

**Executive Summary of
New Hampshire Retirement System (NHRS)
Board of Trustees Meetings**

January 8, 2019, to March 12, 2019

At the January 8, 2019, regular monthly meeting of the NHRS Board of Trustees, the Board voted unanimously to accept the recommendation of the Audit Committee to approve the June 30, 2018, GASB 68 and 75 Report as presented, subject to receipt of an unmodified opinion letter from the external auditor.

The Board voted unanimously to accept the recommendation of the Audit Committee that the Board select Segal Consulting to perform a full scope actuarial audit of the June 30, 2017 valuation performed by GRS, the retirement system's independent actuary, subject to due diligence and successful contract negotiations.

The Board voted unanimously to accept the recommendation of the Governance Committee to approve the revised Governance Manual, as presented. As a result of an annual review, revisions were made to three Board policies, and to the Personnel, Performance and Compensation Committee Charter

The Board voted to accept the recommendation of the Governance Committee to renew the fiduciary insurance coverage for \$20 million with Hudson Insurance Company.

The Board unanimously voted to approve the proposed rule revisions to NH Code of Administrative Rules chapters Ret 200, 300, and 400, for final adoption.

At the February 12, 2019, regular monthly meeting, Director of Investments Larry Johansen reported that the Independent Investment Committee (IIC) is working with investment consultant NEPC on an asset-liability study and a liquidity analysis. In the coming months, the IIC will be working with NEPC to provide the Board with any suggested changes to the asset allocation targets and ranges.

The Board heard an update on the pension database upgrade project (PGV3), which kicked off with staff meetings on January 24. The PGV3 implementation team is working on project plan documents, all of which are on track to be approved by February 15.

The Board was updated on the possible transition to paperless Board meetings, noting that staff will review the two RFI responses. Legal staff is also in the process of reviewing and scoring the RFP responses for fiduciary, tax and benefit, and legislative counsel legal services.

At the March 12, 2019, regular monthly meeting, the Board voted unanimously to accept the recommendation of the Governance Committee that the Groom Law Group – the retirement system’s current service provider – be selected as outside legal counsel for fiduciary, tax and benefits, and legislative matters per the recent RFP for those legal services. The agreement is for a three-year term and provides NHRS with an option to extend the agreement for three additional one-year periods, at its discretion.

Director of Investments Larry Johansen updated the Board on the IIC’s ongoing review of asset allocation targets and ranges, which are looked at periodically as a best practice. In recent meetings, the IIC has conducted thorough reviews of the private equity portfolio, the public market portfolio and capital market assumptions, and an asset liability study and liquidity analysis. Mr. Johansen noted that he is not expecting any significant changes to the asset class targets, but there may be some adjustments within the asset classes and manager benchmarks.

The Board received an update on the ongoing series of system requirements meetings for the pension database upgrade project (PGV3), which are intended to identify the hundreds of features and processes NHRS would like to see programmed into the new system. The goal is to streamline workflow and increase efficiency.

Executive Director George Lagos reported that House Bill 2 includes proposed changes to the Judicial Retirement Plan (JRP), which could have implications with regard to retirement system expenses associated with providing administrative services to the JRP.

Additional details regarding actions and discussions of the NHRS Board of Trustees may be found in the archive of meeting minutes posted on www.nhrs.org. The direct link to this page is: <https://www.nhrs.org/about-nhrs/board-of-trustees/meeting-minutes>

NHRS Board of Trustees
Minutes-January 8, 2019

Note: These minutes from the January 8, 2019 Public Session were approved and executed at the February 12, 2019 Regular meeting of the Board of Trustees.

**Board of Trustees
January 8, 2019
Public Minutes**

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

Trustees: Richard Gustafson, Chair; Bill Dwyer, Sue Hannan, Bill Hart, Maureen Kelliher, Tim Lesko, Bob Maloney, Michael Milligan, Scott Myers, Don Roy, and George Walker. *Telephonically:* Christopher Coates. *Absent:* Melvin Friese.

Staff: George Lagos, *Executive Director*; Tim Crutchfield, Esq., *Chief Legal Counsel*; Nancy Miller, *Director of Member Services*; Larry Johansen, *Director of Investments*; Gerard Murphy, *Director of Finance*; Frank Clough, *IT Director*; Mark Cavanaugh, Esq., *Associate Counsel & Compliance Officer*; Diana Crichton, Esq., *Hearings Examiner*; Marty Karlon, *Public Information Officer*; Nancy Cone, *Internal Auditor*; Nina Calkins, *Process Improvement Manager*; Rosamond Cain, *Human Resources Manager*; and Margaret Astles, *Executive Assistant*.

Also attending: Jack Dianis, *Finance Consultant*.

Chair Gustafson called the January 8, 2019 regular meeting of the NHRS Board of Trustees to order at 10:38 a.m. Chair Gustafson welcomed Gerard Murphy, the new Director of Finance for NHRS and thanked Jack Dianis, for his work as Interim Director of Finance and assistance with Gerard's transition. Having established a quorum, Chair Gustafson called for a motion to accept the December 11, 2018 public Board of Trustees meeting minutes.

On a motion by Trustee Roy, seconded by Trustee Myers, the Board voted to approve the minutes, as presented. *Abstention:* Trustee Hannan.

Trustee Dwyer presented the Audit Committee update, recapping that morning's meeting. He began by noting that the Audit Issues Tracking Report reflects four open audit issues. The resolution of the QDRO Member Retirement Procedures item has been extended to March 2019. The other three audit issues relating to the Employer Contribution Reconciliation Audit

should be concluded when the remediation actions are put into effect. The Committee also reviewed the FY 2019 Internal Audit plan, noting that audits for Employer Hire and Separation procedures and System Access User Rights will likely be added to the Tracker in March 2019. Concerning the Data Security Response update, Mr. Dwyer noted that Nancy Cone, Internal Auditor, provided the Committee with a well-received status summary. He explained that staff continues to address the implementation of remediation measures and currently have achieved 61% completion. The Committee also reviewed a letter from Plante Moran as part of the CAFR audit, which identified opportunities for internal control improvements. He was happy to report that in several instances, the NHRS staff had already implemented recommendations, noted in Plante Moran's letter.

Mr. Dwyer reported on the draft GASB 68 & 75 Employer Allocation reports, which provide the allocation of both pension liabilities, as well as post-employment benefits expenses for participating employers. Mr. Dwyer explained that GASB 68 & 75 requires employers to identify these liabilities in their financial statements.

On a motion by Trustee Dwyer, seconded by Trustee Hannan, the Board unanimously accepted the recommendation of the Audit Committee to accept the June 30, 2018 GASB 68 & 75 Reports, as presented, subject to receipt of an unmodified opinion letter from Plante Moran.

Trustee Dwyer noted that the Audit Committee had considered and acted upon a recommendation from staff regarding a peer actuarial audit. This would be done by an independent actuary by performing a full scope actuarial review of the last valuation performed by GRS, as a matter of best practice. It is expected that the consulting firm chosen would complete its work in May or June 2019, with an estimated cost of \$70,000, not to exceed \$80,000.

On a motion by Trustee Dwyer, seconded by Trustee Myers, the Board unanimously voted to accept the recommendation of the Audit Committee that the Board select Segal Consulting to perform a full scope actuarial audit of the June 30, 2017 valuation performed by GRS, subject to due diligence and successful contract negotiations.

Executive Director George Lagos noted that the GRS contract expires at the end of next year. At that time, an RFP will be issued for these services. Replying to a question as to how often a peer actuarial audit would be done, Mr. Lagos suggested that an audit mid-way through the next actuary's contract would be appropriate.

Lastly, Trustee Dwyer noted that the Audit Committee received a draft of a new Data Risk Assessment Policy, which will also be provided to the Governance Committee for review. The expectation is that the Governance Committee will

consider it for recommendation to the full Board for approval at a future meeting.

Chairman Roy reported for the Governance Committee, stating that the Committee met on December 11, 2018. The first matter discussed was an update from Chief Legal Counsel Crutchfield on the issuance of an RFI to providers relating to the potential transition to paperless Board meetings. The Committee also discussed the annual Governance Manual review, with revisions to three Board policies, revisions to the PPCC Charter, and an annual update of certain information included in the Appendices and Exhibits.

On a motion by Trustee Roy, seconded by Trustee Lesko, the Board voted unanimously to accept the recommendation of the Governance Committee that the Board approve the revised Governance Manual, as presented.

Next, Trustee Roy reported that at its December 11, 2018 meeting, the Governance Committee voted unanimously to recommend to the full Board that it renew its fiduciary insurance coverage with the Hudson Insurance Company. Hudson had confirmed that it would renew, at the same terms of the expiring policy, for the next two years, with \$20 million in coverage, with a \$100,000 deductible, at an annual premium of \$123,000.

