New Hampshire Retirement System

A Component Unit Of The State Of New Hampshire

Comprehensive Annual Investment Report

For The Fiscal Year Ended June 30, 2009



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December 8, 2009

Honorable Governor John H. Lynch Honorable Sylvia B. Larsen, President of the Senate Honorable Terie Norelli, Speaker of the House of Representatives

The Independent Investment Committee of the New Hampshire Retirement System (NHRS') is pleased to present the inaugural comprehensive annual investment report for the fiscal year ended June 30, 2009. This report is designed to comply with the provisions of the Revised Statutes Annotated (RSA') 100-A:15, VII of the State of New Hampshire.

Fiscal year 2009 marked a significant change in the oversight and management of the investment program. Prior to January 1, 2009, the Board of Trustees served as the NHRS Investment Committee. On that date, the Independent Investment Committee assumed its responsibilities in accordance with the provisions of RSA 100-A:14-b. The Committee is responsible for investing in accordance with policies established by the Board; making recommendations to the Board regarding investment consultants, asset allocation, and other policy matters; selecting investment managers, agents, and custodial banks; and reviewing performance.

The Committee, which meets monthly, is comprised of five members; three independent members appointed by the Governor and Executive Council, and two members of the Board of Trustees appointed by the Chair of the Board. All are expected to have significant experience in institutional investment or finance. The three independent members are David Jensen, Patrick O'Donnell and Tom Silvia. The two Board members on the Committee are Senator Harold Janeway and Dr. Lisa Shapiro.

David Jensen is currently self-employed as a health care consultant. He has had a long career in the health care and insurance industries throughout the country. Among his positions he has served as CEO or President of such industry leaders such as Anthem Blue Cross Blue Shield of New Hampshire and Healthsource Management, Inc.

Tom Silvia brings over two decades of institutional investment experience to the committee. Most recently Tom was Senior Vice President and Bond Group Leader with Fidelity Investments. Tom worked in increasingly responsible positions with Fidelity for over 15 years after tenure with both Donaldson, Lufkin & Jenrette, and LF Rothschild. Patrick O'Donnell has several decades of investment experience. He was a securities analyst at Donaldson, Lufkin & Jenrette and other firms. He held executive positions at Prudential Securities and at Putnam Investments, where he was Managing Director of Global Equity Research and portfolio manager for the Research Fund.

Dr. Lisa Shapiro is Chief Economist with Gallagher, Callahan & Gartrell. She analyzes economic and industry trends, and provides strategic advice to businesses and institutions. For more than 15 years, she has worked on complex economic and financial projects in public and private settings. She holds a Ph.D. in economics from Johns Hopkins University. She was recently reappointed to her second term as Chair of the Board of Trustees of the New Hampshire Retirement System.

Senator Harold Janeway chairs the Committee. A New Hampshire State Senator since 2006, he was appointed by the Senate President to serve on the NHRS Board of Trustees. He brings nearly 50 years of investment experience to the Committee. After 18 years on Wall Street as a securities analyst and director of research he established an investment advisory firm in Concord, serving individual and institutional clients. He retired in 2006. He is a Chartered Financial Analyst and a member of the Financial Analysts Federation.

Investment Philosophy

Consistent with statutory requirements, one of the Committee's first acts was to develop and adopt a philosophy statement. The NHRS Investment Philosophy is included in Appendix D of this report. Among other things, the Investment Philosophy describes the System's Investment Objectives; Portfolio Structure and Implementation; and Performance Measurement.



Investment Committee, left to right: Patrick O'Donnell, Tom Silvia, Chair Senator Harold Janeway, Dr. Lisa Shapiro, David Jensen.

Investment Results

Fiscal year 2009 was marked by the most challenging financial conditions since the Great Depression. The sub-prime mortgage debacle led to the full-blown credit crisis which rapidly spread through the financial markets. This created a lack of liquidity and a collapse in consumer confidence which further affected the economy. Businesses were thrown into upheaval by the failure of large banks and financial institutions and the automobile industry faced consolidation and restructuring. Only unprecedented global governmental intervention averted a financial catastrophe. By March of 2009, the domestic and international equity markets had declined to a level nearly 50% below the highpoint for the fiscal year. As government actions began to take hold, the financial markets started to function once again and prices began to recover. Nevertheless, for the twelve-month period ending June 30, 2009, equity markets suffered severe losses, as evidenced by the performance of U.S. and global indices which declined by 27% and 31%, respectively. However, high-quality bonds generated positive returns which underscored the importance of diversification. The NHRS total portfolio declined 18.1%.

The following table sets forth the returns on the total portfolio and the various asset classes over the past decade, which was one of the worst ten-year periods ever recorded in the stock market.

Annualized Investment Returns for the period ended June 30, 2009					
	Weight	Fiscal Year			
Asset Class	6/30/09	2009	3 Year	5 Year	10 Year
Total NHRS Fund (Gross Returns)	100.0%	-17.9%	-2.9%	2.2%	2.5%
ICC Public Fund Universe Ranking ¹		62	64	56	79
Total NHRS Fund (Net Returns)	100.0%	-18.1%	-3.2%	1.8%	2.1%
Total Fund Custom Index		-17.2%	-2.6%	2.3%	2.4%
Domestic Equity	39.9%	-28.0%	-9.9%	-2.9%	-1.8%
Russell 3000 Index		-26.6%	-8.3%	-1.8%	-1.9%
International Equity	14.0%	-31.1%	-6.1%	3.8%	1.4%
MSCI ACWI (ex U.S.)		-30.9%	-5.8%	4.5%	2.2%
Global Equity ²	5.3%	-21.9%	-	-	-
MSCI ACWI		-29.3%	-	-	-
Fixed Income	32.3%	5.1%	6.4%	5.7%	6.9%
Barclays Capital Universal Bond Index		4.9%	5.8%	4.9%	6.0%
Real Estate ³	6.2%	-31.7%	-4.1%	7.0%	8.4%
NCREIF Property Index + 0.50%		-18.8%	2.5%	8.4%	8.8%
Alternative Investments ³	2.3%	-31.2%	-10.2%	-4.4%	-4.2%
Consumer Price Index $+5\%^4$		4.5%	7.1%	7.6%	7.6%
Cash Equivalents		1.2%	3.6%	3.5%	3.4%
Cash Index		1.0%	3.2%	3.2%	3.2%

Performance returns are calculated on a net-of-fees time-weighted rate of return basis.

¹ The Independent Consultants Cooperative Public Fund Universe represents more than 150 public fund observations. The rankings are in percentile terms on a scale from 1 as the highest score to 100 as the lowest score.

 2 The Investment Committee of the Board of Trustees implemented a 5% allocation to Global Equity, effective July 1, 2008.

⁴ There is not a generally-accepted benchmark for Alternative Investments since characteristics vary widely between investment categories. The Consumer Price Index + 5% is utilized for comparative purposes.

Additional information regarding the investment program is detailed in Appendix A.

³ Performance returns for Real Estate and Alternative Investments reflect a one-quarter lag calculation methodology, with the exception of direct property investments which were appraised as of June 30, 2009 and reflect significant downward revisions in their valuations and performance for fiscal year 2009.

Annual Investment Policy Statement

The NHRS Statement of Investment Policy was established by the NHRS Board to provide governance and oversight of the pension fund assets. Highlights of the Statement of Investment Policy, which is presented in Appendix D of this report, include:

- Description of the roles and responsibilities of the Board, the Investment Committee, NHRS Staff, and the System's service providers
- Detail regarding various considerations related to the oversight of investments, including the selection of service providers
- Establishment of the program's asset allocation policy
- Specification of asset class performance measurement and monitoring policy

The Board sets the assumed rate of return based on guidance from the System's actuary. The current 8.5% assumed rate of return has been in place since the beginning of fiscal year 2007. A 9.0% assumed rate of return was in effect for the prior fourteen fiscal years. An assumed rate of return of 8.5% results in a model portfolio that emphasizes equity-like investments in order to achieve that result. While the return over the past decade fell far short of the current 8.5% assumed rate of return, the 20-year annualized, net-of-fee return of 8.3% came very close to meeting this objective. The actuary retained by the NHRS Board provided a written opinion letter on this subject which is included in this report as Appendix B.

Asset Structure

As noted above, the Statement of Investment Policy establishes the program's asset allocation parameters. The target allocation and acceptable range for each asset class, currently in effect, are:

Asset Class	Target Allocation	Allocation Range	Actual at 6/30/09
Domestic Equity	30%	26-43%	39.9%
International Equity	15%	11 - 19%	14.0%
Global Equity	5%	3 – 7%	5.3%
Fixed Income	30%	26-34%	32.3%
Real Estate	10%	5 - 15%	6.2%
Alternative Investments	10%	0 - 15%	2.3%

The target allocation and acceptable ranges for subclasses of equity and fixed income investments, as well as real estate and alternative investments are detailed in these respective policies located in Appendix D.

The respective asset class benchmarks outlined in the Statement of Investment Policy are as follows:

Asset Class	Benchmark
Domestic Equity	Russell 3000 Index
International Equity	MSCI All Country World Ex-U.S. Index
Global Equity	MSCI All Country World Index
Fixed Income	Barclays Capital Universal Bond Index
Real Estate	NCREIF Property Index + 50 basis points
Alternative Investments	Consumer Property Index + 5%
Total Fund	Total Fund Custom Benchmark ¹

¹The Total Fund Custom Benchmark is comprised of the asset class specific benchmarks, weighted in the same proportion as the target allocation for each asset class.

Governance, Benchmarks and Measurement of Outcomes

As previously mentioned, the management and administration of the pension trust is a complex effort involving multiple stakeholders with distinct roles and responsibilities as described in the Statement of Investment Policy and in statute. At each monthly meeting of the Board or 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 or quarterly basis, as appropriate. An overview of stakeholder functions and interactions is provided below.

Level	Policy	Strategy	Implementation	Oversight
Board of Trustees	Approve			Х
Investment Committee	Recommend	Approve		Х
Investment Staff	Recommend	Recommend	Manage	Х
Consultants	Recommend	Recommend		Х

Additional discussion of the mandates of these stakeholders can be located in this report, specifically, in the Investment Committee Charter and the Board of Trustees Charter, at Appendix C and in the Statement of Investment Policy at Appendix D.

Administrative Comments

Under RSA 100-A:15, VII.(d) the Committee may include in the annual investment report suggested changes in legislation which the Board may seek in order to better serve the members of the System. Given the Committee's current focus on the asset-liability modeling study and the structure of the investment program, no legislative changes related to investment matters are being proposed at this time.

The Committee meets at the System's offices one day each month. Notice is provided regarding the time and location of these meetings. The Committee promotes transparency regarding the investment program through these public meetings, investment materials and reports, and meeting minutes which are posted on the NHRS website. Certain investment matters may require discussion in non-public session in accordance with statute. On a monthly basis, the Committee receives presentations from investment managers currently retained by the NHRS as well as from prospective manager candidates.

In September of 2008, Rick Shafer was named Director of Investments. In this new role, Mr. Shafer provided strategic direction and oversight of the investment program until his departure from the NHRS in May of 2009. The Committee extends its gratitude to Jeff Gendron for his able service as Interim Director of Investments while the NHRS completes the current Director of Investments search.

Each fiscal year, the NHRS produces a Comprehensive Annual Financial Report (CAFR) which details the operation and financial condition of the System. This report also includes a financial section which outlines the funded status and unfunded actuarial accrued liability as well as an actuarial section. The CAFR is available on the System's website <u>www.nhrs.org</u>.

Overview of Significant Investment Initiatives

Despite the difficult environment, the investment program has been enhanced through the following major initiatives. During the fiscal year ended June 30, 2009, the Board of Trustees and Investment Committees realized the following milestones:

- Retained and funded a new global equity portfolio mandate and rebalanced the international equity portfolios.
- Hired a new consultant, NEPC, LLC, to advise on general investment matters (policy and allocation); traditional assets (equities and fixed income) and alternative investment mandates (private equity and absolute return strategies); and transitioned consulting support services (performance calculations and reporting).
- Implemented the reporting requirements of RSA 100-D (the Sudan divestment law) but subsequently pursued and obtained a stay of implementation from Superior Court. The Board of Trustees continues to seek clarification from the court regarding its obligations in light of its fiduciary responsibility under the State Constitution and statute.
- Established the Investment Committee Charter, Investment Philosophy, and updated related governing policies.
- Adopted a real estate policy and an annual manager investment plan in order to begin a transition from existing direct property holdings to a more diversified program of real estate funds.
- Conducted a competitive review of custodial banking services resulting in the re-hiring of the custodian to provide an expanded suite of services at reduced cost.

• Adopted an alternative investment policy as well as workplans for private equity and absolute return strategies. The Investment Committee also began the restructuring of the private equity portfolio in order to diversify the existing program.

Leading up to fiscal year 2009, the Investment Committee of the Board laid the foundation for many of the current initiatives by conducting the following actions:

• Evaluated the alternative investment portfolio and initiated the disposition of fifteen private equity partnerships and three timber fund investments via secondary sales.

• Completed the assessment of the fixed income portfolio, which resulted in the replacement of one active manager and the addition of a passively-managed fixed income fund.

