



NHRS

New Hampshire Retirement System

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



Discussion Topics

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

Key Observations

NHRS Pension Plan

Asset Allocation and Portfolio Structure

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

Investment Performance

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

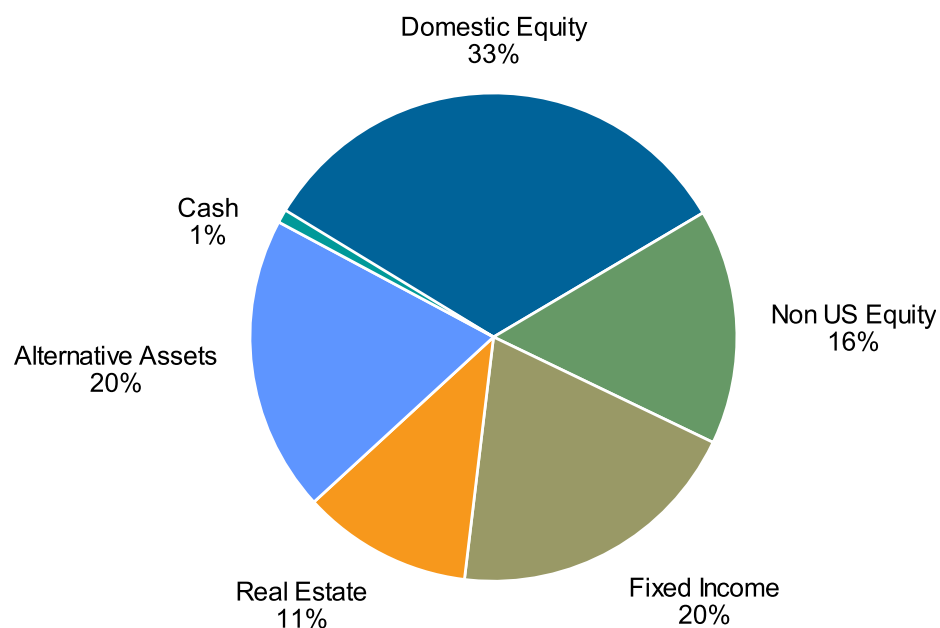
Other Developments

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

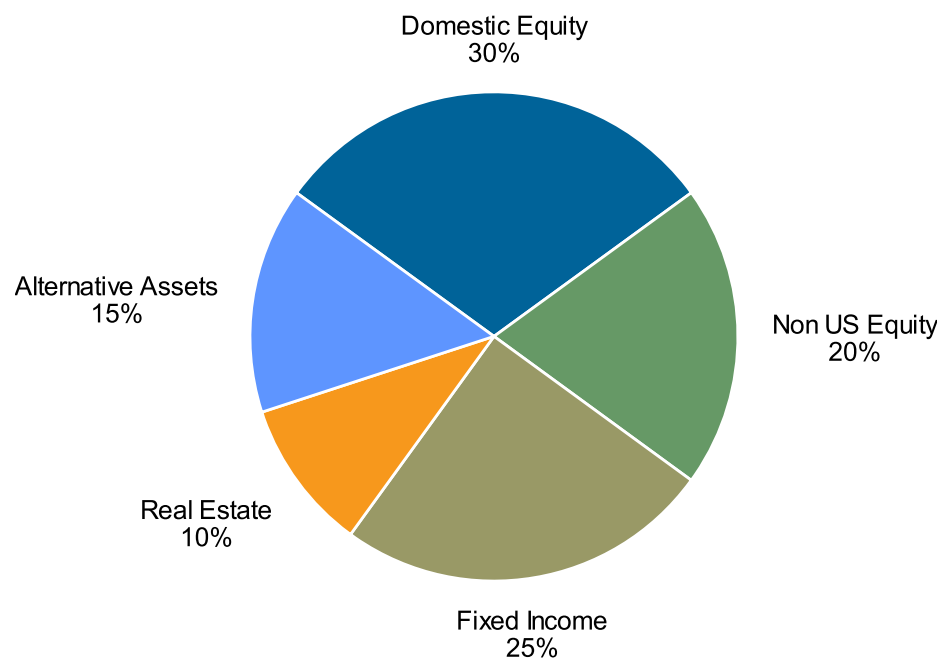
Total Fund

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

Actual Asset Allocation



Target Asset Allocation



Asset Class	\$Millions Actual	Weight Actual	Target	Percent Difference	\$Millions Difference
Domestic Equity	3,755	33.0%	30.0%	3.0%	337
Non US Equity	1,773	15.6%	20.0%	(4.4%)	(506)
Fixed Income	2,251	19.8%	25.0%	(5.2%)	(597)
Real Estate	1,282	11.3%	10.0%	1.3%	142
Alternative Assets	2,228	19.6%	15.0%	4.6%	520
Cash	103	0.9%	0.0%	0.9%	103
Total	11,392	100.0%	100.0%		