On a motion by Trustee Roy, seconded by Trustee Kelliher, the Board unanimously voted to accept the recommendation of the Governance Committee to renew its annual fiduciary insurance coverage for \$20 million with Hudson Insurance Company, as presented.

Lastly, Trustee Roy reported that at the Governance Committee meeting today, following the Board meeting, the Committee would be discussing the proposed draft Data Security Policy mentioned by Trustee Dwyer.

Trustee Kelliher provided a recap from the IIC's meeting of December 14, 2018. She noted that the Director of Investments reviewed the IIC's work plan and the IIC unanimously voted to renew the investment management agreements with mid-cap investment managers TSW and AllianceBernstein, through November 30, 2020. The IIC then reviewed the status of the Real Estate Investment Plan for FY 2019, as presented by the Townsend Group. Lastly, in that meeting, the IIC heard a presentation from NEPC on the performance of the private equity & private debt investments included in the NHRS portfolio. After the presentation, the IIC unanimously approved the private equity & private debt strategic plan for calendar year 2019.

Commenting on the market and economic conditions, Trustee Kelliher noted the last couple of months have been the most tumultuous market many had ever experienced and, after one of the worst Decembers on record in the stock market, it was welcomed to see cooler heads prevail last week. Two of the

largest factors driving the uncertain market at the end of 2018 were concerns over the Federal Reserve and its judgement regarding balance sheet reduction and 2019 interest rate increases. She noted that the Federal Reserve Chair recently quelled market jitters by clarifying that the Federal Reserve will be data-dependent regarding additional moves in 2019. More importantly, regarding the low point in Federal Reserve confidence levels, the employment report from January 4, 2019, was remarkable, showing strength and resolve that the Federal Reserve and the FOMC were justified in the decisions they made in December 2018.

Director of Investments Johansen reported on NEPC's Private Equity & Private Debt Portfolio review ending December 2018. He noted that fiscal year-end June 30, 2018 saw strong S&P 500 total return gains of 14.4% and the Barclay Aggregate Fixed Income saw a return of -0.4%. The Private Equity portfolio's FY '18 return was up 18.1% against the S&P return of 14.4% and continues to perform well. The Private Debt portfolio was up 6.5% relative to the Barclay Cap, down 40 basis points. He noted that the alternative program continues to add value relative to the public market results.

Mr. Johansen reviewed the Private Equity & Private Debt Executive Summary, highlighting the target asset allocation at 10.0%, the actual net asset value at 14.1% and the committed but unfunded at 11.0%. The Private Equity & Private Debt exposure of the net asset value, plus the unfunded, is at 25.6%. The trailing 5-year internal rate of return as of June 30, 2018 for the full program, was 11.4%. The return was hampered by the Legacy Program, down by -4.3%, but buoyed by the Restart Program, which was up 11.6%. The review for December 2018 shows the number of commitments made at 55, with 39 meeting expectations, 4 that are of concern, and 12 commitments that have had a year or less of operation.

In summary, NEPC's Private Equity & Private Debt Strategic Plan for CY 2019 recommends that NHRS consider making \$300-\$400 million of new commitments per calendar year for the next several years. Roughly, \$365 million of commitments have already been made for CY 2019. In closing, Mr. Johansen noted that the portfolio is doing extremely well.

Trustee Myers reported on the Legislative Committee meeting held prior to the Board meeting on January 8, 2019. Public Information Officer Karlon reported on the latest list of LSRs and noted that after the Board meeting, he, the Director of Investments and the Executive Director would be making an informational presentation to the House Executive Departments and Administration Committee (ED&A) on the retirement system.

Executive Director Lagos noted that at today's presentation, he wanted to make sure that the ED&A Committee, especially the new legislators, were aware of three important points: 1) NHRS provides a modest benefit to its members;

2) the actual cost of that benefit is modest and represents only about 20% of the total cost that employers pay into the system; and 3) that the key is not really where NHRS is in terms of its funded liability, but rather where NHRS is going. Mr. Lagos wanted to make clear that NHRS has a plan in place that it is executing and the existing fund deficit is being amortized and will be paid down by 2039.

Trustee Walker reported that the Benefits Committee did not meet in December, but Board action is expected at today's meeting to approve the proposed rule revisions to Chapters Ret 200, 300, and 400, for final adoption.

Associate Counsel and Compliance Officer Cavanaugh explained that the final adoption of the rule revisions would be the end of the process. Upon approval by the Board, the rule revisions to all three chapters would be filed today and become effective at midnight. Mr. Cavanaugh noted that the process went very well with the Office of Legislative Services (OLS) and JLCAR accepted all substantive revisions that were recommended. He noted that NHRS will not have to re-adopt rules Ret 200, 300, and 400, for another 10 years.

On a motion by Trustee Roy, seconded by Trustee Walker, the Board unanimously voted to approve the proposed rule revisions to chapters Ret 200, 300, and 400, for final adoption.

Trustee Roy inquired if the rule revisions would be difficult to implement. Chair Gustafson replied that the adoption of the rule revisions aligns with the rules that were previously in place, but had expired.

Trustee Hart reported on the PPCC meeting held on January 2, 2018, noting that the Committee had entered into non-public session to discuss personnel matters. Upon reconvening in open session, the PPCC discussed the Executive Director evaluation. Trustee Hart explained the ED evaluation process to the Trustees. He and Chair Gustafson asked all Trustees to participate in the evaluation, answering to the best of their ability, even though many of the Trustees are newly appointed. Trustees were requested to return the evaluations to NHRS on or before Friday, January 18. Lastly, he asked that the Board enter into a temporary adjournment to discuss the collective bargaining strategies or negotiations.

On a motion by Trustee Hart, seconded by Trustee Milligan, the Board unanimously voted to temporarily adjourn the meeting, for the purpose of discussing collective bargaining strategies or negotiations, under RSA 91-A:2, I(a).

On a motion by Trustee Myers, seconded by Trustee Dwyer, the Board unanimously voted to reconvene the Board meeting.

Executive Director Lagos provided his operating report, noting that Key Performance Measures scored 97.75% for the month. He noted that the PG-V3 kick-off date would be January 24, 2019.

Concerning his telephone survey results, Executive Director Lagos noted that he has now spoken with 999 members and retirees on his weekly calls, as of December 31, 2018. His telephone survey response rate is very favorable, with 91% positive, 8% neutral, and 1% negative.

Lastly, Executive Director Lagos reported that given the ongoing challenges of maintaining the security of our systems, it would be beneficial to hire an IT Security Officer (ISSO), given the security threats that are, unfortunately, part of the day-to-day business activities.

Chief Legal Counsel Crutchfield gave his legal update, noting that Attorney Crichton revised the format on the monthly appeals report, hopefully, making it easier to read. He then thanked the Trustees for submitting their annual Statement of Financial Interests forms, by the January 18, 2019 due date.

Mr. Crutchfield noted that responses for the legal RFP for fiduciary, tax and benefits counsel are due by January 18, 2019. The RFI for the transition to paperless Board meetings was issued on January 4, 2019, to five providers, based on information provided by several different retirement plans, and a survey of the NHRS Trustees.

Jack Dianis reported on behalf of Finance, thanking the Board for its contingent acceptance on the GASB 68 & 75 report, which will enable Finance to provide the reports to employers so they can complete their financial statements.

Mr. Dianis reviewed and explained the net position, the cash flow report of contributions, benefits and investment income, and the budget-to-actual report. Lastly, he noted that now that the audit is complete, Finance is focusing on internal projects that will continue to be outlined in the monthly FY 2019 Action Plan Summary.

Chair Gustafson, thanked Mr. Dianis and Heather Fritzky, the Assistant Director of Finance and Controller, for their continued work and support to NHRS, and their willingness to assist new Director of Finance, Gerard Murphy, with his transition.

IT Director Clough presented his report, and noted that the IT Disaster Recovery plan has been completed. The next step is to develop a plan to test and validate the Plan.

Concerning email redundancy, Director Clough explained that a second email server at our co-location in Massachusetts will afford protection, and if one email server goes down, emails will be transferred to the second server.

Director of Member Services Nancy Miller reported on July retirements, noting that because of the new forms, new process, and the education programs, which PIO coordinated, all of the July employer retiree termination forms have been received by NHRS. By the end of January 2019, 714 termination forms out of 743 would be processed.

Concerning recruiting, Ms. Miller reported that a new Member Services Manager was starting at the end of the week and a third-round candidate for the Benefit Coordinator position was being interviewed. She remarked that the timing could not be better, with the upcoming PG-V3 kick-off.