• Conducted an asset-liability modeling study to determine the impact of legislation on the investment program. This resulted in establishing a new global equity allocation and shifted the policy targets to accommodate greater exposure to real estate and alternative investments.

• Adopted the NHRS Statement of Investment Policy to provide guiding principals for the management of the investment program.

- Restructured the U.S. equity program by consolidating sixteen actively-managed portfolios into nine active portfolios and one passive index fund. The process included hiring four new active managers.
- Evaluated the international equity program. Affirmed the retention of the existing managers and added a passively-managed index fund.
- Initiated the funding of the new global equity allocation by converting an existing international equity portfolio mandate.
- Conducted an asset-liability modeling study and evaluated public market asset classes from a risk-budgeting perspective.

Looking ahead, the Committee's Plan for fiscal year 2010 includes:

• Continued restructuring of the Alternative Investments and Real Estate portfolios.

• Conducting an Asset Liability Modeling Study in conjunction with the System's investment consultant, NEPC, LLC.

• Performing a needs assessment based on the results of the Asset Liability Modeling Study. Continuing the evaluation of the investment structure and individual portfolio mandates.

• Reviewing the long-term performance of all investment managers against their respective benchmarks to determine if they meet the Committee's expectations and evaluating prospective manager candidates, as appropriate.

• Migrating to a central book of record platform which will serve as a common recordkeeping system for assets held in custody on behalf of the NHRS (equities, fixed income, and cash accounts) as well as those assets held in custody by managers or general partners (real estate and alternative investments).

Fiscal year 2009 was a challenging year in the financial markets and a period of significant change for the NHRS. The Committee recognizes the importance of its role in achieving the best long-term investment results consistent with responsible, prudent policies and practices. The themes of service to the members, continuous improvement, and implementation of best practices have been prominent in the work conducted by the stakeholders of the NHRS.

Respectfully submitted,

Senator Harold Janeway, Chair Dr. Lisa Shapiro David Jensen Patrick O'Donnell Tom Silvia Richard W. Ingram, Executive Director Jeff Gendron, Interim Director of Investments

Appendix A

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"Advancing Your Investments"

Kevin M. Leonard Senior Consultant

December 8, 2009

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

Dear NHRS Fiduciaries:

NEPC, LLC (NEPC) is pleased to introduce this overview of the New Hampshire Retirement System (NHRS) investment program for the fiscal year ended June 30, 2009.

The overall objective of the New Hampshire Retirement System (NHRS) is to provide service, disability, death and vested retirement benefits, and other postemployment benefits to members and their beneficiaries. To ensure a solid foundation for the future of the System, NHRS plans and implements an investment program designed to achieve the actuarial assumed rate of return over the long term, while prudently managing the risk of the portfolio. Additionally, the NHRS investment program is administered in accordance with sound governance practices and applicable statutes. The Board of Trustees ("Trustees") established a Statement of Investment Policy which includes asset allocation targets and acceptable ranges as well as benchmarks for performance measurement. The Trustees also adopted an Alternative Investment Policy Statement and a Real Estate Policy. The Trustees retain the services of actuaries and consultants to provide guidance regarding actuarial matters, asset allocation, and investment policy. The Investment Committee manages the investment program pursuant to the Statement of Investment Policy and other related policies, monitors and evaluates performance, and makes determinations regarding the retention of managers. Professional investment managers are selected by the Investment Committee to manage portfolios in accordance with investment management agreements and NHRS proxy voting guidelines. The following pages report on the performance and attributes of the investment program for fiscal year 2009.



From an economic perspective, fiscal year 2009 was difficult with the global markets experiencing unprecedented events such as the effects of the sub-prime mortgage fallout and the ensuing credit crisis, the sudden failure of iconic financial institutions, and severe liquidity constraints resulting in declining consumer confidence. In this environment, volatility soared as investors remained anxious and uncertainty continued around future market direction. This confluence of negative events resulted in wide-spread declines in almost every traditional equity and fixed income market.

For the fiscal year ended June 30, 2009, the NHRS Total Fund returned -18.1% on a net-of-fees basis and -17.9% on a gross-of-fees basis, underperforming the Total Fund Custom Benchmark return of -17.2%. On a universe comparison basis, the NHRS Total Fund fiscal year ended June 30, 2009 gross-of-fees return of -17.9 ranked the Fund in the 62nd percentile of the Independent Consultants Cooperative Public Fund Universe. Since June 1989, the System has achieved an 8.3% return on an annualized net-of-fees basis

Diversification aims to reduce volatility and mitigate overall plan risk across a range of asset classes with varied return patterns. Our goal is to increase the diversification of the System's assets more broadly within the traditional and non-traditional asset classes for the purpose of reducing volatility, while at the same time enhancing the Fund's ability to generate superior returns throughout all market conditions.

NEPC provides NHRS with quarterly economic and investment market updates and performance reviews, investment manager monitoring and selection advice, and related investment services for traditional and non-traditional asset classes. Investment performance analysis and comparisons produced by NEPC have been calculated using standard performance evaluation methodologies and are consistent with industry standards. Performance results are calculated using a time-weighted return methodology and are reported on a net-of-fees basis.

Sincerely,

New Hampshire Retirement System

Investment Performance Review – Fiscal Year 2009

Market Commentary

July 1, 2008 marked the beginning of fiscal year 2009 and the beginning of a long and tumultuous year for investors. What started as a sub-prime fueled housing bubble in the United States quickly led to a restructuring of the financial industry around the world. The past year has seen the demise, bankruptcy or government take-over of Fannie Mae, Freddie Mac, Lehman Brothers, AIG, Washington Mutual and many others.

The quarter ended September 30, 2008 saw equity declines of 8.4% for the Standard & Poor's 500 (S&P 500) Index, -20.6% for the MSCI Europe Australasia Far East (EAFE) Index, and -27.0% for the MSCI Emerging Markets (EM) Index. Treasuries posted the only positive performance, as investors fled all risky assets in search of safety. During this period, all assets seemed to be perfectly correlated and experienced significant negative impacts. Treasurv yields hit near-zero levels as investors sought near-term security. Unemployment rates began to tick up in July, consumer confidence continued to decline, and the housing market continued to see weakness, along with tighter borrowing standards. The month of September was especially stark for financial markets and world economies, as Lehman Brothers declared Chapter 11 bankruptcy, the FDIC negotiated the takeover of Washington Mutual by JP Morgan Chase (in effect helping the troubled thrift avoid the largest bank failure in history), the Treasury provided \$85 billion in emergency financing to AIG to address its liquidity crisis and the SEC temporarily banned short-selling of the stocks of hundreds of financial firms. The Federal Housing Finance Authority also placed Fannie Mae and Freddie Mac under government conservatorship, confirming the widespread assumption that these truly were government-backed entities. The Federal Open Market Committee (FOMC), in response to the growing liquidity crisis, left its federal funds target rate unchanged at 2.0% and Congress debated the passage of the Emergency Economic Stabilization Act of 2008, with the House of Representatives initially voting the measure down.

The second quarter of the fiscal year began with a revised Emergency Economic Stabilization Act of 2008 being passed by the House of Representatives in early October. The nearly \$700 billion stimulus package included assistance for homeowners, automakers, and banks. The extensive measures to stem the tide of foreclosures, increase liquidity and prevent further bank failures demonstrated the extent to which the government was willing to use its extensive balance sheet to avoid a deepening of the recession and deflationary concerns. Although criticized for its broad bailouts, minimal oversight on the distribution of funds and

the extension of government control over private industry, many economists agreed that such measures were necessary to overcome the tremendous headwinds facing the global economy. Foreign governments responded with similar stimulus efforts, although they were not quite as costly or expansive. In October, after a flurry of negative economic news, domestic equity indices posted the weakest monthly returns since October 1987. The S&P 500 Index returned -16.8%, while the Russell 2000 Index returned -20.8% for the month. International markets also posted one of the weakest monthly returns in recent history. International developed-market equities, as measured by the MSCI EAFE Index returned -20.2%, its worst month for the past 40 years. International emerging market equities, as measured by the MSCI EM Index, returned -27.4% in October, and -56.4% for the past year.

During the quarter ended March 31, 2009 investor fear returned to the markets. Economic reports revealed the depths that the recession had reached in the fourth quarter. Unemployment continued to climb as January payrolls fell by about 600,000, pushing the nation's unemployment rate to 7.6%. This was the highest level the unemployment rate had been since September of 1992. The impact of the recession on consumers became clearly evident as the Conference Board announced that consumer confidence fell to new lows in February. However, in March, an increase in consumer activity and the economy, in general, sparked the beginnings of a remarkable rally for global equities and corporate bond markets. Congress passed a massive \$700 billion stimulus package, along with the implementation and release of further details on other government programs including the Term Asset-Backed Securities Loan Facility 1.0 & 2.0 and the Public-Private Investment Program to continue to provide liquidity and mend the credit markets. The American Recovery and Reinvestment Act of 2009 was passed by Congress and signed into law by President Barack Obama on February 17, 2009. Equity markets responded sharply to the upside. The S&P 500 Index rallied 8.8% in the month and the Russell 2000 Index gained 8.9%. Developed international markets also participated in the March market rally, as the MSCI EAFE Index rose 6.3% for the month. Emerging market equities, however, posted the strongest return of any asset class. A 14.4% rally in March offset losses in January and February, leaving the MSCI EM Index up 0.9% for the quarter.

The final quarter of fiscal year 2009, and specifically April and May, extended the global market rally that began in March. By the end of June, domestic equity markets were up 15.9%, as measured by the S&P 500, and the riskier assets such as high-yield corporate bonds and emerging-markets equities posted even higher returns. The Barclays High Yield Index was up 23.1% in the second quarter, while the MSCI EM Index rallied 34.7%. The positive results of the U.S. Treasury's bank "stress tests," coupled with additional declines in the rate of job losses, led investors to regain their confidence and return to risk-oriented investments. The Bureau of Economic Analysis released an advance estimate on real GDP for the second quarter of -1.0%, which marked a significant

improvement from the past two quarters as government spending increased amidst smaller declines in private inventories and investment. Consumer confidence also rebounded in spite of the bankruptcy filing of General Motors on June 1st, which was the fourth-largest bankruptcy in U.S. history.

Fiscal Year Overview

Investment Performance

For the fiscal year ended June 30, 2009, the NHRS Total Fund returned -18.1% on a net-of-fees basis and -17.9% on a gross-of-fees basis, underperforming the Total Fund Custom Benchmark return of -17.2%. On a universe comparison basis, the NHRS Total Fund fiscal year ended June 30, 2009 gross-of-fees return of -17.9 ranked the Fund in the 62nd percentile of the Independent Consultants Cooperative Public Fund Universe. Underperformance relative to the Custom Benchmark was primarily driven by active management within the domestic equity growth portfolio, active management within the fixed income portfolio, impaired collateral investments within the securities lending program of the passive fixed income portfolio, and substandard returns within the alternative investments portfolio. Within the non-traditional allocations of the portfolio, the total real estate portfolio returned -31.7% relative to the National Council of Real Estate Investment Fiduciaries (NCREIF) Index + 50 basis points return of -18.8%. The total alternative investments portfolio comprised of private equity and absolute return strategies also experienced significant losses, down approximately 31.2% during the fiscal year. Despite the returns of this fiscal year, the NHRS has achieved an 8.3% annualized, net-of-fees return since June 1989.

For the majority of the year, the portfolio was overweight to fixed income and underweight to equities relative to allocation policy targets due to declines in the equity markets. This portfolio positioning protected the portfolio as the broad domestic and international equity markets posted double-digit losses for the fiscal year ended June 30, 2009. The Russell 3000 Index posted a return of -26.6% and the MSCI All Country World Index (ACWI) ex U.S. posted a return of -30.9%. The broad fixed income markets posted respectable gains, as the Barclays Capital Aggregate Index posted a return of +6.1% and the Barclays Capital Universal Index posted a return of +4.9%.

U.S. Equity Markets

U.S. equity returns over the fiscal year were starkly negative, despite a sharp reversal in the latest quarter ended June 30th. Large-cap stocks underperformed small-cap stocks, as evidenced by the S&P 500 Index decline of 26.2% as compared to the Russell 2000 Index decline of 25.0%. Growth stocks generally fared better than value stocks. For example, the Russell 1000 Growth and Value

Indices were down 24.5% and 29.0%, respectively. Also, the Russell 2000 Growth Index declined 24.8% while the Russell 2000 Value Index was down 25.2%.

The NHRS total domestic equity portfolio has a policy target weight of 30% and it is comprised of active domestic growth, active domestic value, and passive domestic equity components. During the fiscal year, an additional 10% of assets were temporarily invested in the passive domestic equity portfolio pending redeployment into real estate and alternative investments over the next several years. The domestic equity portfolio returned -28.0% for fiscal year 2009, underperforming the Russell 3000 Index return of -26.6% by 1.4%. Active management within the domestic equity growth portfolio was the primary driver of underperformance. The total active domestic growth equity portfolio (-33.1%) underperformed the Russell 3000 Growth Index (-24.5%) by 8.6%. Relative outperformance was generated within the domestic equity value portfolio. The total active domestic equity value portfolio. The total active domestic equity value portfolio. The total active domestic equity value portfolio.