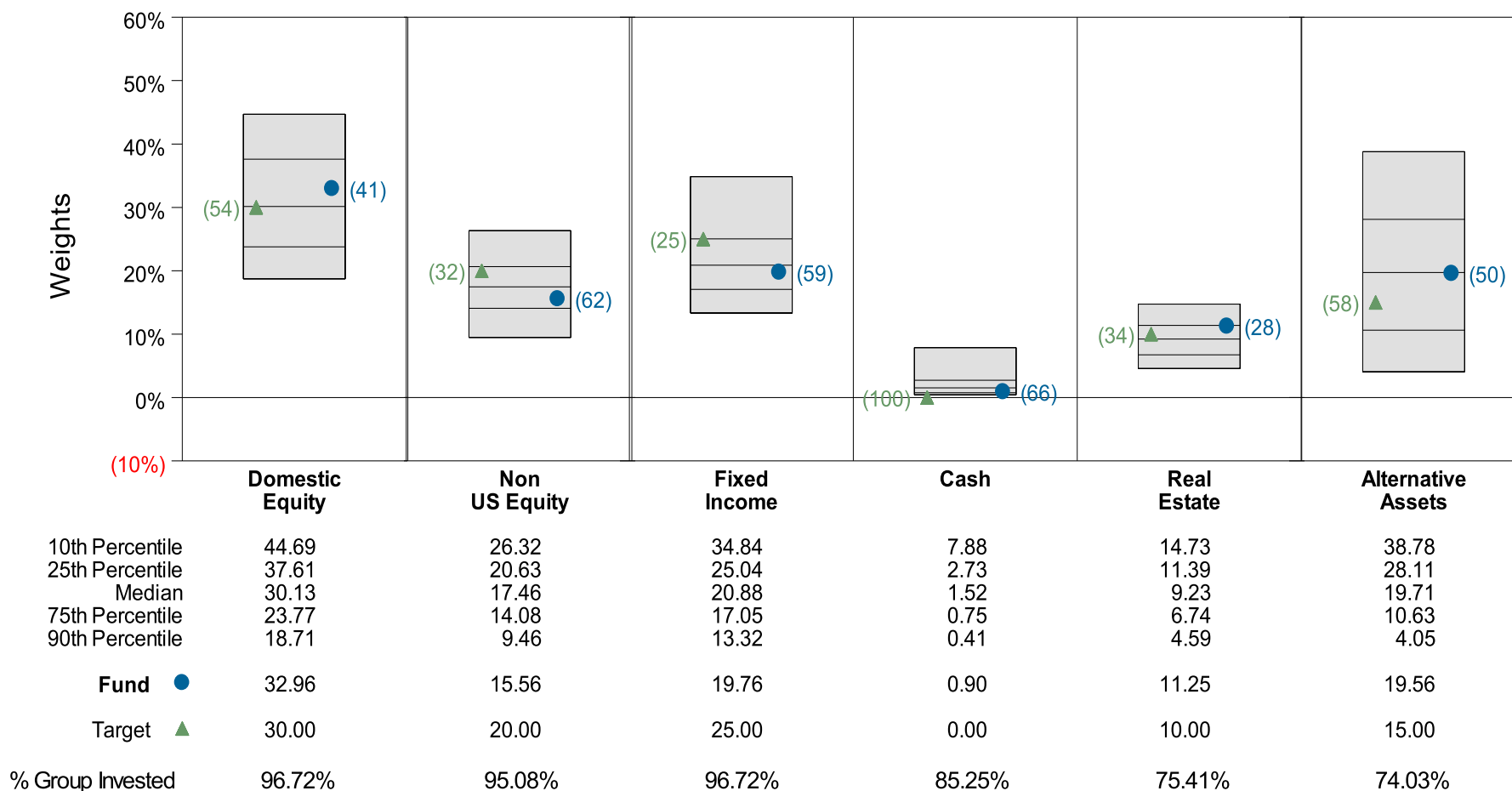
*Current Quarter Target = 30% Russell 3000 Index, 25% Bloomberg Universal, 20% MSCI ACWI ex US, 10% NCREIF NFI-ODCE Val Wt Net, 10% Russell 3000 Index +2.0%, 2.5% Bloomberg HY Corp +1.0%, and 2.5% Mstar LSTA Lev Loan 100 +1.0%.