Ms. Miller noted that Member Services did not make the KPM, relating to member refunds due. There should be a correlation between employer file reconciliations and member refunds, but there is currently a 30-day timing difference between the two functions. She expects that since this problem was identified, a resolution will come about shortly.

On a motion by Trustee Hart, seconded by Trustee Roy, the Board unanimously voted to approve the consent agenda, with the exception of disability application recommendation #6-R.T.

On a motion by Trustee Dwyer, seconded by Trustee Hart, the Board voted unanimously on a roll-call vote to enter into non-public session, under RSA 91-A:3 II(c) to discuss a disability application.

On a motion by Trustee Dwyer, seconded by Trustee Lesko, the Board voted unanimously to conclude the non-public session.

In public session, on a motion by Trustee Dwyer, seconded by Trustee Myers, the Board voted unanimously to approve the disability application recommendation of #6-R.T.

Executive Director Lagos noted that the Action Items from the December 11, 2018 meeting have either been completed or are underway.

On a motion by Trustee Walker, seconded by Trustee Hannan, the Board voted unanimously to adjourn.

Respectfully submitted,

Margaret M. Astles
Executive Assistant

NHRS Board of Trustees
Minutes-February 12, 2019

Note: These minutes from the February 12, 2019 Public Session were approved and executed at the March 12, 2019 regular meeting of the Board of Trustees.

**Board of Trustees
February 12, 2019
Public Minutes**

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

Trustees: Richard Gustafson, Chair; Bill Dwyer, Bill Hart, Maureen Kelliher, Tim Lesko, Bob Maloney, Michael Milligan, Scott Myers, and George Walker. *Telephonically:* Christopher Coates. *Absent:* Trustees Melvin Friese, Sue Hannan, and Don Roy.

Staff: George Lagos, *Executive Director*; Tim Crutchfield, Esq., *Chief Legal Counsel*; Nancy Miller, *Director of Member Services*; Larry Johansen, *Director of Investments*; Gerard Murphy, *Director of Finance*; Frank Clough, *IT Director*; Mark Cavanaugh, Esq., *Associate Counsel & Compliance Officer*; Diana Crichton, Esq., *Hearings Examiner*; Marty Karlon, *Public Information Officer*; Nancy Cone, *Internal Auditor*; Nina Calkins, *Process Improvement Manager*; Rosamond Cain, *Human Resources Manager*; Cecile Merrill, *Project Manager*; Deb Tasker, *Member Services Manager*; and Margaret Astles, *Executive Assistant*.

Chair Gustafson called the February 12, 2019 regular meeting of the NHRS Board of Trustees to order at 10:31 a.m. Having established a quorum, Chair Gustafson called for a motion to approve the January 8, 2019 public Board of Trustees meeting minutes.

On a motion by Trustee Dwyer, seconded by Trustee Kelliher, the Board unanimously voted to approve the minutes, as presented.

Trustee Dwyer presented the Audit Committee update, recapping that morning's meeting. He began by noting that the Committee had an opportunity to review Nancy Cone's most recently completed audit of IT's role in documenting new hires to the System, as well as disabling access for employees who have left NHRS. Trustee Dwyer commented that the audit showed that the process is well managed and thorough, with no remediation required and, as a result, this audit will not appear on the Audit Tracker.

Mr. Dwyer noted that this month's Audit Tracker has four items remaining and it is expected that all four will be remediated in March.

The Audit Committee reviewed the 2019 Audit Plan. The next item to be addressed relates to System User Access Rights, and preliminary work on this audit has begun. The Committee also reviewed the status of the Data Security Remediation efforts and Trustee Dwyer reported that 64% of the identified items are complete. It is expected that eight or nine more of the remaining items will be resolved in March.

Trustee Dwyer reported that most of the process enhancement recommendations provided by Plante Moran have been addressed. Lastly, he noted that the Committee has received an update from Gerard Murphy, Director of Finance, on the actuarial audit of GRS by Segal. Segal and GRS have been exchanging information and a draft report from Segal is expected in late April.

Chair Gustafson reporting for Trustee Roy of the Governance Committee noted that the Committee last met on January 8th and discussed the RFI, which was issued to five providers for paperless Board meetings. Legal staff will review the two responses received.

He also noted that the Governance Committee discussed the adoption of a Data Security Policy, as recommended in the Data Risk Assessment Project Plan.

Trustee Kelliher reported that the Independent Investment Committee (IIC) met on January 25th. Investment returns were reviewed, and a work plan was approved for the 4th quarter. The IIC heard from Megan Greene of Manulife on global macroeconomic topics, and NEPC provided a presentation on Capital Market Assumptions. The IIC also reviewed and discussed the structure of the Public Markets portfolio.

Trustee Kelliher noted that after the capital markets bottomed on December 24, 2018, the markets have rebounded and have done exceptionally well. Since the beginning of the calendar year, the S&P 500 is up more than 8%, and international markets are trailing a bit but still in a positive position, with continuing improvement.

Director of Investments Larry Johansen reported that performance for the fiscal year to date was down -4.3% as of 12/31/18, but noted that S&P 500 is presently up over 8%, non-US equity is up over 7%, and Fixed Income is up over 1%. He then reported on positive news regarding the Plan's rankings relative to peers. For the fiscal year to date through 12/31/18, NHRS ranks in the top quartile; and for 1-, 3-, 5- and 10-year time periods, NHRS ranks in the top decile and ahead of 85% of NHRS' peers for 20 and 25 years.

Mr. Johansen reported that the first calendar quarter for the IIC would be very busy because they are working with NEPC on an asset liability study and a liquidity analysis, with the preliminary results being very positive. In March, the IIC will be working with NEPC to provide any suggested changes to the asset allocation targets and ranges. Mr. Johansen noted that he is not expecting any changes at the asset class level, although the IIC may make adjustments below the asset class level.

Trustee Myers provided the Legislative Committee report, highlighting the February 7th Legislative Committee meeting, and noting that Public Information Officer Marty Karlon gave the Committee the latest update on the Legislative Tracker as of February 5th. Trustee Myers commented on several bills relative to NHRS, including HB 110, HB 116, HB 497, HB 616, HB 675, and SB 28.

Mr. Karlon added that the House Executive Departments and Administration Committee scheduled Executive Sessions this week on HB 418, HB 616, HB 629, and HB 675. He reported that the Senate is scheduled to vote on SB 28, the IIC composition bill, on February 14th, and that the House will be voting on HB 110, HB 116, and HB 497 the same day.

Trustee Walker reported on the February 8th Benefits Committee meeting. During public session, the Committee received an update from Attorney Crutchfield on the status of the salary continuance review process. This discussion stemmed from the Scaglione matter that the Board considered in November 2018. Attorney Crutchfield noted that staff was able to create a search of imaged records through Pension Gold for any member for whom a salary continuance form had been submitted, since the law changed effective July 1, 2014. That search identified 1,128 such records. Staff is now auditing the accuracy of those imaged data records to determine possible next steps.

Next, Trustee Walker reported that in non-public session, the Benefits Committee had reviewed two disability re-examination situations and a recoupment matter.

Once back in public session, the Benefits Committee voted unanimously to recommend to the full Board that it waive any further re-examinations for J.M. and M.C.

On a motion by Trustee Walker, seconded by Trustee Hart, the Board unanimously voted to enter into non-public session, under RSA 91-A:3, II(c), to discuss both a disability matter, under the Benefits Committee report, and a personnel matter, under review by the PPCC. A roll call vote was taken.

On a motion by Trustee Walker, seconded by Trustee Hart, the Board unanimously voted to conclude the non-public session.

No action was taken during the non-public session.

On a motion by Trustee Walker, seconded by Trustee Hart, the Board unanimously voted to accept the Benefits Committee's recommendation to waive any further re-examinations for J.M. and M.C.

Trustee Hart reported on the PPCC meeting held February 5th, noting that the primary discussion regarded the Executive Director's annual performance evaluation. In addition, the PPCC received an update on PGV3 staffing.

Executive Director Lagos gave his Executive Report, noting that staff scored 95.50% on key performance measures this past month. He also noted that staff and the Board are about to develop the 3-year rolling strategic plan for Fiscal Year 2020 and beyond. At the next Board meeting, he will present the "Preserve, Achieve, and Avoid" exercise, which categorizes actions or activities that NHRS wishes to continue; those it wishes to achieve; and those that NHRS wishes to avoid.

Executive Director Lagos then turned the Board's attention to the quarterly report for NHRS' Member Satisfaction Survey Summary and noted that the summary provides a high-level overview of survey results for Member Services. NHRS strives to meet a goal of 95%, and Mr. Lagos added that NHRS staff excels in its personal interactions with members and retirees.