U.S. Fixed Income Markets

Over the past year, U.S. fixed income returns were volatile. The Barclays Capital Aggregate Bond Index (formerly a Lehman Brothers index) returned 6.1%. The best performers and worst performers were mortgage-backed bonds (+9.4%) and high-yield bonds (-2.4%), respectively. However, after a flight to safety of Treasuries from October through December, there was a return to risk-oriented assets which created a significant run-up in high-yield bonds (+30.4%).

The NHRS total fixed income portfolio has a policy target weight of 30% and it is comprised of active and passive fixed income components. At June 30, 2009, the asset class was approximately 2% above this allocation target. The aggregate portfolio generated a 5.1% return and slightly outperformed the Barclays Capital Universal Index return of 4.9% by 20 basis points. The passive fixed income portfolio return of 4.9% trailed the Barclays Capital Aggregate Bond Index return of 6.1% by 120 basis points due to impaired collateral investments within the index fund securities lending program. The total active fixed income portfolio provided a 4.3% return which underperformed the Barclays Capital Universal Index return of 4.9% by 60 basis points during the fiscal year.

International Markets

International developed-market equities returned -31.4% for the year ended June 30, 2009, as measured by the MSCI EAFE Index. Emerging-market equities, as measured by the MSCI EM Index returned -28.1%. However, both of these indices were beneficiaries of the strong spring rally, posting six-month returns of 8.0% and 36.0%, respectively. Global bonds posted a very modest 4.0% return

for the fiscal year, as measured by the Citigroup World Government Bond Index, reflective of the global flight to the safety of government-issued debt.

The NHRS total international equity portfolio has a policy target weight of 15% and it is comprised of active international equity and passive international equity. At June 30, 2009, the asset class weight of 14% was slightly below the allocation target. The portfolio returned -31.1% for fiscal year 2009, underperforming the MSCI ACWI ex U.S. return of -30.9% by 20 basis points. The total active international equity portfolio returned -30.8%, slightly ahead of the MSCI ACWI ex U.S. return of -30.9%. The global equity portfolio maintained an allocation weight that approximated the 5% policy target weight. The portfolio return of -21.9% provided a margin of 7.4% relative to the MSCI ACWI Index return of -29.3%.

Alternative Investments and Real Estate

Like their counterparts in the traditional long-only space, alternative investments (absolute return strategies and private equity) and real estate experienced precipitous declines in fiscal year 2009. Global mergers and acquisition activity was down for both transaction volume and disclosed deal value. Through June 30, 2009 only 12 private equity-backed companies had gone public over the last 18 months. This lack of liquidation opportunities depressed distributions at a time when capital commitments continued to be called which, in turn, fueled the denominator effect (increased private market allocation percentages due to the value of total plan assets falling faster than the value of total private market assets). Similarly, the list of challenges absolute return strategy managers faced was long: performance fell significantly below expectations, managers constrained liquidity by imposing gates and other redemption restrictions on investors, high-profile funds closed and, ultimately, industry assets under management declined some 30% due to investment losses and investor redemptions. Fundraising, debt, deal workouts and the lack of exits were challenges for both private equity and real estate managers.

Direct real estate property values fell significantly due to generally weak market conditions and the associated revaluation of individual holdings. Recognizing that sale opportunities were limited and refinancing was difficult, real estate managers retained as much cash as possible in their funds to preserve their ability to negotiate with lenders and maintain operations. The limited distributions from real estate funds also contributed to the liquidity challenges for private market investors.

The NHRS total real estate portfolio allocation at June 30, 2009 was approximately 6%. Over the next several years, the portfolio will be increased toward the 10% policy target weight. For fiscal year 2009, the portfolio returned -31.7%, underperforming the NCREIF Index + 50 basis points return of -18.8%. It should be noted, however, that the NCREIF Index represents unleveraged

institutional real estate properties. Any real estate investment containing leverage saw deterioration in excess of the benchmark. In this asset class, the main detractors from NHRS performance were due to significant write-downs in the value of individual properties in the residential, retail, and industrial sectors.

The NHRS total alternative investments portfolio represented approximately 2% of the total fund assets. Over the next several years, the portfolio will be increased toward the 10% policy target weight. The alternative investment asset class is comprised of private equity and absolute return strategy investments returned -31.2% for fiscal year 2009. The private equity portfolio returned -34.1%. Although private equity industry performance is not yet available for the quarter ended June 30, 2009, the trailing 12-month performance for all private equity, through March 31, 2009 was -24.4% according to Thomson Reuters Venture Economics. Detractors from performance for NHRS included funds specializing in media and a vintage year 2004 fund which suffered write-downs of large investments. The absolute return strategy portfolio returned -25.8%, primarily due to underperformance of a concentrated, activist-equity portfolio which was impacted by the same market conditions that affected domestic equity portfolios during the year. The hedge fund of fund investment performed in line with its peers, though still fell nearly 17.6% during the fiscal year. During the same period, the Hedge Fund Research Inc. Fund of Funds Index declined 15.1%.

During the fiscal year, the NHRS initiated a multi-year process of increasing its real estate and alternative investment programs toward their respective policy targets. This initiative was a result of an asset allocation study conducted and approved by the Board of Trustees in early 2008. A real estate policy was adopted with the objective of restructuring the asset class and utilizing fund investments to gain greater diversification within the asset class. Also, an alternative investment consultant was retained in the fall of last year to assist Staff and the Investment Committee with selection and retention of gualified investment managers, as well as to develop and construct investment policies specific to the alternative investment program. Late last year, the Board adopted an alternative investment policy and strategic plans for both the private equity and absolute return strategy portfolios. Through June 30, 2009, Staff and the Investment Committee have worked diligently to execute this plan and have begun making new commitments in the private equity space (focusing on secondaries, mezzanine and distressed). Plans are in place to supplement the existing absolute return strategy program in fiscal year 2010.

INVESTMENT REPORTS

	Current Year		Annualized		
	2009	3 Year	5 Year	10 Year	
Total NHRS Fund	-18.1%	-3.2%	1.8%	2.1%	
Total Fund Custom Index ¹	-17.2	-2.6	2.3	2.4	
Domestic Equity	-28.0	-9.9	-2.9	-1.8	
Russell 3000 Index	-26.6	-8.3	-1.8	-1.9	
International Equity	-31.1	-6.1	3.8	1.4	
MSCI ACWI (ex U.S.)	-30.9	-5.8	4.5	2.2	
Global Equity ² MSCI ACWI	-21.9 -29.3	_	_	_	
Fixed Income	5.1	6.4	5.7	6.9	
Barclays Capital Universal Bond Index	4.9	5.8	4.9	6.0	
Real Estate ³	-31.7	-4.1	7.0	8.4	
NCREIF Property Index + 0.50%	-18.8	2.5	8.4	8.8	
Alternative Investments ³	-31.2	-10.2	-4.4	-4.2	
Consumer Price Index + 5% ⁴	4.5	7.1	7.6	7.6	
Cash Equivalents	1.2	3.6	3.5	3.4	
Cash Index	1.0	3.2	3.2	3.2	

ANNUALIZED INVESTMENT RETURNS—ACTUAL VERSUS INDICES

Performance returns are calculated on a net-of-fees time-weighted rate of return basis.

- ¹ The Total Fund Custom Index is comprised of major market indices in proportion to the System's asset allocation.
- ² The Investment Committee of the Board of Trustees implemented a 5% allocation to Global Equity, effective July 1, 2008.
- ³ Performance returns for Real Estate and Alternative Investments reflect a one-quarter lag calculation methodology, with the exception of direct property investments which were appraised as of June 30, 2009 and reflect significant downward revisions in their valuations and performance for fiscal year 2009.
- ⁴ There is not a generally-accepted benchmark for Alternative Investments since characteristics vary widely between investment categories. The Consumer Price Index + 5% is utilized for comparative purposes.



Ten Year History of Time-Weighted Annual Returns

	A	As of June 30, 2009)
	Actual %	Target %*	Target Range %
Domestic Equity	39.9%	30.0%	26 – 43
International Equity	14.0	15.0	11 – 19
Global Equity	5.3	5.0	3 – 7
Fixed Income	32.3	30.0	26 – 34
Real Estate	6.2	10.0	5 – 15
Alternative Investments	2.3	10.0	0 – 15
TOTAL FUND	100.0%	100.0%	

ACTUAL ASSET ALLOCATION VERSUS TARGET ASSET ALLOCATION

* On April 8, 2008, the Investment Committee of the Board of Trustees approved the following asset allocation targets, which became effective July 1, 2008: Domestic Equity 30%; International Equity 15%; Global Equity 5%; Fixed Income 30%; Alternative Investments 10%; and Real Estate 10%. Domestic Equity is used for the temporary investment of assets to be redeployed into Alternative Investments and Real Estate pending future commitment decisions in these asset classes.



Actual Asset Allocation as of June 30, 2009

Target Asset Allocation as of June 30, 2009



TEN	LARGEST S	TOCK HOLDINGS BY FAIR VALUE*	(in thousands)
	Shares	Stock	June 30, 2009 Fair Value
1	954,400	Cisco Systems, Inc.	\$17,790
2	618,890	Microsoft Corporation	14,711
3	348,341	SAP AG	14,008
4	238,700	PepsiCo, Inc.	13,119
5	380,300	JPMorgan Chase & Co.	12,972
6	256,130	Teva Pharmaceutical Industries Ltd. ADR	12,637
7	319,830	Nestle SA	12,034
8	364,160	CVS Caremark Corporation	11,606
9	441,600	Wells Fargo & Co.	10,713
10	710,920	Pfizer, Inc.	10,664

TEN LARGEST FIXED INCOME HOLDINGS BY FAIR VALUE*			(in thousands)	
	Par	Security	June 30, 2009 Fair Value	
1	15,891,817	FHLMC Bonds, 6.000%, Agency, Due 8/15/2028	\$16,654	
2	15,815,000	U.S. Treasury Bonds, 4.500%, AAA, Due 5/15/2038	16,327	
3	11,798,000	FNMA Bonds, 4.000%, Agency, Due 11/25/2018	11,846	
4	9,734,888	SBA Bonds, 6.020%, Agency, Due 8/1/2028	10,660	
5	10,023,816	SBA Bonds, 5.600%, Agency, Due 3/1/2029	10,641	
6	13,000,000 **	New South Wales Treasury Bonds, 5.500%, AAA, Due 3/1/2017	10,152	
7	10,000,000	FNMA Bonds, 4.000%, Agency, Due 2/25/2019	10,066	
8	9,140,000	FNMA Bonds, 6.000%, AAA, Due 4/18/2036	9,556	
9	8,806,831	FHLMC Bonds, 4.000%, Agency, Due 9/15/2018	8,820	
10	8,405,000	U.S. Treasury Notes, 0.875%, Agency, Due 5/31/2011	8,375	

The NHRS Also	he NHRS Also Invests in the following Collective Investment Trusts:		
Units	Security	June 30, 2009 Fair Value	
1,857,482	NTGI Collective Daily Russell 3000 Index Fund	\$981,798	
21,617,474	Pyramis Core Plus Commingled Pool	268,273	
596,482	NTGI Collective Daily Aggregate Bond Index Fund	230,577	
15,158,062	NTGI Collective Daily All Country World Index ex-U.S. Fund	128,707	

 * A complete listing of portfolio holdings is available for review by contacting the NHRS offices.

** Par value is denoted in local currency.

	YEAR ENDED JUNE 30, 2009		
	Assets Under Management (in thousands)	Fees (in thousands)	Basis Points
INVESTMENT MANAGEMENT FEES			
Equity Investments: Domestic International Global	\$1,715,138 632,402 222,708	\$ 4,117 2,476 1,361	24 39 61
Fixed Income Investments	1,338,205	3,275	24
Alternative Investments: Venture Capital Funds* Buyout Funds* Distressed Debt* Absolute Return Strategies	21,888 19,836 12,994 48,310	448 362 154 571	27 63 51 118
Real Estate	273,559	2,113	77
Cash and Cash Equivalents	115,285	_	_
TOTAL INVESTMENT MANAGEMENT FEES	\$4,400,325	\$14,877	34
INVESTMENT SERVICE FEES			
Custodial Fees Investment Advisor Fees Security Lending Management Fees	\$4,023,739 4,400,325 301,400	\$ 679 1,121 652	2 3 22
TOTAL INVESTMENT MANAGEMENT AND SERVICE FEES	\$4,400,325	\$17,329	39

SCHEDULE OF INVESTMENT MANAGEMENT AND SERVICE FEES

* Basis point calculation is based on committed capital in accordance with investment management agreements.