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

Total Fund

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

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

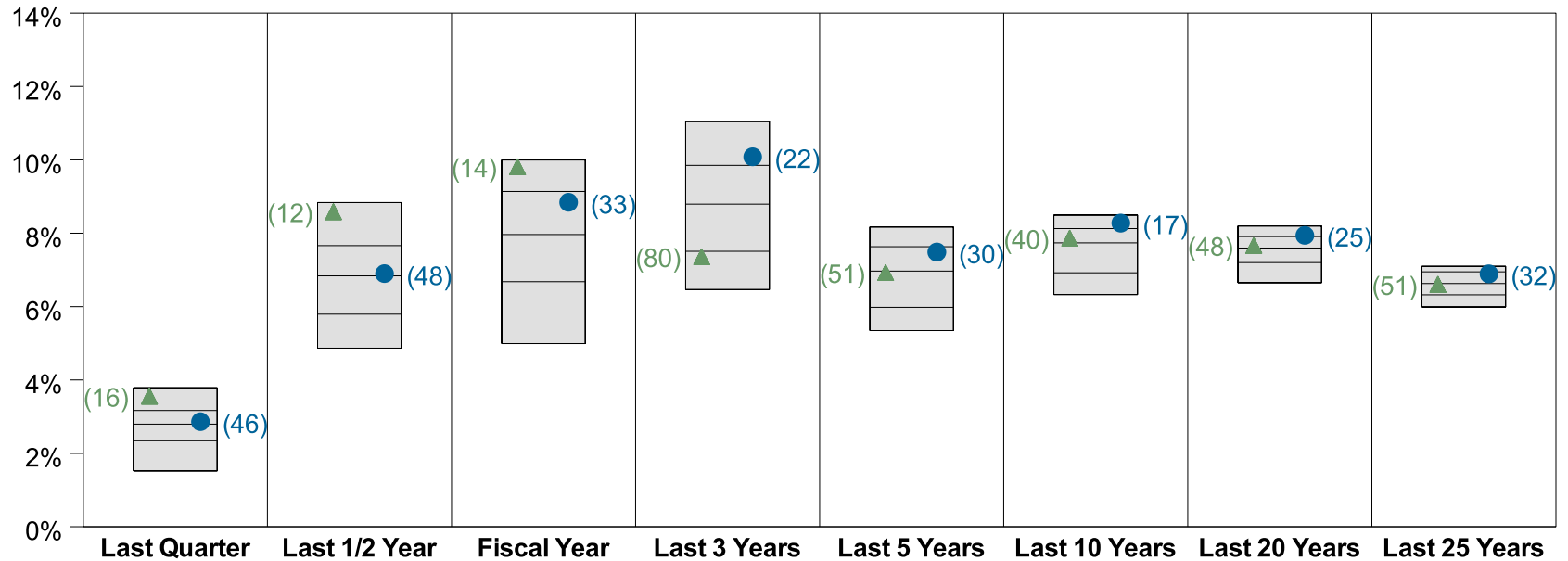


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Total Fund Performance – Gross of Investment Management Fees

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

Performance vs Callan Public Fund Large DB (Gross)



	Last Quarter	Last 1/2 Year	Fiscal Year	Last 3 Years	Last 5 Years	Last 10 Years	Last 20 Years	Last 25 Years
10th Percentile	3.79	8.84	10.00	11.05	8.17	8.49	8.20	7.10
25th Percentile	3.17	7.66	9.14	9.85	7.63	8.13	7.91	6.95
Median	2.80	6.84	7.97	8.79	6.97	7.74	7.60	6.63
75th Percentile	2.34	5.79	6.68	7.51	5.98	6.93	7.20	6.33
90th Percentile	1.52	4.87	4.99	6.46	5.35	6.33	6.65	5.99
Total Fund Composite	● 2.84	● 6.88	● 8.82	● 10.06	● 7.47	● 8.26	● 7.92	● 6.88
Benchmark - Unlagged	▲ 3.56	▲ 8.59	▲ 9.81	▲ 7.36	▲ 6.93	▲ 7.87	▲ 7.67	▲ 6.61

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

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INVESTMENT EXPENSES BY ASSET CLASS

Investment activity fees and other related expenses:

For the Quarter and Fiscal Year to Date through 6/30/23 (in thousands)

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

Notes:

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

DEFINITION OF ASSET CLASSES

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

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

Fixed Income: The investment in fixed income will serve to reduce volatility experienced in the equity markets, as well as offer an opportunity for return enhancement by investment in selected securities (for example, investment grade corporates and high yield). A portion of the fixed income allocation is expected to be invested in Treasury or other government-related issues, which will serve to reduce risk within the portfolio.

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

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