Project Manager Cecile Merrill, reported the PGV3 Project kick-off meeting was held on January 24th in two sessions, so that all staff could attend. LRS and LRWL were on site and multiple LRS representatives presented the different phases of the project for staff.

Ms. Merrill reported that currently, the PGV3 Team is working on project plan documents and that out of seven, five were approved, and two are under review, with the expectation of having those approved by February 15th.

Ms. Merrill reported that the PGV3 team is still in the interview process for the System Business Analyst, with one candidate moving to the next level. The Data Conversion project has one issue remaining. LRS is running a script to fix a portion of the records, and is researching the remaining records to determine the next steps.

Ms. Merrill reported that the first round of the Requirements Definition Process meetings would be scheduled from February 19th to February 22nd, with LRS and LRWL on site.

Lastly, she reported on change management, noting that a PGV3 display board with updated information has been created and is located in a common staff area. In addition, PGV3 updates will be distributed to staff on a weekly basis.

Executive Director Lagos added that the utilization of LRWL, who is NHRS' outsourced and part-time project management partner, is working out very well so far. LRWL is very experienced and has worked with LRS on multiple implementations, which has proven beneficial in the early phases of the project.

Chief Legal Counsel Tim Crutchfield reported further on the possible transition to paperless Board meetings, noting that staff will review the two RFI responses. Legal staff is also in the process of reviewing and scoring the responses for fiduciary, tax and benefit, and legislative counsel.

Director of Finance Gerard Murphy reported that the actuarial peer audit is in full swing, with weekly status update calls from Segal. As of February 11th, the audit is on schedule for a final report expected at the May or June Board meeting.

Mr. Murphy replied to questions regarding how Segal will audit GRS' work. He noted that Segal will take data, provided by NHRS, and re-calculate it since GRS would have calculated it, to ensure that the calculations are sound and the assumptions are reasonable.

Mr. Murphy noted that on January 25th, the System's 1099-R forms were sent to retirees and Finance and Member Services have been busy fielding phone questions on those forms.

Mr. Murphy reviewed this month's financial report, noting that it is the first time that expenses associated with the PGV3 project are shown in the monthly Budget vs Actual analysis.

Director of IT Frank Clough reported that for quite a few years NHRS has been using a product called File Upload, which is how the Board received its electronic meeting materials each month. Recently, IT received word that File Upload has reached its end-of-life and was flagged with a number of vulnerabilities. NHRS is now moving to Citrix Fileshare, which will be deployed later in the week. Instructions on how to use the product will be provided to all Trustees, and staff will be prepared to assist with any issues, which may arise.

A new Information Systems Security Officer (ISSO) has recently been hired. One of the ISSO's first duties will be to remediate the Security Audit findings, which scans all systems within NHRS. The first priority from that audit will be to resolve and remediate all critical findings. Executive Director Lagos noted that he is very pleased with the new hire, noting the importance of directing additional resources to system security issues.

Lastly, Mr. Clough reported on improving email redundancy by having back-up capability at our COLA site, if anything should happen to our email server within the building.

Member Services Director Nancy Miller reported on the remaining July 2018 retirements, noting that out of the 743 retirements to process for that month, only 14 still need to be finalized. The key to this year's improvement for this process is that Member Services had received most of the termination forms from employers in a much more timely manner.

The filing period for July 2019 retirements has begun with Member Services staff filling appointment slots, starting in April.

Concerning PGV3 staffing, Ms. Miller noted that Deb Tasker has been hired as the Member Services Manager and there are ongoing efforts to backfill a benefits coordinator position, prior to the July filing period.

On a motion by Trustee Myers, seconded by Trustee Dwyer, the Board unanimously voted to approve the Consent Agenda, as presented.

Executive Director Lagos reported that the Action Items from the January 8, 2019 meeting are moving along well.

With no further business to discuss, on a motion by Trustee Milligan, seconded by Trustee Hart, the Board unanimously voted to adjourn.

Respectfully submitted,

Margaret M. Astles
Executive Assistant

Note: These minutes from the March 12, 2019 Public Session are subject to approval at a subsequent regular meeting of the Board of Trustees.

Board of Trustees
March 12, 2019
Draft Public Minutes

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

Trustees: Richard Gustafson, Chair; Bill Dwyer, Melvin Friese, Sue Hannan, Bill Hart, Tim Lesko, Bob Maloney, Michael Milligan, Scott Myers, Don Roy, and George Walker. *Absent:* Trustees Christopher Coates and Maureen Kelliher.

Staff: George Lagos, *Executive Director*; Tim Crutchfield, Esq., *Chief Legal Counsel*; Nancy Miller, *Director of Member Services*; Larry Johansen, *Director of Investments*; Gerard Murphy, *Director of Finance*; Frank Clough, *IT Director*; Mark Cavanaugh, Esq., *Associate Counsel & Compliance Officer*; Diana Crichton, Esq., *Hearings Examiner*; Marty Karlon, *Public Information Officer*; Nancy Cone, *Internal Auditor*; Nina Calkins, *Process Improvement Manager*; Rosamond Cain, *Human Resources Manager*; Cecile Merrill, *Project Manager*; Tracy Knight, *Sr. IT Business Analyst*; Tracey Horner, *Member Services Benefits Manager*; and Margaret Astles, *Executive Assistant*.

Chair Gustafson called the March 12, 2019 regular meeting of the NHRS Board of Trustees to order at 10:04 a.m. Having established a quorum, Chair Gustafson called for a motion to approve the February 12, 2019 public Board of Trustees meeting minutes.

On a motion by Trustee Myers, seconded by Trustee Lesko, the Board voted to approve the minutes, as amended. *Abstentions:* Trustees Friese, Hannan, and Roy.

Trustee Maloney complimented the NHRS staff for getting the 1099-R forms out so quickly.

Trustee Dwyer presented the Audit Committee update, recapping that morning's meeting. He began by noting that the audit tracker is still carrying four items, one related to QDRO and three employer contribution reconciliation items, which he expects will be completed by the end of March. He noted that the next audit will review System User Access Rights and will be included in the May audit tracker.

Trustee Dwyer noted that the Committee reviewed the status of the Data Security Remediation update and stated that 67% of the identified items have been

completed. He reported that 14 of the 16 process enhancement recommendations provided by Plante Moran have been addressed. The two remaining recommendations need to be reviewed with Plante Moran. Lastly, he noted that the Committee received an update on the pending Actuarial Audit. Segal has received all of the information that they requested from GRS and the expectation is that Segal will provide a draft report to NHRS in either late April or early May.

Trustee Roy reported on the recent activities of the Governance Committee, noting that it met on February 12 and March 7. At the February 12 meeting, the Committee unanimously voted to recommend to the Board of Trustees that it adopt the Data Security Policy.

On a motion by Trustee Roy, seconded by Trustee Hart, the Board voted unanimously to accept the recommendation of the Governance Committee to adopt the Data Security Policy, as presented.

Trustee Roy explained that at the March 7 Governance Committee meeting, it voted unanimously to recommend to the Board of Trustees to engage Groom Law Group based on the RFP evaluation undertaken by staff.

Chief Legal Counsel Crutchfield explained that pursuant to the RFP, firm responses were weighted 2/3 for technical responses and 1/3 for fees. Staff involved in the scoring unanimously selected Groom as their first choice. Another key factor in staff's decision to recommend Groom was that since 2009, Groom has had intimate knowledge of RSA 100-A, as well as the reasoning and history of multiple revisions to the statute over the past 10 years. This knowledge has led to time efficiencies and expense reductions.

Chair Gustafson directed the Board's attention to Mr. Crutchfield's February 28, 2019 memo, outlining the downtrend in legal expense over time. He also noted that the staff has been very satisfied with the quality of Groom's legal work, responsiveness and commitment to assisting with Trustee education.

On a motion by Trustee Roy, seconded by Trustee Dwyer, the Board voted unanimously to accept the recommendation of the Governance Committee that the Board select Groom Law Group as outside legal counsel for fiduciary, tax and benefits, and legislative matters per the recent legal RFP for those services, as presented. The engagement period under the RFP will be for a three-year term, following the expiration of the current agreement in May. NHRS will retain the option to unilaterally extend the agreement for three additional periods, not to exceed one year at a time.

Chair Gustafson reported on the Board Self-Evaluation Policy adopted at the June 12, 2018 Board meeting. He encouraged the Board members to complete and return the *Overall Board Evaluation* form to assess Board function and effectiveness. Executive Director Lagos noted that the *Self-Evaluation* section is for the Trustees' personal use and is not intended to be returned to the Board.