YEAR ENDED JUNE 30, 200			
	Number of		Commissions
	Shares Traded		Per
Brokerage Firm	(in thousands)	(in thousands)	Share
Merrill Lynch & Company, Inc.	14,578	\$136	0.01
Goldman Sachs & Company, Inc.	13,860	135	0.01
UBS AG	15,607	125	0.01
Credit Suisse First Boston Corporation	8,966	116	0.01
J.P. Morgan Securities, Inc.	3,789	91	0.02
Abel/Noser Corporation	6,090	90	0.01
Morgan Stanley & Company, Inc.	4,799	85	0.02
Citigroup Global Markets, Inc.	3,599	62	0.02
Liquidnet, Inc.	2,591	58	0.02
The Bank of New York Mellon Corporation	7,992	53	0.01
Investment Technology Group, Inc.	2,842	48	0.02
Lehman Brothers, Inc.	3,548	43	0.01
Jeffries & Company, Inc.	1,317	41	0.03
Deutsche Bank AG	4,165	39	0.01
Cantor Fitzgerald & Company	1,847	33	0.02
Caylon Securities, Inc.	11,764	33	0.01
Barclays Capital	1,034	29	0.03
Bear Stearns Securities Corporation	1,661	29	0.02
The Citation Group	1,331	27	0.02
Robert W. Baird & Company	676	25	0.04
All Others (140 not listed separately)	24,521	608	0.02
TOTAL BROKERAGE COMMISSIONS PAID	136,577	\$1,906	0.01

SCHEDULE OF BROKERAGE COMMISSIONS PAID

Commission detail is not included in the schedule above for the following funds because they are com-mingled investments:

NTGI Collective Daily Aggregate Bond Index Fund NTGI Collective Daily All Country World Index ex-U.S. Fund NTGI Collective Daily Russell 3000 Index Fund Pyramis Core Plus Commingled Pool

SUMMARY OF INVESTMENTS

	June	30, 2009
TYPE OF INVESTMENT	Fair Value (in millions)	Percent of Total Fair Value
FIXED INCOME		
Asset Backed Bonds	\$ 11.0	0.3%
Collateralized Mortgage Bond Obligations	88.0	2.0
Commercial Mortgage Backed Bonds	40.0	0.9
Corporate Bonds	289.8	6.6
Government and Agency Bonds	405.9	9.2
Guaranteed Fixed Income	4.6	0.1
Pyramis Core Plus Commingled Pool	268.3	6.1
NTGI Collective Daily Aggregate Bond Index Fund	230.6	5.2
TOTAL FIXED INCOME	1,338.2	30.4
EQUITY		
Consumer Discretionary	144.2	3.3
Consumer Staples	122.7	2.8
Energy	140.1	3.2
Financial Services	248.9	5.7
Health Care	201.7	4.6
Industrials	165.6	3.8
Information Technology	242.6	5.5
Materials	85.1	1.9
Telecommunication Services	72.7	1.7
Utilities	36.1	0.8
NTGI Collective Daily Russell 3000 Index Fund	981.8	22.3
NTGI Collective Daily All Country World Index ex-U.S. Fund	128.7	2.9
TOTAL EQUITY	2,570.2	58.5
OTHER INVESTMENTS		
Alternative Investments	103.0	2.3
Real Estate	273.6	6.2
Cash and Cash Equivalents	115.3	2.6
TOTAL INVESTMENTS	\$4,400.3	100.0%

(in millions) \$6,500.0 \$5,967.9 \$5,597.0 \$6,000.0 \$5,112.3 \$5,500.0 \$4,728.6 \$5,000.0 \$4,391.3 \$4,461.2 \$4,500.0 \$4,000.0 \$3,500.0 \$3,000.0 \$2,500.0 \$2,000.0 \$1,500.0 \$1,000.0 \$ 500.0 \$ 0.0 FY 2004 FY 2005 FY 2006 FY 2007 FY 2008 FY 2009

Net Assets Held In Trust For Benefits

Appendix B

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One Towne Square Suite 800 Southfield, MI 48076-3723

November 25, 2009

Board of Trustees New Hampshire Retirement System 54 Regional Drive Concord, New Hampshire 03301-8509

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.*

The current investment policy is based on an asset liability modeling study and asset allocation recommendations of Ennis Knupp in April 2008. The asset allocation selected by the Board had an expected rate of return of 7.1%, a standard deviation of returns of 11.5%, and an underlying inflation assumption of 2.3% in the Ennis Knupp study. The implied real return is 4.8% (7.1% less inflation of 2.3%).

In determining the assumed rate of return for the actuarial valuation, we abide by the Actuarial Standards of Practice (ASOP) No. 27, Selection of Economics Assumptions for Measuring Pension Obligations, as prescribed by the American Academy of Actuaries.

Under ASOP No. 27, we determine the best estimate range for each economic assumption then pick a single value within the best estimate range. For the investment return assumption we use the building block method which determines the assumed rate of return as sum of inflation and real return assumption.

Board of Trustees November 25, 2009 Page 2

Actuarial Opinion:

For the June 30, 2009 valuation, the actuarial assumed rate of return is made up of a wage inflation assumption of 4.5% and a real rate of return assumption of 4.0% for a total of 8.5% per year, net of investment expenses.

The best estimate range is the narrowest range within which the actual results compounded over the measurement period are more likely than not to fall. This range is typically defined as being between the 25th and 75th percentiles of the distribution of outcomes over the appropriate time horizon. Using a 30-year time horizon the best estimate range for the investment return assumption is 5.85% to 8.89%.



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 15 years in the Investment Policy is based on a shorter time frame than used to determine the assumed rate of return which can be 30 years or longer.

Board of Trustees November 25, 2009 Page 3

• The underlying inflation assumption used by Ennis Knupp was 2.3% resulting in a real return assumption of 4.8% per year. Under the valuation assumptions, the wage inflation assumption of 4.5% is more conservative for pension valuation purposes since benefits grow with wages and the real return assumption of 4.0% use in the valuation is more conservative than the 4.8% real return in the expected return from the Investment Policy analysis.

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

The undersigned actuaries are independent of the plan sponsor and are Members of the American Academy of Actuaries (MAAA) as indicated, and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Respectfully submitted,

Tennot D allet

Kenneth G. Alberts

David To Fausch

David T. Kausch, F.S.A., E.A., M.A.A.A.

KGA/DTK:sc

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Appendix C

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SUMMARY OF FUNCTIONS & INTERACTIONS: NHRS INVESTMENTS

Level	Policy	Strategy	Implementation	Oversight
Board of Trustees	Approve			Х
Investment Committee	Recommend	Approve		Х
NHRS Investment Staff	Recommend	Recommend	Manage	Х
Consultants	Recommend	Recommend		Х

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IV. BOARD RESPONSIBILITIES - Approved at the October 14, 2008, NHRS Board meeting.

The Board of Trustees has certain responsibilities set forth in State law and also other implied responsibilities that are necessary for its prudent oversight of the System.

Together these include the responsibilities or authority to:

- Adopt a strategic plan including a mission statement that is consistent with the statutory mandate and core values that set forth proper standards of behavior. The current strategic plan is contained in the Appendix of this manual.
- Establish governance policies to guide the Board in an effective and efficient manner. Currently all governance polices are contained in this Governance Manual.
- Establish standing and special committees of the Board, as necessary. The Committees are contained in Section VII of this manual.
- Articulate and adopt a statement of risk management principles. Those principles are contained in Section X of this manual.
- Adopt a Statement of Investment Policy consistent with statutory requirements and current best industry practices including an appropriate asset allocation policy for the investment of the System's assets.
- Hire the necessary professionals (e.g.: actuaries, investment consultants, and legal counsel) to support the operation of the System).
- Approve an annual investment report, prepared by the Independent Investment Committee as described by statute, for submission to the President of the Senate, the Speaker of the House, and the Governor.
- Adopt a funding policy with necessary contribution rates to keep the System actuarially sound.
- Adopt reasonable actuarial assumptions and methodologies upon the advice of the actuary.
- Adopt a sufficient administrative budget on a biennial basis and monitor compliance.
- Ensure that an independent audit of the System's financial statements takes place each year.
- Evaluate those to whom duties have been delegated on a regular basis.
- Keep a record of all its proceedings and file an annual financial report, as described by statute, for submission to the President of the Senate, the Speaker of the House, the Governor and the Commissioner of Administrative Services.
- Annually provide active member statements as outlined by the statute.
- Annually make relevant System-related information publicly available.

There are several aspects of NHRS that the Board does not control as the New Hampshire Legislature retains the responsibilities for these items. These items include:

- The structure of the Board of Trustees
- The legal and types of benefits to be provided to public employees

- The level of employer and employee contributions
- Funding of the benefits

INDEPENDENT INVESTMENT COMMITTEE

The Independent Investment Committee has certain responsibilities set forth in State law and also other implied responsibilities that are necessary for its prudent oversight of the System's investments.

Together these include the responsibilities or authority to:

- Recommend an investment policy and investment consultants to the full board for approval.
- Review investment performance, choose fund managers, and have the full power to invest and reinvest funds on behalf of the System in accordance with the policy adopted by the Board of Trustees.
- Select and retain a custodial bank to hold and safeguard assets of the System.
- Select and authorize investment managers and other similar agents to make necessary decisions regarding investment actions or the disposition of assets on behalf of the independent investment committee.
- Report to the Board of Trustees at least quarterly on the actions taken by the independent investment committee and developments regarding the investment program.
- Prepare a comprehensive annual investment report, consistent with statute, for review and approval by the full board and submission to the President of the Senate, the Speaker of the House, and the Governor.

New Hampshire Retirement System Investment Committee Charter

Adopted March 13, 2009

Overview

The Investment Committee (IC) was established by Chapter 300 of the 2008 Session Laws with an effective date of January 1, 2009. The purpose of the IC is to invest the funds of the New Hampshire Retirement System ("NHRS" or "System") in accordance with the policies approved by the NHRS Board of Trustees (the Board). The IC will also make recommendations to the Board on investment policy, prepare a comprehensive annual investment report, and provide quarterly investment program updates to the Board.

As fiduciaries, the IC members must exercise the highest degree of care, skill, prudence, and loyalty to beneficiaries of the trust funds.

Composition

The IC consists of not more than 5 members. Three members, who shall not be members of the NHRS Board, will be appointed by the Governor with the consent of the Executive Council. Up to two members, who will be members the NHRS Board, will be appointed by the chairperson of the NHRS Board of Trustees. All members of the IC shall have substantial experience in the field of institutional investments or finance (beyond experience as a trustee of the New Hampshire Retirement System).

Authority

The IC is granted authority as outlined in statute, as may be amended from time to time, and as summarized below. The IC has the authority to invest and reinvest fund assets in accordance with the policy set by the Board, and in recognition of the assumed rate of return set by the Board. Furthermore, the IC has the authority to hire and terminate investment managers, and the custodian, and other related investment agents, consistent with statute.

The IC has the authority to review research data, historical information, consultants' reports, and other documents it deems reasonably necessary to form an opinion on the capabilities of the investment managers and related agents, custodian, and investment consultant of the fund. The Committee is allowed to ask any questions of the firms that are relevant to the services they perform on behalf of the trust funds.

The IC also has the authority to call upon the NHRS Executive Director, Director of Investments or his or her designee, legal counsel, investment consultant, actuary, and auditor to assist it in carrying out its responsibilities.

Implementation of IC decisions and directives is delegated to NHRS staff.

Statutory Obligation to Act as Fiduciary (excerpts from RSA 100-A:15):

I-a.(a) A trustee, independent investment committee member, or other fiduciary shall discharge duties with respect to the retirement system:

(1) Solely in the interest of the participants and beneficiaries;

(2) For the exclusive purpose of providing benefits to participants and beneficiaries and paying reasonable expenses of administering the system;

(3) 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;

(4) Impartially, taking into account any differing interests of participants and beneficiaries;

(5) Incurring only costs that are appropriate and reasonable; and

(6) In accordance with a good-faith interpretation of the law governing the retirement system.

(b) In investing and managing assets of the retirement system pursuant to subparagraph (a), a trustee or independent investment committee member with authority to invest and manage assets:

(1) Shall consider among other circumstances:

(A) General economic conditions;

(B) The possible effect of inflation or deflation;

(C) The role that each investment or course of action plays within the overall portfolio of the retirement system;

(D) The expected total return from income and the appreciation of capital;

(E) Needs for liquidity, regularity of income, and preservation or appreciation of capital; and

(F) The adequacy of funding for the system based on reasonable actuarial factors;

(2) Shall diversify the investments of the retirement system unless the trustee or independent investment committee member reasonably determines that, because of special circumstances, it is clearly prudent not to do so;

(3) Shall make a reasonable effort to verify facts relevant to the investment and management of assets of a retirement system; and

(4) May invest in any kind of property or type of investment consistent with this section.

(c) The board of trustees shall adopt a statement of investment objectives and policy for the retirement system as provided in subparagraph VII(c).

I-b. Paragraph 1-a shall apply to all board members, independent investment committee members, and other fiduciaries, as well as staff and vendors to the extent they exercise any discretionary authority or discretionary control respecting management of the retirement system or exercise any authority or control respecting management or disposition of its assets, or they render investment advice for a fee or other compensation, direct or indirect, with respect to any monies or other property of the retirement system, or have any authority or responsibility to do so, or they have any discretionary authority or discretionary responsibility in the administration of the retirement system.

