice February 10-11, 2024 Orlando, FL * (Occurs prior to Advanced Trustees & Administrators Institute)	 Ideal for plan professionals, and for Trustees who've served 3 to 5 years and completed Level I: Core Concepts. Learn from industry experts on current events and reform initiatives. Network with peers facing similar challenges – share best practices, ideas, and solutions. Gain insight and garner resource materials to share with colleagues.
	Advanced Trustees & Administrators Institute February 12-14, 2024 Orlando, FL	Ideal for Trustees and plan administrators who've served two or more years and seek to network and learn about the latest industry issues and trends, attend sessions that include such topics as emerging benefit trends, economic update, investment hot topics, collecting employer contributions, legal and regulatory update, communication and social media, crisis management, artificial intelligence (AI), and cybersecurity.

(NACDA)		
(NASRA)	NASRA Winter Meeting	• Primarily for Executive
National Association of State Retirement Administrators	February 23-27, 2024 Washington, DC	Directors, but some Trustees attend.
www.nasra.org	wasnington, DC	Trustees attend.
www.nasra.org		 Discussions and
		presentations in the round
		and an overview of federal
		legislative and regulatory
		affairs.
(CII)	CII Spring Conference & 40th Anniversary	■ Agenda TBD.
Council of	Celebration	- Agenda TDD.
Institutional Investors	March 4-6, 2024	
www.cii.org	Washington, DC	
<u></u>	(Registration opens mid-December)	
	,	
(NCPERS)	2024 NCPERS Accredited Fiduciary (NAF)	 For Trustees with at least
National Conference on	& Trustee Educational Seminar (TEDS)*	five years of experience.
Public Employee Retirement	May 18-19, 2024	Trustee Education Seminar
Systems <u>www.ncpers.org</u>	Seattle, WA	(TEDS) is a pre-requisite.
	*(Runs concurrently with the Annual	- 17
	Conference & Exhibition (ACE), and	 Earn continuing education credits.
	registration opens in January)	credits.
	Modules 1 & 2, 3 & 4	 Strengthen knowledge of
	**Trustees who wish to earn their NCPERS	pensions and governance.
	Accredited Fiduciary (NAF) accreditation take	
	TEDS first.	 Topics include investing
		principles, understanding
		actuarial science, board
		policies and fundamental
		concepts.
	2024 Annual Conference & Exhibition	■ Good for new and
	(ACE)	experienced Trustees,
	May 19-22, 2024	administrators, public
	Seattle, WA	pension plan members,
		staff, local officials, and
		financial and union officers.
		The new Trustees session
		occurs immediately before
		the conference.
(NCTR)	NCTR's 24th Annual Trustee Workshop	■ Good for all Trustees, new
National Council on Teacher	July 14-17, 2024	and experienced.
Retirement	Berkeley, CA	
www.nctr.org		Workshop sessions.

NHRS Abbreviations and Acronyms

BENEFITS

ADR = Accidental Disability Retirement (job-related)

AFC = Average Final Compensation

COB = Compensation over base pay

COLAs = Cost of Living Adjustments

EDD = Electronic Direct Deposit

ESDP = Extra or Special Duty Pay

GI/GII = Group I (Employee, Teacher) / Group II (Police, Fire)

GO = Gainful Occupation

IME = Independent Medical Examiner/Examination

ODR = Ordinary Disability Retirement (non-job-related)

QDRO = Qualified Domestic Relations Order

Tier A = Members vested prior to 1/1/12

Tier B = Members in service prior to 7/1/11 but not vested prior to 1/1/12

Tier C = Members hired on or after 7/1/11

TPS = Treating Physician's Statement

TSA = Temporary Supplemental Allowance (a one-time retiree payment)

BUSINESS OPERATIONS/VENDORS

APs = Action Plans

DRAPP = Data Risk Assessment Project Plan

GRS = Gabriel, Roeder, Smith & Co (NHRS actuary)

KPMs = Key Performance Measures

LRS = Levi, Ray and Shoup, Inc. (PensionGold vendor)

PM = Plante Moran (NHRS external auditor)

PPM = Policy and Procedure Manager (database software system for NHRS

policies/procedures)

PIP = Process Improvement Program

GENERAL

ACFR = Annual Comprehensive Financial Report

AU = Audit

BOT = Board of Trustees

CAIR = Comprehensive Annual Investment Report

EE = Employee

ER = Employer

FA = Facilities

HB 2 = House Bill 2 (2011 version, which made major changes to NHRS benefits)

IIC = Independent Investment Committee

JLMC = Joint Loss Management Committee (a.k.a. Safety Committee)

MS = Member Services

NHRS = New Hampshire Retirement System

OPEB = Other Post-Employment Benefits (i.e. Medical Subsidy)

PIO = Public Information Office(r)

PPCC = Personnel, Performance and Compensation Committee

P. Sub (or "subs") = Political Subdivision (i.e. any NHRS employer other than the state)

RTK = Right to Know request

SAU = School Administrative Unit

SD = School District

UAAL = Unfunded Actuarial Accrued Liability

<u>IT</u>

CO-LO = Co-location site for backup servers

DRS = NHRS Data Reporting System (employer portal)

PG = Pension Gold (current pension application from LRS)

PGV3 = Pension Gold Version 3 project

LEGISLATIVE

ED&A = House (or Senate) Executive Departments and Administration Committee

HB = House Bill

ITL = Inexpedient to Legislate

JLCAR = Joint Legislative Committee on Administrative Rules

LOB = Legislative Office Building

LSR = Legislative Services Request (a request to draft a bill)

OTP = Ought to Pass

SB = Senate Bill

SH = State House

VV = Voice Vote

OTHER

BCCRR = Boston College Center for Retirement Research

COB = Close of Business

EOB = End of Business

GASB = Governmental Accounting Standards Board

G&C = Governor & Executive Council

JRP = Judicial Retirement Plan (not affiliated with NHRS)

November 2022

NASRA = National Association of State Retirement Administrators

NCPERS = National Council on Public Employee Retirement Systems

NCTR = National Council on Teachers Retirement

NIRS = National Institute for Retirement Security