Trustee Roy gave the Board an update on the progress made on the due diligence on possibly moving to paperless Board meetings. He reported that two presentations have been made to staff by respondents to the RFI, Convene and Diligent.

Director of Investments Larry Johansen gave the Board an economic update in Trustee Kelliher's absence. He reported that new jobs in January were expected to be up 180,000 jobs but only 20,000 jobs were realized. Unemployment came in at 3.8%, with 3.9% expected. CPI came in with the year-over-year up 1.5%, as compared to the expected 1.6%. He noted that Federal Reserve Chairman Powell's recent speech indicated that the economy continues to grow, although more slowly. There are concerns about the economies slowing down in China and Europe, but none of the economists have indicated expectations for a recession in this calendar year.

Mr. Johansen recapped the February IIC meeting, noting that non-US small-cap equity manager Segall Bryant & Hamill and global fixed income manager Manulife gave presentations in conjunction with the two-year contract renewal process. AbelNoser presented an analysis of the System's equity trading costs for calendar year 2018, with all categories reflecting lower-than-average costs. NEPC presented the results of its Asset/Liability study and Liquidity Analysis. A brief summary indicated that nearly 75% of its assets maintain monthly or better liquidity. In the event of a significant market turndown, NHRS would have ample assets to meet benefit payments.

At the March IIC meeting, global equity manager Walter Scott will make a presentation in conjunction with a two-year contract renewal process. The IIC will spend significant time with NEPC discussing asset allocation targets and ranges. Mr. Johansen noted that he is not expecting any significant changes to the asset class targets, but there may be some changes within the asset classes and manager benchmarks. The IIC has been very busy over the last few months. In December, a thorough review with NEPC occurred for the private portfolio and, in January, a thorough review was conducted of the public market portfolio and NEPC's capital market assumptions. In February, a significant amount of time was spent reviewing the asset liability study and liquidity analysis, and March will culminate with decisions regarding asset class targets and ranges.

In reply to a Trustee's question regarding Board member attendance at the NEPC Conference in Boston on May 7-8, Mr. Johansen replied that Trustees are welcome to attend, and he would provide attendee information to Mr. Lagos to be circulated in the weekly Board Update.

Chair Gustafson called the Board's attention to Page 2 of the NEPC's Comparative Performance and Fee Analysis. The analysis reflects that NHRS has done very well in terms of both investment and administrative expense management, as compared to peer pension systems.

Trustee Myers reported on the Legislative Committee, highlighting the noteworthy bills in the 2019 Legislative Tracker. He reviewed the status of each bill, noting that HB 629, establishing a defined contribution state retirement plan for new members of the retirement system who begin service on or after July 1, 2019, was deemed inexpedient to legislate. He also noted that SB 28, as amended, which adds an active NHRS member, appointed from a list of nominations provided by public employee labor organizations, to the NHRS's Independent Investment Committee as a non-voting member, was passed by the Senate, and will move to the House.

Mr. Lagos mentioned that HB 2 includes proposed changes to the Judicial Retirement Plan (JRP), which could have implications with regard to retirement system expenses associated with providing administrative services to the JRP. An internal meeting is planned later in the week to discuss this further.

Trustee Walker reported for the Benefits Committee, noting that there was no meeting in March but a meeting is expected before the April Board meeting.

Trustee Hart reported that following the last Board meeting, he and Chair Gustafson met with Executive Director Lagos to review the recently completed Executive Director Performance Evaluation, and to discuss strategic goals that will be integrated into the Strategic Planning process. A "non-meeting" to discuss the collective bargaining strategy was held on March 7. Trustee Hart requested that the Board temporarily adjourn to discuss collective bargaining.

On a motion by Trustee Hart, seconded by Trustee Milligan, the Board voted unanimously to temporarily adjourn the meeting for the purpose of discussing collective bargaining strategy or negotiations under RSA 91-A:2, I(a).

On a motion by Trustee Hart, seconded by Trustee Lesko, the Board voted unanimously to reconvene the Board meeting.

Director of Member Services Nancy Miller, along with Public Information Officer Marty Karlon, began the Trustee Education session on the "Retirement Application Process." Ms. Miller and Mr. Karlon gave the Board an overview of benefits, planning for retirement, required documentation, timeframes and the options available to members, with respect to filing for retirement. Ms. Miller and Mr. Karlon then fielded questions from the Trustees.

Executive Director Lagos remarked that the Member Benefit Specialists on the Member Services Team are doing an outstanding job and noted that NHRS consistently receives positive feedback from the members and beneficiaries on a regular basis.

Mr. Lagos reported on the annual update to the 2020 Strategic Planning Process. This plan is the basis for creating action plans for the next fiscal year for each NHRS operating area. He then explained the "Preserve, Achieve and Avoid" (PAA) exercise, which identifies functions and activities that are positive contributors to the NHRS

mission; additional opportunities or initiatives not yet being realized; and situations or circumstances that are perceived as detrimental and ought to be mitigated or eliminated.

Mr. Lagos provided the Board with a draft of the preliminary FY 2020 NHRS Three-Year Strategic Plan, which incorporated the objectives identified by the Trustees as a part of the Executive Director Performance Evaluation Process. Mr. Lagos noted that the Board would again be discussing Strategic Planning at the April meeting, and the final plan would likely be adopted at the May meeting.

Mr. Lagos reported on the Executive Operating Report, noting that Key Performance Measures (KPMs) scored 95.51% this month. A Plante Moran recommendation, with regard to medical subsidies and the way employers provide their rate changes on their insurance programs to NHRS, is still under review. A conference call is being scheduled with Plante Moran to discuss possible corrective measures.

The PGV3 Project is underway, with meetings held in February to develop requirements. NHRS hired a new IT Senior Business Analyst, Tracey Knight.

The Data Risk Assessment or (DRAPP) remediation effort is now 67% complete. Most of the remaining issues will be resolved in the near term, but those items requiring system solutions will take additional time, as will issues related to vendor contracts.

Mr. Lagos reported on the monthly Telephone Survey Results, noting that he has now personally spoken to 1,035 members about their experiences with NHRS. He commented that these calls have been valuable in providing insight into issues important to our members and beneficiaries.

Lastly, Mr. Lagos reported on the System's Policies & Procedures database, which now houses over 100 system policies, 150 procedures, and over 100 contracts, and other important documents.

Project Manager Cecile Merrill gave the Board an update on the PGV3 project. She reported that all seven of the project planning documents are complete, approved, and posted for staff to review. The Project Team has had two requirement gathering sessions with LRS, and reviewed a total of 491 requirements of which 20 are being held for further discussion; 35 requirements have been removed; 20 requirements have been added; and 13 requirements are out of scope. The 35 data conversion issues, which had been identified have been addressed. Ms. Merrill noted that the Team would now focus on data cleansing. LRS and LRWL will be on site next week for another requirements gathering session, looking at about 188 requirements. Ms. Merrill noted that the project is on schedule and all is going well.

Chief Legal Counsel Tim Crutchfield gave the Legal report, noting that Hearing Examiner Diana Crichton continues to do a good job managing pending appeals,

either administrative or disability, and has handled timely scheduling of all pre-hearings and hearings. Regarding gainful occupation (GO), March is the month that requests are sent out for those receiving disability retirement benefits, asking them to report any annual earnings they may have had. In October, the Board will receive the annual GO report, which includes benefit adjustments to be made for the next calendar year.

Mr. Crutchfield continued that during the past month, the Legal Department has worked on a variety of issues such as the Legal RFP, the RFI for the paperless Board meetings, and reviewing eligibility for earnable compensation and/or service credit. Legal meets with Member Services every two weeks to discuss pending issues which may lead to administrative appeals.

Director of Finance Gerard Murphy reported that on February 26, staff held an employer training session for municipal and county employers which was fully subscribed. The first session was on Employer Audits and the second session was on Employer reporting and the reconciliation process. The feedback on the sessions was very positive. Another session is planned for later in the year for school districts. Mr. Murphy directed the Board's attention to pages 4 and 5 of the Investment & Non-Investment Administrative Expenses – Budget vs. Actual. He explained that the negative expense variances shown for actuarial fees, audit fees, and insurance expenses are all attributable to timing differences. He further explained that another variance in audit fees is anticipated due to GASB 75 audit work, which was not included in the Plante Moran contract and had to be completed by KPMG.

Mr. Murphy noted that the KPM that Finance missed this month was due to a penalty notification to one employer which was late by one day.

Director of IT Frank Clough referred to a chart indicating the number of system outages reported from 2014 to 2018. The chart reflects a significant and consistent reduction in outages each year from 2014 through 2018 due in part to updated hardware, extended software support and the efforts of the IT staff. This measure evidences the improved effectiveness of the IT operation.