I-c. The fiduciary obligations of the members of the board of trustees and the independent investment committee are paramount to any other interest a trustee or independent investment committee member may have arising from another role or position that he or she holds, including the position which qualified the person for appointment to the board of trustees or independent investment committee.

Responsibilities of the Committee

The IC has the following responsibilities:

- Determine the IC's philosophy for investing the assets of the System
- Recommend changes in the Statement of Investment Policy to the Board
- Review, with the assistance of the investment consultant or Director of Investments or his or her designee, the performance of the fund, asset classes, and investment managers versus the benchmarks set forth in the Statement of Investment Policy
- Select and, as appropriate, terminate the investment managers or related investment agents, consistent with statute
- Appoint and periodically review a custodian bank for the assets
- Report to the Board at least quarterly on the management, investment, and reinvestment activities of the IC
- Recommend an investment consultant to the Board and participate in the Board's annual evaluation of the investment consultant
- Prepare a comprehensive annual investment report as outlined in statute for review and approval by the Board
- Suggest legislative changes to the Board
- Maintain an orientation and education program for its members

Responsibilities of the Committee Members

Individual committee members have the following responsibilities:

- Discharge duties solely in the interest of the members and beneficiaries and for their exclusive benefit
- Observe relevant policies and procedures of NHRS such as those covering Code of Ethics, disclosure, confidentiality, travel, and communications.

- Observe appropriate distinctions in roles and responsibilities with NHRS staff, service providers, IC members and Trustees
- Be informed about the System's investment policies and remain current on developments in the pension and public fund industry
- Work constructively with other IC members
- Interact appropriately with NHRS staff, outside service providers, and the full Board
- Be prepared and regularly attend IC meetings
- Respect open meeting laws by not convening meetings with fellow IC members to discuss NHRS business outside the properly noticed meetings
- Maintain co-fiduciary responsibility
- Live up to high ethical standards and avoid the appearance of impropriety

Reporting to the NHRS Board of Trustees

By statute the IC is required to provide quarterly and annual investment reports to the Board.

The quarterly investment program updates will be provided to the Board in advance of its scheduled meetings in March, June, September and December. They will include, at a minimum, the following:

- Review of the performance of the total fund, asset classes, and investment managers' versus benchmarks
- Comparison of the fund's actual asset allocations versus target allocations, with explanation of deviations
- Summary of actions taken which involved moving investment proceeds or assets during the period (such as liquidity events, rebalancing, manager hire or termination)

In addition to the items above, supplemental information for the annual period ending June 30th will be provided to the Board in advance of its September meeting. This will be presented as the comprehensive annual investment report. It will include, at a minimum, the following:

- A description of the IC's investment philosophy, including a summary of any significant changes to that philosophy that have occurred since the last annual report.
- A review of the Statement of Investment Policy with any recommended changes, including asset class target allocations and allowable ranges
- A summary of compliance with the Statement of Investment Policy, including an explanation for exceptions and steps taken to return to compliance
- An analysis of returns on investment by investment category
- Summary of changes to investment structure or portfolio managers
- An assessment of the current asset structure to determine if it will allow the funds to reach its long range objectives, and any recommended changes
- Statement of investment costs
- Summary of any other relevant investment program developments, including those affecting securities lending, proxy voting, divestment, etc.
- Any suggested changes in legislation which are requested to better serve the members of the System
- Other items as required by statute

Upon approval of this comprehensive annual investment report by the Board, it will be submitted to the president of the senate, the speaker of the house, and the governor.

As the IC is also responsible for recommending an investment consultant to the Board of Trustees, the IC will provide a report, upon request from the Board, which may include any of the following:

- An assessment of the current investment consultant
- A recommendation to retain, competitively review, or terminate the investment consultant
- An assessment of proposals from investment consultants, including a recommendation for an investment consultant

Meetings

The IC shall set an annual calendar and meet no less frequently than quarterly. All meetings will be held in compliance with open meeting laws.

Governance

The IC will elect a chair person for a one-year term, or until a successor is chosen, from among the Committee members who will have the following responsibilities:

- 1. Communicating with the chair person of the NHRS Board of Trustees, the NHRS Executive Director, and the Director of Investments or his or her designee, on a regular basis
- 2. Setting the schedule and agendas for the meetings
- 3. Conducting the IC meetings or appointing another IC member to conduct them in his or her absence
- 4. Calling special or emergency meetings, when necessary
- 5. Enforcing the governing policies of the IC
- 6. Scheduling and attending new member orientations

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Appendix D

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NHRS Investment Philosophy:

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 plan-level 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.

NHRS Investment Philosophy:

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.

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.

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NEW HAMPSHIRE RETIREMENT SYSTEM STATEMENT OF INVESTMENT POLICY Amended at the July 14, 2009 NHRS Board Meeting

This Statement of Investment Policy is issued by the Board of Trustees of the New Hampshire Retirement System ("NHRS" or "System") to provide for the governance and oversight of the pension fund assets. The System's assets are invested pursuant to the Constitution of the State of New Hampshire and all applicable laws and regulations and managed for the exclusive purpose of providing plan benefits and paying plan expenses. This document supersedes all prior documents entitled Statement of Investment Policy and related sections of NHRS investment guidelines.

- I. Roles & Responsibilities
 - A. The Board of Trustees (the "Board")

The NHRS is intended to be a "Qualified Pension Plan" under Section(s) 401(a) and 414(d) of the Internal Revenue Code and is administered by a Board of Trustees.

- 1. The Board of Trustees adopts a Statement of Investment policy, including an asset allocation of the System's assets.
- 2. The Board approves a Comprehensive Annual Investment Report presented by the Investment Committee.
- 3. The Board shall receive a report from the Investment Committee on its actions at least quarterly.
- 4. The Board has additional authority and responsibilities as outlined in statute.
- B. The Investment Committee (the "Committee")
 - 1. The Investment Committee recommends an investment policy and investment consultants to the Board for approval.
 - 2. The Committee reviews investment performance and related matters, selects and retains managers for the System's assets, and invests and reinvests funds on behalf of the System in accordance with the Board's Statement of Investment Policy.
 - 3. The Committee selects and retains a custodian bank to hold and safeguard System assets.
 - 4. The Committee selects and retains other investment-related agents consistent with statutes.
 - 5. In addition to its quarterly reports to the Board, the Committee, prepares a Comprehensive Annual Investment Report.

C. Staff Responsibilities

The Director of Investments, or designee, is responsible for administration of the investment program of the System consistent with the requirements established by law, this Statement of Investment Policy, and the directives of the Committee, and the policies set by the Board. Areas of direct responsibility include:

- 1. Identify policy issues for consideration by the Committee and the Board and prepare recommendations regarding such matters. Provide other advice and counsel, as appropriate.
- 2. Assess and report the condition of the overall investment program to the Executive Director, the Committee, and the Board, relative to goals, objectives, policies and guidelines.
- 3. Monitor and assess service providers, including conducting on-site due diligence visits, and ensure that they meet expectations and conform to policies and guidelines. Recommend selection and termination of service providers, as needed.
- 4. Effectively implement the policies of the Board and decisions of the Committee, using judgment and care while being mindful of implementation risks and costs.
- 5. Initiate rebalancing and liquidity events.
- 6. Proactively encourage and support the ongoing education and professional development of investment staff. Provide for educational opportunities for the Committee and the Board.

The Director of Investments, or designee, receives policy direction from the Board and actionable directives from the Committee and provides updates to the Executive Director, to the Committee, and to the Board.

To carry out this Policy and investment-related decisions of the Investment Committee as well as administration of the investment program, the Director of Investments, or designee, is authorized to execute and amend agreements and other necessary or proper documents pertaining to investment-related service providers or other investment functions.

D. Service Providers

Service Providers, including custodian banks, investment consultants, investment managers, transition managers, and similar agents, shall acknowledge their fiduciary status, to the extent permitted by law¹, within the contractual agreement. Legacy contracts will be amended accordingly. Exceptions will be reported to the Committee.

¹ On July 14, 2009 the Board of Trustees adopted the attached resolution interpreting the term "assets" of the System relative to NH RSA 100-A:15, I-b.

The Board will retain the services of investment consultants with experience in the analysis and performance measurement of asset types within large public and private funds and plans. The consultant will provide an independent report and evaluation of manager and portfolio performance quarterly for relevant periods, compare results to appropriate benchmarks and peers. Consultants may also conduct Asset Liability studies as assigned, participate in manager searches as assigned, assist in client education on investment-related matters, and provide independent advice and counsel to the Board and the Committee.

Investment Managers shall possess and demonstrate to NHRS staff sufficient attributes to warrant engagement and retention. Investment Managers shall manage investments in accordance with investment guidelines, and investment management agreements, as they may be modified from time to time.

Custodians will assume responsibility for the safekeeping and / or accounting of all assets held on behalf of the System, preparing timely unaudited performance calculations, and other duties as agreed to by contract.

II. Investment Oversight Considerations

The System's assets are invested and managed for the exclusive purpose of providing plan benefits and paying plan expenses.

Trustees and members of the Investment Committee of the New Hampshire Retirement System recognize their fiduciary duty to invest the System's funds in compliance with RSA 100-A. Within this context of investment management, the Trustees and members of the Committee shall rely upon appropriate professional advice.

Asset managers and other investment-related service providers or opportunities shall be evaluated and utilized based on the intrinsic merits of the situation and not based on other external factors including but not limited to a social investing focus or economically-targeted objectives. Economically-targeted investments ("ETI") and socially-targeted investments ("STI") are defined as those that are promoted or selected for the economic and / or social benefits they create in addition to the expected investment return. As with any other investment decision, the process and resulting decision must be consistent with the objectives of the investment program. The fiduciary principles of prudence and exclusive benefit provisions will be followed in the consideration of ETI or STI and similar situations. Each investing situation will be evaluated using an integral, objective process based on risk/return criteria and other factors outlined in sections I. D. and II.A. of this Policy.

A. Selection of Service Providers

The Director of Investments shall recommend investment managers, custody banks, and other service providers to the Committee for hire. In order to create an efficient and effective process, the Director of Investments, or designee, may utilize RFI, RFP, investment consulting services, third party proprietary software or database, review of

July 14, 2009

existing service provider capabilities or any combination of these or other methods to identify service provider finalists for consideration by the Committee.

Existing managers may have a change in discretion within their mandate, or even be considered for a change in asset class (as between international equity and global equity, for example). Any mandate changes across asset types will be recommended and documented by staff.

Contact and communication with service providers proposing products, mandates, or business relationships to System-related individuals for consideration and potential retention shall be directed to the Director of Investments, or staff designee. During searches, existing service providers retained by the NHRS shall limit communication with System-related individuals and to NHRS business matters unrelated to the search to avoid a violation of policy.

Staff will recommend asset class policies and guidelines for investment managers, the custodian, and other service providers for action by the Committee.

Service providers are retained by executing a written contract with the System which describes the responsibilities and other relevant matters for all parties.

Service providers are required to abide by the NHRS Code of Ethics and the Political Contributions and Prohibitions on Investment Management Business Policy.

III. Asset Allocation Policy

The Trustees recognize that it is necessary to maintain proper diversification both among and within the asset classes and pursue an investment strategy designed to meet the long term funding requirements of the System as determined by the System's actuary. To this end, the Board's asset allocation will reflect the results of an Asset Liability Study performed at least once in every five year period, or more often, as recommended by System staff and investment advisors.

The Asset Liability study determines the mix of investments, by asset class, which is expected to produce the return required to meet future funding requirements at the lowest level of risk, given all of the assumptions made and employing a mean-variance optimization model. The current 8.5% assumed rate of return results in an "equity-centric" model in that equity-like returns are needed to achieve the result. Equity volatility (risk) is among the highest for any asset class. In order to address this risk, an emphasis on both diversification and risk management becomes important to the long-term success of the investment program.

The Board adopts an asset allocation based on recommendations from the Committee, the Director of Investments, and the investment consultant. The Trustees chosen asset allocation may differ from that proposed in the Asset Liability study provided there is an accepted rationale for doing so.

Generally, investment managers are expected to fully invest the funds under their management, allowing that from time to time the investment manager will require a portion of the allocated funds to be temporarily held in cash pending reinvestment. The investment and use of derivatives, including but not limited to futures, options, and swaps, is also permitted under the specific guidelines applicable to each investment mandate.² Managers are permitted to use exchange traded funds (ETFs) for a limited portion of the portfolio on a temporary basis.

Certain managers using well defined strategies, and within certain asset classes, may benefit from being permitted to hold portions of cash from time to time. If permitted, the guidelines for such managers will reflect this, and the written description of their strategy will explain the rationale for such discretion.

The following allocation targets have been adopted for the NHRS³:

Asset Class	Target Allocation	Allocation Range
Domestic Equity	30%	26 - 43%
International Equity	15%	11 - 19%
Global Equity	5%	3 - 7%
Fixed Income ⁴	30%	26 - 34%
Real Estate	10%	5 - 15%
Alternative Investments	10%	0 - 15%

The actual asset class allocation of the NHRS investment program will be reviewed by staff relative to the asset class policy targets. The allocation range for domestic equity reflects commitment time periods needed to raise the actual alternative and real estate allocations up to their targets. Staff shall maintain the System's actual asset allocation within allocation ranges at all times. When rebalancing assets already within ranges, staff will give due consideration to market environments, costs and risks of implementation, potential impacts on manager-level performance, and other relevant factors.