Mr. Clough reported on the Nessus security audit being done by David Crepeault, our recently hired IT Security Officer (ISSO). This audit involves a scan of all devices on our network infrastructure or anything that is plugged in.

Mr. Clough went on to note that we now have a second email server at the Massachusetts COLO site to provide redundancy. If one email server goes down, the other will take over.

Executive Director Lagos noted that NHRS received an alert earlier in the week from the FBI that there have been increased efforts to gain unauthorized access to participant and member accounts of pension systems, 401Ks, and other benefit related entities. A notice was provided to staff with a number of recommendations.

Director of Member Services Nancy Miller reported that staffing is still a priority with ongoing efforts to fill the Benefit Coordinator position, the newly created Clerk position and the Member Accounts Manager position, which had been recently vacated. She noted that Member Services did not meet the KPM for interest posting due to a decision to purposely delay the posting of all interest in all accounts until some corrections were made to individual files.

On a motion by Trustee Myers, seconded by Trustee Hart, the Board voted to approve the Consent Agenda as presented. *Abstentions:* Chair Gustafson for Consent Agenda item #4-M.P.

Executive Director Lagos reported that Action Items from the February 12 Board meeting are being addressed.

Mr. Lagos mentioned that staff has discussed the creation of an ad hoc sub-committee of the Board, to attend abbreviated presentations by Convene and Diligent with respect to their paperless Board book capabilities. Trustees Hart, Walker, Roy and Maloney expressed interest in participating on the sub-committee.

Mr. Lagos noted that at next month's Trustee Educational Session, there would be a presentation on the disability retirement process.

Trustee Myers asked if the NHRS facility has a back-up generator power source, if a power outage occurred. Mr. Lagos directed the question to Mr. Clough, who replied that NHRS does have a generator that will keep the power going in the Granite State Conference Room, and that it also supports IT systems and IT staff computers.

With no further business to discuss, on a motion by Trustee Hannan, seconded by Trustee Hart, the Board unanimously voted to adjourn the meeting.

Respectfully submitted,

Margaret M. Astles
Executive Assistant

INVESTMENT HIGHLIGHTS

	Market Value (\$)	% of Portfolio	3 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Total Fund Composite	8,341,621,928	100.0	-6.2	-4.3	-2.3	7.1	5.5	9.2
<i>Total Fund Custom Index*</i>			-5.4	-2.5	-1.8	6.9	6.1	9.4
Total Domestic Equity	2,154,812,450	25.8	-15.5	-10.6	-7.1	8.1	6.8	12.6
<i>US Equity Index*</i>			-13.5	-6.9	-4.4	9.3	8.4	13.5
Total Non US Equity	1,469,580,093	17.6	-11.7	-10.9	-14.2	4.6	1.0	7.3
<i>Total Non-US Equity Index*</i>			-11.5	-10.8	-14.2	4.5	0.7	6.6
Total Fixed Income	1,999,663,098	24.0	-0.3	-0.1	-1.5	3.5	2.6	5.3
<i>Total Fixed Income Benchmark*</i>			1.2	1.4	-0.3	2.6	2.7	4.1
Total Cash	398,615,751	4.8	0.6	1.1	1.9	1.2	0.7	0.4
<i>91 Day T-Bills</i>			0.5	1.0	1.9	1.0	0.6	0.4
Total Real Estate**	795,214,087	9.5	1.4	1.4	9.6	10.5	12.1	5.9
<i>Real Estate Blended Benchmark*</i>			1.9	3.7	7.7	7.8	9.9	6.9
Total Alternative Assets**	1,523,717,514	18.3	2.4	2.4	10.4	9.4	8.0	4.7
<i>Alternative Assets Blended Benchmark*</i>			4.1	6.4	11.2	10.7	12.8	11.9

* In a dynamic market, strategies and objectives evolve over time. Consequently, these benchmarks are blended due to historical investment strategy decisions. Detailed descriptions of the benchmarks above are available by contacting NHRS.

** Performance returns for the Total Real Estate and Total Alternative Assets composites and their respective benchmarks are lagged one quarter.



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- The client's custodian bank is NEPC's preferred data source unless otherwise directed. NEPC generally reconciles custodian data to manager data. If the custodian cannot provide accurate data, manager data may be used.
- Trailing time period returns are determined by geometrically linking the holding period returns, from the first full month after inception to the report date. Rates of return are annualized when the time period is longer than a year. Performance is presented gross and/or net of manager fees as indicated on each page.
- For managers funded in the middle of a month, the "since inception" return will start with the first full month, although actual inception dates and cash flows are taken into account in all Composite calculations.
- This report may contain forward-looking statements that are based on NEPC's estimates, opinions and beliefs, but NEPC cannot guarantee that any plan will achieve its targeted return or meet other goals.

TOTAL MARKETABLE BY ASSET CLASS

	Market Value (\$)	% of Portfolio	Policy %	1 Mo (%)	3 Mo (%)	Fiscal YTD (%)	YTD (%)	1 Yr (%)	2 Yrs (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Marketable Assets	6,381,969,585	100.0	100.0	2.2	2.9	1.0	8.2	0.7	6.9	10.4	5.7	11.3	9.5	Jul-75
<i>Total Marketable Custom Index</i>				1.8	3.0	2.2	7.6	1.4	6.9	9.8	6.0	11.3	--	Jul-75
Total Domestic Equity	2,450,364,313	38.4	40.0	3.9	2.0	1.6	13.7	5.1	9.5	15.1	9.3	16.3	10.9	Jul-75
<i>US Equity Index</i>				3.2	1.4	3.8	11.5	4.7	10.7	15.3	10.5	17.0	11.3	Jul-75
Total Non US Equity	1,621,577,691	25.4	26.7	2.3	4.5	-1.8	10.2	-6.4	8.2	11.0	3.2	10.4	6.1	Mar-88
<i>Total Non-US Equity Index</i>				2.0	4.7	-2.2	9.7	-6.5	6.7	10.7	2.5	9.6	5.2	Mar-88
Total Fixed Income	2,283,281,599	35.8	33.3	0.3	2.8	1.9	2.0	0.7	2.4	3.9	2.6	5.7	7.8	Jun-75
<i>Total Fixed Income Benchmark</i>				0.1	3.1	3.0	1.5	3.2	2.1	2.4	2.6	4.3	--	Jun-75
Total Cash	26,745,981	0.4	0.0	0.2	0.6	1.5	0.4	2.1	1.6	1.3	0.8	0.4	2.7	Apr-94
<i>91 Day T-Bills</i>				0.2	0.6	1.5	0.4	2.1	1.6	1.2	0.7	0.4	2.4	Apr-94