In order to meet the long-range goals and stated objectives of the NHRS investment program, the System may allocate assets across 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 return comparable to the asset class benchmark. Nonetheless, it is recognized that many asset classes, especially those that are illiquid, and many investment strategies are not easily replicated in a passive manner. The goal of active management is to exceed the

 $^{^{2}}$ On January 15, 2008 the Investment Committee approved the addition of this sentence to the Policy, to address the use of derivatives.

³ On April 8, 2008 the Investment Committee voted to approve the allocation targets provided in this Policy, with an effective date of July 1, 2008. The allocation targets had previously been as follows: 44% to Domestic Equity; 16% to International Equity; 30% to Fixed Income; 5% to Commercial Real Estate; and 5% to Alternative Investments. ⁴ On June 12, 2007 the Investment Committee voted to combine the Domestic Fixed Income and Global Fixed Income asset classes into a single combined Fixed Income asset class, with a target asset allocation of 30%. The asset allocation had previously been 26% to Domestic Fixed Income and 4% to Global Fixed Income.

performance of the appropriate index on a net-of-fees basis at a commensurate level of risk over a market cycle.

IV. Asset Class Performance Measurement and Monitoring Policy

The following benchmarks represent the standards of measurement to be used for the various investment asset classes of the New Hampshire Retirement System as determined by the Board.

Asset Class	Benchmark
Domestic Equity	Russell 3000 Index
International Equity	MSCI All Country World Ex-U.S. Index
Global Equity	MSCI All Country World Index
Fixed Income	Lehman Brothers Universal Bond Index
Commercial Real Estate	NCREIF Property Index + 50 basis points
Alternative Investments	Consumer Price Index + 5%
Total Fund	Total Fund Custom Benchmark *

* Total Fund Custom Benchmark is a weighted average return comprised of the following benchmarks in the same proportion as the target asset allocation: Russell 3000 Index, MSCI All Country World Ex-U.S. Index, MSCI All Country World Index, Lehman Brothers Universal Bond Index, NCREIF Property Index + 50 basis points, and Consumer Price Index + 5%.⁵

The Committee is cognizant that performance results may vary under different economic conditions and market cycles. Therefore, an optimal period for measuring performance effectively would span three to five years or more. Performance returns are expected to exceed the relevant benchmark on a net-of-fees basis over time.

Individual managers' performance results are appropriately measured against market indices, similarly constrained peers, tracking error expectations and other appropriate criteria that may include such measures as amount of active risk taken, information ratios, upside-downside capture ratios, and other metrics. Individual managers may have different benchmarks assigned to their specific mandate than those selected for an asset class as a whole. This approach is intended to provide better total returns over time but at the cost of slightly greater interim performance tracking error within an asset class. Manager benchmarks are assigned when they are hired but may be adjusted by the Committee if a recommendation to do so is approved. Such a change may be the result of granting greater discretion to a manager to invest outside their existing benchmark, or even a change of mandate sufficient to move an existing manager to another asset class, or for other reasons.

The Committee, working with consultants and staff, will make appropriate determinations of number, and relative size, of manager mandates within an asset class.

⁵ The respective weighting of those indices that comprise the Total Fund Custom Benchmark will be updated over time as implementation progresses toward the allocation targets approved by the Investment Committee on April 8, 2008.

When doing so, the Committee will consider factors such as asset class risk, overall portfolio diversification and risk, costs, and expected investment outcomes. The timing of any changes may reflect other portfolio considerations such as a liquidity event or rebalancing.

V. Other Policies

A. Securities Lending

The Committee has determined that a carefully tailored program permits the Fund's custodian to lend certain of the assets that are held by the custodian. The Committee may make changes in the program from time to time, up to, and including, its termination.

B. Proxy Voting

The Committee will establish policies and procedures under which proxy voting of the System's investments will occur.

- C. Alternative Investment Policy Statement
- D. 2009 Real Estate Policy

RESOLUTION OF THE BOARD OF TRUSTEES OF THE NEW HAMPSHIRE RETIREMENT SYSTEM

WHEREAS, Sections 100-A:14 and 100-A:15 of the New Hampshire Revised Statutes Annotated (the "RSA") provide that the Board of Trustees (the "Board") of the New Hampshire Retirement System (the "System") is vested with the authority to administer and set the investment policy of the System; and

WHEREAS, Section 100-A:14 of the RSA grants the Board the authority to adopt such rules and regulations as it deems necessary to the fulfillment of its duties to the System; and

WHEREAS, Section 100-A:15, I-b of the RSA provides that various standards of conduct apply to vendors and other fiduciaries that have discretionary control over the management of the "assets" of the System; and

WHEREAS, Section 100-A:15, I-b of the RSA does not define when the underlying assets of a commingled entity will be deemed to be "assets" of the System;

NOW, THEREFORE, pursuant to its authority to administer the System and establish its investment policy, the Board hereby adopts the following resolutions:

RESOLVED, that when the System makes an equity investment in another entity, the underlying assets of such other entity will be deemed "assets" of the System for purposes of Section 100-A:15, I-b of the RSA except with respect to investments in the following entities:

- (a) Publicly-offered securities
- (b) An investment company registered under the Investment Company Act of 1940
- (c) A Company primarily engaged, either directly or through majorityowned subsidiaries, in the production and/or sale of goods and/or services (other than the investment of capital) ("Operating Company")
- (d) A private equity fund whose primary objective is to invest in Operating Companies in which it has contractual rights to influence company management
- (e) A private investment fund whose primary objective is to invest in real estate with respect to which it has the right to participate directly in the development or management
- (f) A government mortgage pool guaranteed by the United States or an agency or instrumentality thereof

(g) An investment fund or entity in which:

(1) (i) private U.S. employee benefit plans subject to Part 4 of Subtitle B of Title I of the Employee Retirement Income Security Act of 1974 ("ERISA Plans"), (ii) plans subject to Section 4975 of the Internal Revenue Code ("4975 Plans"), and (iii) other entities deemed under ERISA to hold assets of such ERISA Plans and 4975 Plans (together with ERISA Plans and 4975 Plans, "Benefit Plan Investors"), hold less than 25% of any class of equity interests and

- (2) the System holds less than 25% of the total equity interests
- (h) An insurance company general account to the extent that the nonguaranteed policy portion of such account is less than 25% held by Benefit Plan Investors and less than 25% held by the System

RESOLVED, that it is the intention of the Board that in settling any ambiguity regarding foregoing resolution, the Board shall look to available guidance under ERISA to settle such ambiguity.

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ALTERNATIVE INVESTMENT POLICY STATEMENT Adopted: November 12, 2008 Effective: January 1, 2009

STATE OF NEW HAMPSHIRE RETIREMENT SYSTEM ALTERNATIVE INVESTMENT POLICY STATEMENT TABLE OF CONTENTS

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1. SCOPE & PURPOSE

This policy applies to the alternative investments in the Fund. This policy provides the broad strategic framework for managing the alternative investments allocation.

In general, alternative investments are incorporated into programs to provide multiple sources of returns, diversify volatility, and enhance the overall portfolio's risk-adjusted return. *Private Equity* tends to be incorporated into plans to provide return enhancement, *Absolute Return* strategies seek to provide diversification and non-correlation benefits, and *Real Asset* strategies seek to provide inflation protection. *Opportunistic* strategies are non-definable in advance and seek to capitalize on temporary anomalies in the capital markets.

2. INVESTMENT PHILOSOPHY

The alternative investments program predominantly uses active management strategies and is 100% externally managed. For certain commodity-related <u>real</u> <u>asset</u> investments, a passive commodity index may be utilized. The Fund's Annual Investment Plan establishes the short and long-term approaches for achieving the performance objectives consistent with the requirements of this policy.

3. COMMITMENT PACE AND ALLOCATION

Funding of the alternative investments program (especially in the <u>private equity</u> and <u>real assets</u> strategies) through *closed-end funds* will occur over an extended time period and may take a number of years before the total allocation to those strategies is fully invested. Further, an individual investment may begin to return capital to the Fund prior to the full funding of the commitment, and the outstanding invested capital of the investment may at times be substantially less than the total commitment. In recognition of this, a committed allocation to private equity and certain real assets through closed-end funds should exceed the long-term private equity and real assets allocation target. In recognition of private equity and certain real assets investing characteristics, a committed allocation to private equity and real assets may equal up to 150% of the private equity allocation target. Over committing to target allocation is necessary to achieve/maintain policy target allocation as distributions are generally received prior to fund commitments being fully drawn.

4. STRATEGY ALLOCATION

Asset Allocation is a critical driver for the long-term success of the alternative investments program. Portfolio theory suggests that we control asset allocation risk by establishing strategy and sub-strategy target portfolio exposure parameters and optimizing the portfolio along risk and return. Alternative investments face challenges when utilizing mean-variance optimization methods for the construction of efficient portfolios. Utilizing mean-variance optimization, risk-budgeting, and historical observation, a diversified alternative investment strategic allocation is set forth below. There is wide variance in the permissible bands due to the cash flow characteristics, liquidity challenges, and non-normal distribution patterns observed in alternative investment strategies. The Board of Trustees has established a 10% target allocation to <u>alternative investments</u>. The table below represents the strategic target allocation to each alternative investment strategy as a percent of total plan assets.

Alternative Investment Strategy	Target Allocation As % of Total Portfolio	Minimum %	Maximum %
Private Equity	4%	0%	10%
Absolute Returns	4%	0%	10%
Real Assets	0%	0%	5%
Opportunistic	2%	0%	5%

Within each alternative investment strategy, sub-strategy allocation targets should be established as well. For the reasons alluded to above, mean-variance optimization does not work well for the sub-strategic allocation, either. The table below represents the sub-strategy target allocation as a percent of the sub-strategy allocation. It is not expected that the program during the development stage will be contained with sub-strategy allocation ranges.

Private Equity (4% of Total Plan Assets)

Private Equity Strategy	Target Allocation	Minimum %	Maximum %
Venture	15%	5%	30%
Growth Equity	15%	0%	30%
Buyouts	20%	5%	40%
Mezzanine	15%	5%	30%
Secondaries	15%	0%	30%
Distressed	10%	0%	25%
Energy / Infrastructure	10%	0%	20%
Special Situations	0%	0%	10%

Absolute Returns (4% of Total Plan Assets)

Absolute Returns Strategy	Target Allocation	Minimum %	Maximum %
Equity Linked	25%	0%	50%
Credit Linked	20%	0%	50%
Event-Driven	20%	0%	50%
Trading	10%	0%	50%
Multi-Strategy	25%	0%	50%
Other	0%	0%	20%

Real Assets (0% of Total Plan Assets)

Real Assets Strategy	Target Allocation	Minimum %	Maximum %
Inflation Linked Bonds (Public)	20%	0%	50%
Commodities (Public)	20%	0%	50%
Energy/Metals/Agriculture (Public & Private)	60%	0%	75%
Timberland/Farmland (Private)	0%	0%	25%
Infrastructure (Private)	0%	0%	25%

Opportunistic (2% of Total Plan Assets)

Opportunistic Strategies	Target Allocation	Minimum %	Maximum %
To be Determined	0%	0%	100%

4.1. Strategy Definitions – Private Equity

4.1.a. Venture Capital

Venture Capital implies early stage financing of rapidly growing companies with an innovative/disruptive business idea for a product or service that is proprietary.

4.1.b. Growth Equity

Growth equity is an investment strategy that provides expansion capital for small, growing businesses that are generating cash flow and profits. Generally, these types of investments have minimal exposure to technology risk.

4.1.c. Buyouts (Leveraged Buyouts, LBOs, Management Buyouts, MBOs)

Buyout investing provides leveraged capital and business development capital to enable the restructuring of existing business and industries.

4.1.d. Mezzanine

An investment strategy involving subordinated debt, (the level of financing senior to equity and below senior debt). Capital supplied by mezzanine financing is used for various situations such as facilitating changes in ownership through leveraged buyouts or recapitalizations, financing acquisitions, or enabling growth.

Venture lending and leasing is a subset of mezzanine financing that targets venture backed companies.

Revenue and Royalty interests are a subset of mezzanine financing that targets intellectual property, license agreements and other similar property that has the ability to restrict the rights to commercialization.

4.1.e. Secondaries

Private equity interests are generally purchased at a discount from valuation from motivated owners of private equity interests. The interests purchased are generally venture and buyout interests with limited exposure to unfunded capital commitments. The strategy also includes the purchase of direct interests in companies through the secondary market.

4.1.f. Distressed

Distressed strategies include trading strategies through control positions. For trading strategies, distressed securities are defined as securities with a current yield of 10% above comparable U.S. Treasury bonds. Investment instruments include publicly traded debt securities, private debt, trade claims, mortgage debt, common and preferred stock and commercial paper. Control strategies involve companies with poorly organized capital structures, turnaround situations and bankrupt companies. Long and short positions are commonly used as a technique to lock in profit or reduce risk.