TOTAL MARKETABLE ASSETS

	Market Value (\$)	% of Portfolio	Policy %	1 Mo (%)	3 Mo (%)	Fiscal YTD (%)	YTD (%)	1 Yr (%)	2 Yrs (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Marketable Assets	6,381,969,585	100.0	100.0	2.2	2.9	1.0	8.2	0.7	6.9	10.4	5.7	11.3	9.5	Jul-75
<i>Total Marketable Custom Index</i>				1.8	3.0	2.2	7.6	1.4	6.9	9.8	6.0	11.3	--	Jul-75
Total Domestic Equity	2,450,364,313	38.4	40.0	3.9	2.0	1.6	13.7	5.1	9.5	15.1	9.3	16.3	10.9	Jul-75
<i>US Equity Index</i>				3.2	1.4	3.8	11.5	4.7	10.7	15.3	10.5	17.0	11.3	Jul-75
Total Small Cap Domestic Equity	532,799,038	8.3	--	6.1	3.9	1.9	17.0	9.7	10.7	17.1	8.5	--	12.2	Nov-10
<i>Russell 2000</i>				5.2	3.1	-3.3	17.0	5.6	8.0	16.7	7.4	16.6	11.7	Nov-10
Boston Trust	139,569,351	2.2		5.4	3.3	3.7	15.6	12.1	9.9	15.6	8.5	--	11.4	Nov-10
<i>Russell 2000</i>				5.2	3.1	-3.3	17.0	5.6	8.0	16.7	7.4	16.6	11.7	Nov-10
Segall Bryant & Hamill	143,144,598	2.2		7.5	3.7	3.5	16.9	11.1	11.8	16.2	7.3	--	11.4	Nov-10
<i>Russell 2000</i>				5.2	3.1	-3.3	17.0	5.6	8.0	16.7	7.4	16.6	11.7	Nov-10
Wellington	250,085,088	3.9		5.6	4.3	0.4	17.8	8.0	10.6	18.7	9.2	--	13.9	Nov-10
<i>Russell 2000</i>				5.2	3.1	-3.3	17.0	5.6	8.0	16.7	7.4	16.6	11.7	Nov-10
Total SMid Cap Domestic Equity	448,098,214	7.0	--	3.7	2.1	-3.0	16.3	4.0	7.5	14.0	7.2	--	11.8	Dec-10
<i>Russell 2500</i>				4.7	4.0	-0.3	16.8	6.4	8.7	15.9	7.9	17.3	12.0	Dec-10
AllianceBernstein	276,088,229	4.3		5.2	4.2	-1.5	18.2	6.2	11.7	17.6	8.4	--	12.6	Dec-10
<i>Russell 2500</i>				4.7	4.0	-0.3	16.8	6.4	8.7	15.9	7.9	17.3	12.0	Dec-10
TSW	172,009,985	2.7		1.4	-1.0	-5.6	13.4	0.4	1.7	9.0	5.5	--	10.7	Dec-10
<i>Russell 2500</i>				4.7	4.0	-0.3	16.8	6.4	8.7	15.9	7.9	17.3	12.0	Dec-10
Total Large Cap Domestic Equity	1,469,467,062	23.0	--	3.2	1.3	3.3	11.7	3.2	9.6	14.7	9.9	--	14.1	Sep-10
<i>S&P 500</i>				3.2	1.4	3.8	11.5	4.7	10.7	15.3	10.7	16.7	14.5	Sep-10
Total Large Cap Passive Equity	1,236,063,688	19.4	--	3.2	1.4	3.8	11.5	4.7	10.7	15.3	10.7	--	14.5	Sep-10
<i>S&P 500</i>				3.2	1.4	3.8	11.5	4.7	10.7	15.3	10.7	16.7	14.5	Sep-10
Blackrock S&P 500	1,236,063,688	19.4		3.2	1.4	3.8	11.5	4.7	10.7	15.3	10.7	--	14.5	Sep-10
<i>S&P 500</i>				3.2	1.4	3.8	11.5	4.7	10.7	15.3	10.7	16.7	14.5	Sep-10
Total Large Cap Active Equity	233,403,374	3.7	--	3.5	0.9	1.4	13.2	-1.6	5.9	12.5	7.7	--	12.8	Sep-10
<i>Russell 1000 Value</i>				3.2	0.5	3.8	11.2	3.2	5.4	12.8	8.1	15.4	12.7	Sep-10
LSV Asset Management	233,403,374	3.7		3.5	0.9	1.4	13.2	-1.6	5.9	13.5	8.5	16.9	8.8	Jun-04
<i>Large Cap Value Manager Index</i>				3.2	0.5	3.8	11.2	3.2	5.4	12.8	8.1	15.4	6.9	Jun-04



TOTAL MARKETABLE ASSETS

	Market Value (\$)	% of Portfolio	Policy %	1 Mo (%)	3 Mo (%)	Fiscal YTD (%)	YTD (%)	1 Yr (%)	2 Yrs (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Non US Equity	1,621,577,691	25.4	26.7	2.3	4.5	-1.8	10.2	-6.4	8.2	11.0	3.2	10.4	6.1	Mar-88
<i>Total Non-US Equity Index</i>				2.0	4.7	-2.2	9.7	-6.5	6.7	10.7	2.5	9.6	5.2	Mar-88
Total Core Non US Equity	899,780,093	14.1	--	2.7	4.5	-2.0	10.6	-6.4	7.5	10.0	1.9	9.6	5.9	Mar-88
<i>Core Non-US Equity Manager Index</i>				2.0	4.7	-2.2	9.7	-6.5	6.7	10.7	2.5	9.6	5.0	Mar-88
Artisan Partners	222,523,022	3.5		2.8	3.9	-0.1	9.9	-3.8	10.8	8.7	--	--	3.1	Nov-14
<i>MSCI EAFE</i>				2.5	4.0	-3.1	9.3	-6.0	6.2	9.3	2.1	9.6	3.4	Nov-14
Causeway Capital	219,774,956	3.4		4.3	4.9	-3.0	12.2	-5.6	6.5	9.1	--	--	2.1	Oct-14
<i>MSCI EAFE</i>				2.5	4.0	-3.1	9.3	-6.0	6.2	9.3	2.1	9.6	3.0	Oct-14
Fisher Investments	236,591,426	3.7		3.2	5.4	-3.0	10.6	-7.4	7.4	10.8	3.1	11.5	6.6	Sep-01
<i>Core Non-US Equity Manager Index</i>				2.0	4.7	-2.2	9.7	-6.5	6.7	10.7	2.5	9.6	5.4	Sep-01
LSV International Value	220,890,688	3.5		0.4	3.9	-1.9	9.5	-8.7	5.7	11.6	--	--	2.7	Oct-14
<i>MSCI ACWI ex USA</i>				2.0	4.7	-2.2	9.7	-6.5	6.7	10.7	2.5	9.6	2.9	Oct-14
Total Emerging Markets	330,043,734	5.2	--	0.5	5.5	-3.5	8.2	-13.4	6.4	11.8	3.6	--	2.1	Jun-11
<i>MSCI Emerging Markets</i>				0.2	6.1	-0.2	9.0	-9.9	8.4	15.0	4.1	10.3	1.1	Jun-11
Neuberger Berman	174,119,508	2.7		0.1	5.5	-3.1	8.8	-12.4	8.0	14.6	--	--	4.0	Apr-14
<i>MSCI Emerging Markets</i>				0.2	6.1	-0.2	9.0	-9.9	8.4	15.0	4.1	10.3	3.6	Apr-14
Wellington Emerging Markets	155,924,226	2.4		0.9	5.5	-4.0	7.6	-14.9	8.9	13.6	4.6	--	4.3	Jun-11
<i>MSCI Emerging Markets</i>				0.2	6.1	-0.2	9.0	-9.9	8.4	15.0	4.1	10.3	1.1	Jun-11
Total Non US Small Cap	122,518,892	1.9	--	1.2	1.7	-11.6	9.3	-18.1	0.8	4.5	-0.9	--	2.9	Jul-11
SBH International Small Cap	122,518,892	1.9		1.2	1.7	-11.6	9.3	-18.1	0.8	--	--	--	1.0	Feb-17
<i>MSCI EAFE Small Cap</i>				2.2	3.4	-8.1	10.5	-10.5	6.8	10.2	4.3	13.5	7.6	Feb-17
Total Global Equity	269,234,973	4.2	--	4.0	4.8	5.9	12.1	7.9	15.5	16.2	9.8	14.6	7.9	May-08
<i>MSCI ACWI</i>				2.7	3.0	0.8	10.8	-0.8	8.5	12.9	6.3	12.7	4.7	May-08
Walter Scott Global Equity	269,234,973	4.2		4.0	4.8	5.9	12.1	7.9	15.5	16.2	9.8	14.2	9.3	Jan-05
<i>MSCI EAFE / ACWI Blend</i>				2.7	3.0	0.8	10.8	-0.8	8.5	12.9	6.3	12.7	6.8	Jan-05