4.1.g. Energy (See 4.3.c)

Investments will include exploration & production, generation, storage, transmission, distribution, renewable energy sources, clean technologies, energy technologies and other like-kind investments.

4.1.h. Infrastructure (See 4.3.g)

Investments in physical assets or companies that operates assets that provide essential services to society. Typically infrastructure assets exhibit one or more of the following qualities: monopolistic or quasi-monopolistic, high barriers to entry, long term assets, regulatory or permitting constraints.

4.1.i. Special Situations

Special situations generally have an open-ended investment objective and are seeking to capitalize on opportunities in a wide variety of sectors.

4.2. Strategy Definitions – Absolute Returns

4.2.a. Equity Linked

Investment Managers maintain positions both long and short in primarily equity and equity derivative securities. A wide variety of investment processes can be employed to arrive at an investment decision, including both quantitative and fundamental techniques; strategies can be broadly diversified or narrowly focused on specific sectors or geographies and can range broadly in terms of levels of net exposure, leverage employed, holding period, concentrations of market capitalizations and valuation ranges of typical portfolios.

- Fundamental Long/Short equities
- Sector-focused Long/Short equities
- Equity Market Neutral equities
- Short-Biased equities

4.2.b. Credit Linked

Managers seek to profit from the realization of a valuation discrepancy in the relationship between multiple credit-linked securities. Managers employ a variety of fundamental and quantitative techniques to establish investment valuations, and security types range broadly across fixed income, derivative or other security types. Fixed income strategies are typically quantitatively driven to measure the existing relationship between instruments and, in some cases, identify attractive positions in which the risk-adjusted spread between these instruments represents an attractive opportunity for the investment manager.

- Convertible Arbitrage
- Capital Structure Arbitrage
- Structured Credit
- Corporate Credit
- Private Issue/Regulation D

• Yield Alternative

4.2.c. Event-Driven

Managers who hold positions in companies currently or prospectively involved in corporate transactions of a wide variety including, but not limited to, mergers, restructurings, financial distress, tender offers, shareholder buybacks, debt exchanges, security issuance or other capital structure adjustments. Security types can range from most senior in the capital structure to most junior or subordinated, and frequently involve additional derivative securities. Event Driven exposure includes a combination of sensitivities to equity markets, credit markets and idiosyncratic, company specific developments. Investments are typically evaluated on fundamental characteristics, as opposed to quantitative metrics.

- Distressed/Restructuring Securities
- Merger Arbitrage
- Special Situations
- Shareholder Activist strategies

4.2.d. Trading

Managers trade a broad range of strategies predicated on movements in underlying economic variables and the impact these have on equity, fixed income, currencies and other *derivative* instruments. Managers employ a variety of techniques, both discretionary and systematic analysis; combinations of topdown and bottom-up views; quantitative and fundamental approaches and long and short term holding periods. Although some strategies employ relative value techniques (e.g. volatility trading), Derivative strategies are generally directional and focus on capturing the market beta of the manager's view of a particular trade.

- Discretionary Thematic
- Systematic Diversified
- Volatility Trading

4.2.e. Multi-Strategy

Managers in this strategy use any combination of the strategies noted above in an attempt to produce returns in any market condition. While managers in this strategy use various techniques to produce returns, they are generally categorized by their diversified use of many strategies and no one strategy dominates. They generally have different teams in the firm running different strategies according to their defined expertise. The portfolio managers of each team focus on selecting the best investments for their portfolio based on their expertise and agreed-upon portfolio constraints. The top-level portfolio managers focus on capital allocation among the various strategies in search of the highest risk-adjusted returns available in the markets.

4.3. Strategy Definitions – Real Assets

4.3.a. Inflation Linked Bonds

The strategy targets inflation-linked bonds. Principal is adjusted for reported inflation (e.g. CPI) such that income payments are inflation-adjusted. In the US, these instruments are referred to as TIPS (Treasury Inflation Protection Securities). Global linked bonds are also available, and may complement the domestic TIPS allocation. Expected total return is due primarily to income, which fluctuates with expectations for future inflation.

4.3.b. Commodities

The strategy targets liquid investments in the commodities markets via derivatives (e.g. futures and swaps). Certain strategies may also include, to a lesser extent, investment in physicals for forward delivery. Exposure includes four major commodity market sectors: Energy Agriculture/Livestock, Industrial Metals, and Precious Metals. Expected total return is due primarily to spot price appreciation; secondarily to contract roll forward dynamics, or the differential between spot and future price (between near and longer term contracts); and thirdly to modest collateral income.

The real asset program will employ both passive and active commodity management. Examination of cash collateral, in particular the quality of fixed income market exposure, will be considered in risk mitigation.

4.3.c. Energy

The strategy targets both public and private energy-related entities. The Energy investment strategy consists of three segments: upstream, midstream, and downstream businesses. Opportunities include core diversified global conglomerates that may span across segments and specific, concentrated satellite investments that may focus on a specific Energy market segment. Investments may include both traditional (oil, natural gas, coal) & alternative (wind, solar) energy sources.

The **Upstream Investment Strategy** focuses on the production of oil and gas, and includes petroleum Exploration and Production (E&P) businesses and power generation.

The *Midstream Investment Strategy* focuses on transporting the upstream products from the source to the end user, and includes storage and processing, as well as oilfield services (the equipment and services required to produce petroleum) and electricity transmission equipment and services. Midstream assets include pipelines, gathering and storage facilities, refining, power lines, and transformer stations. Services are also considered midstream elements, such as oilfield equipment like drill bits, drill rigs, well trees, and geologic and mapping services.

The **Downstream Investment Strategy** focuses on the end users of upstream production. Power generation is an end user of petroleum products, while households and businesses are the downstream users of

power generation. Downstream assets can also be local distribution centers, such as home heating oil distributors or gas stations.

Each segment of the strategy has different investment characteristics, income profiles, and risks.

4.3.d. Metals & Mining

Public equities in the Industrial and Precious metals-related industries Investment opportunities include large core diversified global conglomerates and more specific, concentrated investments. Supply chain position may include upstream, midstream, and downstream companies. Expected total return is due primarily to appreciation and some income.

4.3.e. Public Agriculture-related

Invests primarily in Agriculture-related companies. Exposure may include both traditional agriculture and livestock investments and renewable energy sources. Supply chain position may include upstream, midstream, and downstream companies. Equity-based agriculture exposure ranges from upstream producing companies (i.e. growers) or those who are closely related to them, such as seed and agricultural chemicals companies, to downstream packaged foods producers. Opportunities include core diversified global conglomerates that may span across segments and specific, concentrated satellite investments that may focus on a specific market segment. Expected total return is due primarily to appreciation and some income.

4.3.f. Timberland

The strategy targets both public and private Timberland Investment Management Organizations, TIMO. The Investment strategy includes investing in entities that derive their returns from the growth and harvest of timber, a renewable and biologically growing asset. The investments will include both plantations who utilize intensive management techniques to enhance biological growth and naturally regenerating strategies. The investment strategy has varying time horizons to liquidity, shorter term for softwoods (e.g. for pulp and lumber) to longer term time horizon (e.g. hardwoods).

4.3.g. Infrastructure

Public and private investments in direct physical assets, or a company that operates assets that provide essential services to society. Ranges from publicly held equities to very illiquid private partnerships. Exposure includes toll-oriented projects (e.g. roads, bridges, tunnels), transportfocused (e.g. railroads, airports, seaports); regulated utilities (e.g. gas pipelines; water/sewer treatment facilities); and social services (e.g. schools, hospitals). High toll-orientation offers inflation protection. Expected total return is due primarily to current income and to a lesser extent capital appreciation. Satellite strategies typically use more leverage than core.

Typically, infrastructure assets exhibit one or more of the following qualities: monopolistic or quasi-monopolistic, high barriers to entry, long

term assets, significant regulatory or permitting constraints. Due to substantial risks, only a very modest allocation, within a mature and well diversified program, is considered appropriate.

5. INVESTABLE INSTRUMENTS AND RESTRICTED INVESTMENTS

5.1. Investment Vehicles

This policy authorizes commitments to partnerships, limited liability companies and discretionary managers investing in partnerships, limited liability companies and other similar investment vehicles. When efficient to do so, funds-of-funds may be employed.

5.2. Co-Investment and Direct Placements

Investors' rights may include opportunities for additional capital participation such as co-investment or other side-by-side direct investments opportunities. At this time, the System does not exercise this right. Upon acquiring the necessary resources to efficiently manage a co-investment program in-house, the System may exercise this right. Discretionary managers may exercise the co-investment rights.

5.3. Derivatives

Investing in entities that purchase options, futures, swaps or derivative securities are prohibited within the private equity program. However, other alternative investment strategies and managers may utilize derivatives.

5.4. Real Estate

Real Estate is not within the scope of this policy and investments in entities targeted primarily to equity and/or debt of real estate is prohibited within the alternative investment program.

5.5. Stock Distributions

Stock distributions of publicly traded companies will be liquidated as soon as practicable. Unlisted and thinly traded stock distributions will be liquidated in an orderly manner. A post-distribution manager may be employed to manage the process.

6. PERFORMANCE OBJECTIVES

The System utilizes alternative investments within the total fund portfolio for diversification and return enhancements. Performance will be evaluated on a net-of-fees basis.

6.1. Long-Term – (Net of All Fees)

Alternative Program Composite

The program when fully developed is expected to generate sufficient returns in excess of the public markets to compensate for the complexity and liquidity of the program, the benchmark will be determined at a later date.
6.1.a. Private Equity

The Fund's private equity performance is benchmarked on a long-term, 10 year, rolling basis against 125% of the return from S&P 500 using an internal rate of return, (IRR), cash flow method. Over longer periods of time, the time-weighted return and the internal rate of return from the benchmark should be close to even. This return is based on a mature portfolio consisting of aged exposures and new commitments that have a negative impact on short-term performance, (J-Curve Impact).

6.1.b. Absolute Returns

The Fund's absolute return performance is benchmarked against a target return of FRB 3 Month T-Bills plus 400 basis points, net of fees over a market cycle. It is expected that that monthly volatility should fall between equities and fixed income. Additionally, the correlation of the absolute return portfolio to equity benchmark should be less than 0.50 over a market cycle

6.1.c. Real Assets

The real asset investment program will be benchmarked against reported inflation—to assess the long-term effectiveness of the strategy as an inflation hedge. The Consumer Price Index (CPI) is a valid starting point for a base-line real asset strategy benchmark. CPI can be used as a viable proxy for inflation as it is a well-known and reported measure of it. However, CPI can understate true inflation and is therefore only the minimum return requirement for a well-diversified real asset Program.

Importantly, the inflation estimate will be combined with the plan's liability return requirement to measure the true effectiveness of the real asset program. The investment objective of the real asset program is inflation protection—to maintain the purchasing power necessary to meet the plan's liabilities, without making additional contributions or liquidating excessive capital.

[Inflation estimate	+ liability need	= Real Asset benchmark]
[CPI	+ 5%	= Real Asset benchmark]

6.1.d. Opportunistic

The opportunistic investment program will be benchmarked against a targeted return at the time the opportunistic investment program is implemented.

6.2. Investment Specific –

6.2.a. Private Equity

The benchmark for the fund's specific private equity investments will be measured against the Venture Economics Universe peer group, vintage year and strategy.

6.2.b. Absolute Returns

The benchmark for the fund's specific absolute return investments will be measured against the HFRI or Credit Suisse / Tremont strategy specific peer group.

6.2.c. Real Assets

The benchmark for the fund's specific real asset investments will be determined on a case-by-case basis as the industry lacks a recognized real asset peer universe at this time.

6.2.d. Opportunistic

The benchmark for the fund's specific opportunistic investments will be determined on a case-by-case basis when the investment is made.

7. RISK MANAGEMENT

Alternative investment strategies do not lend itself to traditional quantitative measures of risk such as standard deviation and benchmark tracking error. Rather, risk is managed through a combination of quantitative and qualitative constraints. The following sections identify the significant risks with alternative investments and method of control.

7.1. Liquidity

Alternative investments can be illiquid. Private equity, certain absolute return, and certain real asset investments may have expected holding periods of 10-12 years. Private investments are typically held until maturity and selling prior to maturity results in a discount to fair value. Liquidity risk is managed by minimizing the possibility of forced sales that may arise from exceeding maximum exposure limits or lowering asset allocation exposure limits. Asset allocation exposure is controlled through the investment pacing described in the Annual Investment Plan. The Board of Trustees has authority to change asset allocation targets and recognizes that lowering the private equity target allocation may result in forced sales and increased exposure to liquidity risk. While absolute return managers and strategies may have quarterly liquidity, they should not be considered as liquid as other strategies in the traditional portfolio.

7.2. Vintage Risk

Vintage merely reflects the year of first capital draw and vintage risk refers to the variability of private equity and certain real asset commitments over time. The Annual Investment Plan controls the short and long-term investment pacing that minimizes vintage risk while achieving targeted exposure. Secondary opportunities will be pursued to gain prior vintage year exposure, further minimizing vintage risk.