TOTAL MARKETABLE ASSETS

	Market Value (\$)	% of Portfolio	Policy %	1 Mo (%)	3 Mo (%)	Fiscal YTD (%)	YTD (%)	1 Yr (%)	2 Yrs (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Fixed Income	2,283,281,599	35.8	33.3	0.3	2.8	1.9	2.0	0.7	2.4	3.9	2.6	5.7	7.8	Jun-75
<i>Total Fixed Income Benchmark</i>				0.1	3.1	3.0	1.5	3.2	2.1	2.4	2.6	4.3	--	Jun-75
Long Term Fixed Income														
BlackRock SIO Bond Fund	254,321,219	4.0		0.3	--	--	0.5	--	--	--	--	--	0.5	Jan-19
<i>3-Month Libor Total Return USD</i>				0.2	0.7	1.8	0.5	2.5	2.0	1.6	1.1	0.7	0.5	Jan-19
Brandywine Asset Mgmt	344,294,855	5.4		-1.1	4.5	0.3	2.4	-5.1	3.0	4.2	2.1	6.7	7.0	Nov-97
<i>Brandywine Custom Benchmark</i>				-0.9	2.9	0.6	0.5	-1.3	2.8	1.4	0.3	2.4	4.2	Nov-97
DoubleLine Capital	59,231,472	0.9		0.5	1.7	2.3	2.3	2.3	3.8	5.5	--	--	3.4	Nov-14
<i>LIBOR BBA USD 3 Month +250bps</i>				0.4	1.3	3.4	0.9	5.1	4.5	4.1	3.6	3.3	3.7	Nov-14
FIAM (Fidelity) Tactical Bond Fund	254,463,084	4.0		0.9	--	--	--	--	--	--	--	--	0.9	Feb-19
<i>BBgBarc US Aggregate TR</i>				-0.1	2.9	2.7	1.0	3.2	1.8	1.7	2.3	3.7	-0.1	Feb-19
GAM	66,317,231	1.0		0.7	1.4	0.6	0.9	0.0	2.2	4.9	--	--	2.8	Jan-15
<i>3-Month Libor Total Return USD</i>				0.2	0.7	1.8	0.5	2.5	2.0	1.6	1.1	0.7	1.2	Jan-15
Income Research & Management	491,922,156	7.7		0.1	3.0	2.8	1.2	3.1	2.0	2.3	2.6	5.1	6.9	Sep-87
<i>BBgBarc US Govt/Credit TR</i>				-0.1	3.0	2.6	1.1	3.0	1.8	1.8	2.3	3.8	6.2	Sep-87
Loomis Sayles	437,064,777	6.8		0.9	3.3	3.2	3.6	3.0	3.1	6.7	3.3	8.6	7.8	Oct-02
<i>65% BBgBarc Aggregate / 35% BBgBarc HY</i>				0.5	3.3	3.1	2.8	3.6	2.7	4.5	3.1	6.4	5.7	Oct-02
Manulife Strategic Fixed Income Fund	215,854,943	3.4		0.3	2.4	2.2	2.8	0.8	1.7	2.5	--	--	1.7	Mar-15
<i>BBgBarc Multiverse</i>				-0.5	3.1	1.4	1.2	-0.5	2.8	2.4	0.9	3.4	1.9	Mar-15
Short Term Fixed Income														
IR&M Short Duration	159,811,862	2.5		0.2	1.4	2.2	0.7	2.7	1.5	1.5	--	--	1.3	Feb-15
<i>BBgBarc US Treasury 1-3 Yr TR</i>				0.1	1.2	1.9	0.4	2.3	1.1	0.8	0.8	1.0	0.8	Feb-15
Total Cash	26,745,981	0.4	0.0	0.2	0.6	1.5	0.4	2.1	1.6	1.3	0.8	0.4	2.7	Apr-94
<i>91 Day T-Bills</i>				0.2	0.6	1.5	0.4	2.1	1.6	1.2	0.7	0.4	2.4	Apr-94

Performance shown is net of manager fees
 Results for periods longer than one year are annualized
 Total Fund historical performance calculated quarterly
 Includes historical benchmark changes
 Production Date: 3/14/2019



Investing in our members' future

There's a lot of information out there regarding the New Hampshire Retirement System, some of it fact, some of it fiction. This document, along with others in the "NHRS ... Now You Know" series, is designed to provide you with straight talk about the retirement system.

There are several different ways that public pension investments are managed. In some states, an independent governmental entity, separate from the retirement system, manages the portfolio. In other states, that responsibility is designated to a retirement system's board of trustees. Some states even have a sole individual responsible for investments.

The New Hampshire Retirement System is rare in that most investment-related decisions are made by an Independent Investment Committee (IIC), consisting of three public members and up to two representatives of the Board of Trustees. This IIC marked its 10th anniversary on January 1, 2019.

Public members of the IIC are nominated by the Governor and must be approved by the Executive Council. Trustee members are appointed by the chairperson of the Board of Trustees. By law, all IIC members must have "substantial experience in the field of institutional investment or finance."

The IIC manages investments based on the investment policy and asset allocation approved by the Board of Trustees. With the assistance of an outside investment consultant and NHRS staff, the IIC continuously monitors and evaluates investment performance, and makes determinations regarding the hiring and retention of fund managers. Previously, the Board of Trustees managed investments.

The genesis for an Independent Investment Committee came out of a recommendation from the 2007 Commission to Study the Long Term Viability of the NH Retirement System. During the legislative process, the commission's recommendation underwent some modifications and the IIC as we know it came to life in House Bill 1645 (2008).

It is always important to remember that no market goes up in a straight line and volatility is inevitable, but with nearly 10 years of investment performance to look back on, the Legislature's decision to create the IIC has proven to be beneficial for NHRS, as evidenced by its results compared to other public pension plans.



Because individual outcomes track the overall market, which is subject to peaks and valleys over time, comparing raw number from different eras can be misleading. However, measuring the performance of an individual investor compared to other similarly situated investors provides an objective baseline.

For the five, six, seven, eight, and nine years ending June 30, 2018, a period during which the IIC made the investment decisions, total fund performance was in the top 10 percent of peer plans in the InvestorForce Public Defined Benefit Net Universe, a group of more than 100 public plans. This outperformance by the IIC relative to the peer median for the nine years ending June 30, 2018, represents more than \$535 million in additional investment returns.

By comparison, for the five, six, seven, eight, and nine years ending June 30, 2009, a period preceding the formation of the IIC, more than half of public plans outperformed NHRS. This relative underperformance represents approximately \$400 million less in investment returns than NHRS would have realized had it performed as an "average" plan.

The Decennial Retirement Commission, which convened in 2017 to review the actions taken over the prior decade, stated that, "The work of the [2007] Viability Commission manifested itself in several ways, perhaps the most impactful being the creation of an Independent Investment Committee (IIC)."

NHRS INVESTMENT PERFORMANCE RELATIVE TO PEERS

In investment parlance, the lower the percentile regarding peer comparison, the better the performance relative to peers. For instance, NHRS' five-year performance in the 7th percentile for the period ending June 30, 2018, means the retirement system outperformed 93 percent of peer public plans over that period.

Period	June 30, 2009 (Pre-IIC)	June 30, 2018 (IIC)
9 years ending ...	83rd percentile	8th percentile
8 years ending ...	75th percentile	7th percentile
7 years ending ...	71st percentile	8th percentile
6 years ending ...	53rd percentile	6th percentile
5 years ending ...	61st percentile	7th percentile

NEPC



Sources: RSA 100-A: 14-b; NEPC;
Decennial Retirement Commission Final Report, 2017

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TO: Senator Sharon Carson, Chair, Senate Executive Departments & Administration Committee
Representative Jeff Goley, Chair, House Executive Departments & Administration Committee

FROM: New Hampshire Retirement System Board of Trustees
(Prepared by George P. Lagos, Executive Director)

RE: Quarterly Report to the General Court – April 1, 2019

Dear Senator Carson and Representative Goley:

Pursuant to RSA 100-A:14, VII-a, the Board of Trustees of the New Hampshire Retirement System (NHRS, the retirement system) is submitting this quarterly report to the General Court.

Here is a summary of NHRS activities during the quarter ending March 31, 2019:

- The Board unanimously voted in January to accept the June 30, 2018, GASB 68 and 75 Report. The report, which details the proportionate share of unfunded pension and OPEB (medical subsidy) liabilities for participating employers, will be used by employers to prepare financial statements in accordance with Governmental Accounting Standards Board requirements.
- In January, the Board unanimously voted to select Segal Consulting to perform a full scope actuarial audit of the June 30, 2017 valuation performed by GRS, the retirement system's actuary. An actuarial audit is a valuable tool for monitoring the quality of actuarial services performed on behalf of the pension plan. An actuarial audit is considered a best practice and involves engaging the services of an outside actuary (reviewing actuary) to scrutinize the work of the plan's consulting actuary.
- In March, the Board unanimously voted to select Groom Law Group – one of the retirement system's current legal services providers – as outside counsel for fiduciary, tax and benefits, and legislative matters following a recent RFP for those legal services.
- The multi-year upgrade of the NHRS pension database ("PGV3") kicked off with staff meetings in January, following by the development of project plan documents and a series of system requirements meetings with the vendor.
- The re-adoption of NHRS' expiring administrative rules was completed in January, when the Board unanimously voted to approve the revised RET 200, 300, and 400 administrative rules approved by JLCAR in December.
- NHRS senior staff provided members of the House ED&A and Finance Committees with an overview of retirement system operations in January. The same presentation was made in two sessions to members of the public in February.
- On March 15, NHRS presented its budget to Division I of the House Finance Committee.

In addition to this cover letter, the report contains:

- An executive summary of NHRS Board and staff activity from January through March.
- The minutes of the following Board meetings: January 8, 2019; February 12, 2019; March 12, 2019 (draft).

- Investment highlights for the quarter ended December 31, 2018.
- Investment information on marketable assets through February 28, 2019, which is the most recent data available.
- An “NHRS ... Now You Know” issue brief describing the work of the Independent Investment Committee that was released in January.

If you have any questions or would like additional information, please do not hesitate to contact me.

Respectfully,

A handwritten signature in blue ink, appearing to read "G. P. Lagos", with a horizontal line extending to the right.

George P. Lagos
Executive Director

cc: Office of Governor Christopher Sununu