7.3. Manager Risk

Manager risk consists of two elements, the exposure within an investment vehicle and the number of managers in the alternative investment program. The exposure to a specific manager within an investment vehicle is controlled by limiting the commitment size to a specific investment vehicle. The optimum number of managers in the portfolio varies with time. Both types of risk is controlled by the Annual Investment Plan.

7.3.a. Manager Concentration Risk – Fund Level

Not more than 1% of the System's total plan assets should be allocated to any alternative investment fund, except in the case of fund-of-funds. For Funds-of-funds containing at least 15 underlying investment managers, not more than 5% of the System's total plan assets should be allocated to any alternative investment manager's fund of funds.

7.3.b. Manager Concentration Risk – Manager Level

The System should comprise not more than 20% of any underlying alternative manager's or fund's investor base, unless specifically agreed to by the Board of Trustees.

7.4. Firm Risk

Firm risk is the exposure to an alternative investment firm and is controlled by limiting the maximum commitment to funds actively managed by a firm and its affiliates. The maximum allocation to any alternative investment manager firm should be 5% unless specifically agreed to by the Board of Trustees.

7.5. Currency

The alternative investment program accepts the currency risks consistent with the geographic constraints of the investment opportunity. Many alternative investments do not hedge currency risk and the alternative investment program will not implement currency hedges.

7.6. Industry

Typically, alternative investment funds are permitted to invest in a wide variety of industries with limited controls. Industry risk is controlled primarily through appropriate diversification across strategies and sub-strategies.

7.7. Geography

Geographic risk is controlled through a long-term international target exposure. Global opportunities generally indicate geographic limits and exposure will be attributed and monitored accordingly. The geographic risk is controlled by the Annual Investment Plan.

7.8. Leverage

Many underlying alternative investment programs will utilize leverage. The intent of the System is to not rely on managers employing high degrees of leverage. It is the policy of the System to avoid any individual manager/strategy utilizing leverage in excess of 20:1. Additionally, for the <u>absolute return</u> program, it is anticipated that leverage at the program level will not exceed 2:1, though certain underlying managers / strategies may at times have leverage in excess of that level.

8. ROLES AND RESPONSIBILITIES FOR THE ALTERNATIVE INVESTMENT PORTFOLIO

8.1. Board of Trustees

The Board is responsible for reviewing and approving the Alternative Investment Policy.

8.2. Investment Committee

The Investment Committee is responsible for implementing the Board's Alternative Investment Policy. The Investment Committee is responsible for adopting and implementing the Annual Investment Plan.

8.3. Investment Staff

The Investment Staff is responsible for recommending the Alternative Investment Policy and the Annual Investment Plan. The Investment Staff is also responsible for monitoring and reporting to the Board and the Investment Committee in accordance with requirements of the Alternative Investment Policy.

8.4. Investment Advisor

The Fund may engage an investment advisor(s) to assist in managing the alternative investment program. Specific responsibilities will be established with the investment advisor(s) through contractual agreements.

9. MONITORING AND REPORTING

9.1. Quarterly

Performance report prepared by investment advisor(s).

9.2. Annual

Annual Investment Plan prepared by staff and/or investment advisor(s).

10. HISTORY

The Alternative Investment Policy was adopted on November 12, 2008 by the NHRS Investment Committee, effective January 1, 2009.

New Hampshire Retirement System

2009 Real Estate Policy

September 9, 2008

The Townsend Group Institutional Real Estate Consultants Cleveland, Ohio San Francisco, CA Denver, CO This document is the Strategic Policy for the New Hampshire Retirement System (the "Fund" or the "System") for the asset class of real estate. It establishes the long-term objectives of the real estate program and identifies the policies and procedures by which risk is managed. This document sets forth the Fund's current long-term objectives and policies. It is the intention that the Strategic Policy be reviewed as needed (at least every two years) to be kept timely and consistent with the changes in the marketplace and with the System's objectives.

I. OBJECTIVE

A. Role of Real Estate.

The primary role of real estate in the Fund's portfolio is to provide an inflation hedge and a return that has a low to negative correlation with stock and bond returns, thereby reducing the volatility of risk of the total Fund portfolio. Also, real estate must provide a total return which is competitive on a risk adjusted basis with stocks and bonds.

The Fund recognizes that real estate is an inefficient asset class relative to stocks and bonds. As such, the Fund may have the opportunity to make investments with superior risk adjusted returns. A secondary objective of the Fund is to capture these superior risk adjusted returns through investing in more tactically themed commingled fund investments as well as real estate related debt securities and public real estate securities. If necessary, the System will assume additional risk to make these investments contingent upon the risk of the total real estate program being consistent with the risk level of real estate programs of like pension fund investors.

B. Allocation.

The System has established an allocation to equity real estate of 10% of plan assets. The allocation shall be measured based upon the net equity value (gross real estate assets less any debt) of the portfolio. To achieve fully allocated levels of investment exposure, the discretionary manager may over-allocate within the Tactical Portfolio by 1.25x the targeted level of exposure within the Tactical Portfolio. Over-allocation in this portfolio is necessary due to the nature of private market investments that are executed via closed end fund commitments that drawdown and return capital sporadically over the investment life of the vehicle. It is uncommon to have the full commitment to an investment drawn down at any one point in time.

C. Investment Philosophy.

The System will pursue both a Strategic Portfolio and a Tactical Portfolio. NHRS will develop a Strategic Portfolio with a target of 50% (40% to 60% range) of its real estate allocation to provide its "keel in the water" similar to other U.S. pension funds and similar to the respective weight of the U.S. markets globally. NHRS will construct a Tactical

Portfolio with a target of 50% (40% to 60% range) of its real estate allocation in order to target high returns and drive alpha. The Fund will allocate up to 35% (of the total real estate allocation) to be invested in investments outside of the U.S.

D. Return Target.

The benchmark return objective for the portfolio is NCREIF Property Index (NPI) + 50 bps net of investment management fees.

II. RISK MANAGEMENT POLICIES

A. Strategic Portfolio.

The lowest risk life cycle of real estate that will attain the objectives of the real estate program are operating and substantially leased (60% occupied or more) institutional quality properties, which are defined as Core/Core-Plus investments. These investments may be in the form of the current direct property investments or commingled funds. These investments are institutional quality, well-located assets in the traditional property types: office, apartment, retail, and industrial and located inside the U.S. They generally offer relatively high current income returns and as a result a greater predictability of returns (7%-9% returns). The income component typically represents a significant majority of the expected total return of Core/Core-Plus investments. These investments are of comparatively low risk and provide a stable foundation for the Fund's real estate portfolio.

Consistent with the Fund's objective to not assume any more risk than necessary for the real estate program to perform its role, an allocation of 40% to 60% of the Fund's real estate investments will be in operating and substantially leased properties in the Strategic Portfolio with an initial target of 50%.

B. Tactical Portfolio.

A secondary objective of the real estate program is to capture superior risk adjusted returns caused by imbalances in the real estate and capital markets, which is characteristic of the relatively inefficient asset class of real estate. The investments in this portfolio may include strategies involving various property lifecycle risk levels such as lease-up, repositioning and development. It may also entail investments in niche sectors or property types and investments outside of the U.S. and in emerging markets. To access these opportunities the Fund will make investments that have more risk, and higher expected returns, than the Strategic portfolio. The Tactical Portfolio will target returns of approximately 14%+ net of fees, excluding ex-U.S. investments, which on average target 18%-20% returns net of fees. Between 40% to 60% of the real estate program's allocation will be in tactical investments with an initial target of 50%, which is consistent with industry trends and peers whom allocate toward higher performing strategies.

C. Control.

The Fund will balance its preference for control against its other risk management policies. In order to diversify its investments, the Fund will use collective investment vehicles whenever possible for real estate execution of the Real Estate Program. Currently the System also holds direct ownership of properties within separate account portfolios.

D. Distribution of Investments.

Numerous studies indicate that distributing portfolio investments by certain attributes will reduce the risk of a real estate program. The attributes by which investments should be distributed or diversified to most effectively reduce risk are property type, geographic location, manager allocation and investment size.

1. Property Type Diversification.

No more than 40% of the allocation shall be invested in any one property type. The Fund will allocate tactically amongst the property types in response to real estate and capital markets conditions. The property type limit will ensure prudent diversification amongst the property types but will enable the Fund to capitalize on opportunities caused by shifts in the real estate and capital markets and will allow the Fund to be in compliance over the short term and long term.

2. Location Diversification.

The Fund will distribute its investments geographically for the purpose of attaining economic market diversification. By design, a minimum 65% of the Program will be located in the U.S. in the Strategic Portfolio and Tactical Portfolio. Potential investments outside the U.S. are part of the Tactical Portfolio allocation and are limited to 35% of the Total Real Estate allocation.

	Allocation				
	Target %	Range	U.S.	ex-U.S.	
Strategic Portfolio	50%	40% to 60%	100%	0%	
Tactical Portfolio	50%	60% to 40%	30%-50%	50%-70%	
Total Portfolio	100%	100%	>=65%	<=35%	

3. Manager/Investments Diversification.

The System seeks to diversify its real estate program both by individual investment exposure and manager exposure. The System does not want the failure of a single

investment to have a significant or material impact on the performance of the total real estate program. The System will limit the amount of equity as follows:

- No more than 20% of capital committed to any investment in Strategic Portfolio
- No more than 10% of capital committed to any investment in Tactical Portfolio
- No more than 40% of capital committed to any single investment manager
- No more than 50% of ex-U.S. exposure to come from investments in emerging markets.

D. Leverage.

Underlying fund managers may utilize debt in the execution of their investment mandates.

- The Strategic Portfolio loan-to-value ratio shall be no more than 50% at portfolio level.
- The Tactical Portfolio loan-to-value ratio shall be no more than 75% at portfolio level.
- E Foreign Currency Exposures.

United States dollar denominated funds are preferred, although funds denominated in another functional currency are permitted as part of the Tactical Portfolio. As is feasible and economically practical, foreign currency fluctuations may be mitigated through hedging and other mechanisms. Should such measures be deemed advisable, Townsend would identify and retain a suitable and qualified third party to provide such services, oversee the third party relationship, and propose appropriate controls and policies relative to this program.

IV. Portfolio Investment Procedures

- A. Roles and Responsibilities.
 - 1. *Investment Committee*. The Investment Committee has delegated authority for due diligence, selection, review and management of the NHRS Real Estate Program to the Discretionary Manager. The Investment Committee is responsible for setting the overall allocation to the real estate asset class and for approving the Strategic Policy that establishes the objectives and risk management policies for the NHRS Real Estate Program. The Investment Committee will review and approve the Manager Investment Plan prepared and submitted by the Discretionary Manager. The Investment Committee, in conjunction with staff and other consulting resources, will evaluate the performance; structure; and effectiveness of the real estate program and its compliance with the Strategic Policy and Manager Investment Plan.

- 2. *Staff.* The Staff will provide oversight of the Discretionary Manager and serve as liaison between the Investment Committee and the Discretionary Manager. The Discretionary Manager will provide appropriate advance notice to Staff of developments and initiatives in the NHRS Real Estate Program including outlining the rationale, merits, and considerations of intended actions and the status of the program. The Staff will coordinate with the Discretionary Manager to formalize the Strategic Policy and Manager Investment Plan for approval by the Investment Committee. Staff is responsible for coordinating with the Discretionary Manager, custodian, consultant(s) and legal counsel to implement and administer the NHRS Real Estate Program, including the coordination of information between these parties and the management of funding relative to the investments. The Staff shall facilitate any other duties with the Discretionary Manager relative to the NHRS Real Estate Program, including the implementation of Investment Committee actions.
- 3. *Discretionary Manager*. The Discretionary Manager will coordinate with Staff on the development of the Real Estate Strategic Policy. The Discretionary Manager is responsible for the due diligence, selection, review, management and reporting of performance for the NHRS Real Estate Program consistent with the Strategic Policy and Manager Investment Plan. It will not acquire or manage assets directly but will select funds and provide oversight for properties managed by other third-party investment managers. The Discretionary Manager shall prepare a periodic (annually at a minimum) Manager Investment Plan that shall set forth the implementation and management plans for the portfolio investments. The Discretionary Manager will coordinate with other NHRS consultants, as needed, to provide information regarding the NHRS Real Estate Program, such as capital market expectations for the asset class.
- 4. *Investment Manager*. The Investment Managers will acquire, sell and manage real estate investments for their separate accounts and collective investment vehicles, respectively.
- B. Search and Selection. The Discretionary Manager is responsible for the due diligence, search, selection and commitment pacing of the NHRS Real Estate Program. It will provide the due diligence material, or other such material, along with its recommendation with appropriate advance notice to the Staff regarding the investments being contemplated for selection. It will inform the Staff and the Investment Committee of its investment selections.
- C. Monitoring and Reporting. The Discretionary Manager is responsible for monitoring the portfolio fund investments and Investment Managers. The Discretionary Manager shall report the performance of the NHRS Real Estate Program on a quarterly basis. Included in

such reporting will be a narrative overview of the significant events affecting the various funds and the real estate capital markets. The Discretionary Manager will provide updates, as needed, on significant developments within the portfolio.

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