



November 7, 2024

To: Governor Roy Cooper
State Auditor Jessica Holmes
Council of State
Joint Legislative Commission on Government Operations
House Appropriations Committee
Senate Appropriations Committee
House Finance Committee
Senate Finance Committee
Fiscal Research Division
Investment Advisory Committee

RE: Quarterly Investment Report for the Period Ending September 30, 2024

Dear Colleagues:

Attached is the Quarterly Investment Report for the state pension fund (Fund) for the period ending Sept. 30, 2024. We continue to focus intently on reducing costs and complexity, increasing transparency and accountability, and building value across the divisions of the N.C. Department of State Treasurer.

The attached report provides detailed information I hope you will find valuable. I am aware of your time constraints, so I want to provide you with some highlights from the prior quarter that you may find helpful.

Specifically:

- Investment Performance – 3rd Quarter 2024

The Fund, comprised of the retirement plans the N.C. Department of State Treasurer manages, reported a gain of 4.82% for the quarter. Pension fund assets were valued at \$128.60 billion on Sept. 30, 2024, up from \$123.04 billion at the end of the 2nd quarter of 2024. These figures, and all the following performance figures, are reported net of all fees and expenses.

- North Carolina Retirement Systems' Returns Estimated at Near All-Time High with Lowest Costs in the Country

The value of the North Carolina Retirement Systems as of Nov. 6, 2024, was \$127.2 billion, just slightly less than the all-time high of \$128.6 billion at the end of September. The calendar year-to-date (Nov. 6, 2024) performance was 7.9%, exceeding the plans' assumed rate of return of 6.5%. At the same time, the annual investment costs as a percentage of assets managed for the pension plan decreased by 25.2 basis points, from 50.5 basis points to 25.3 basis points, according to the preliminary 2023 CEM Benchmarking Cost Effectiveness Analysis. The CEM analysis noted that the North Carolina Pension Fund had the lowest annual investment cost as a percentage of assets managed compared to the public plan peer universe.



Thank you all for your support of the N.C. Department of State Treasurer. We will continue to look for opportunities to reduce complexity, increase value, and protect the futures of the more than 1 million members who rely on our retirement systems.

Warmest regards,

Dale R. Folwell, CPA

Dale R. Folwell, CPA
State Treasurer of North Carolina

Outline

This quarterly report provides the information required under North Carolina General Statute (N.C.G.S.) § 147-69.12 and provides information on the overall performance of the State Treasurer's investment programs. The information in this report is as of September 30, 2024. This report addresses the following topics:

- I. Investment Performance
 - A. Market Environment Context
 - B. Retirement Systems
 - i. Total Fund (Investment Program) Performance
 - ii. Investment Policy Statement (IPS) Asset Class Performance
 - C. Cash Management Programs
 - i. Short-Term Investment Fund (STIF)
 - ii. Bank Balances
 - D. Other Investment Programs – Ancillary Governmental Participant Investment Program
 - i. Bond Index Fund (BIF)
 - ii. Equity Index Fund (EIF)
 - iii. Escheat Fund
 - E. Other Investments with or on behalf of the State, its Agencies, or Institutions
 - i. Bond Proceeds Fund
- II. North Carolina Retirement System Financial Information
 - A. Introduction to Differences between the IPS and Statute
 - B. Concordance of IPS and N.C.G.S. § 147-69.2
 - C. Statutory Compliance – Statutory Asset Classes
 - D. Fees – Statutory Asset Classes
 - E. Green Managers and Funds
 - F. Locations on Website

Additionally, there are explanatory tables, financial data, and other information included as appendices to this report:

Appendix 1: Financial Information

- A. Department of State Treasurer Bank Balances
- B. Combined Statement of Net Positions (Fiscal Year to Date)

Appendix 2: References

- A. Implementation vs. Long-Term Policy Benchmark
- B. Other Benchmark Definitions
- C. Definitions and Procedures

Quarterly Investment Report for the Period Ending September 30, 2024

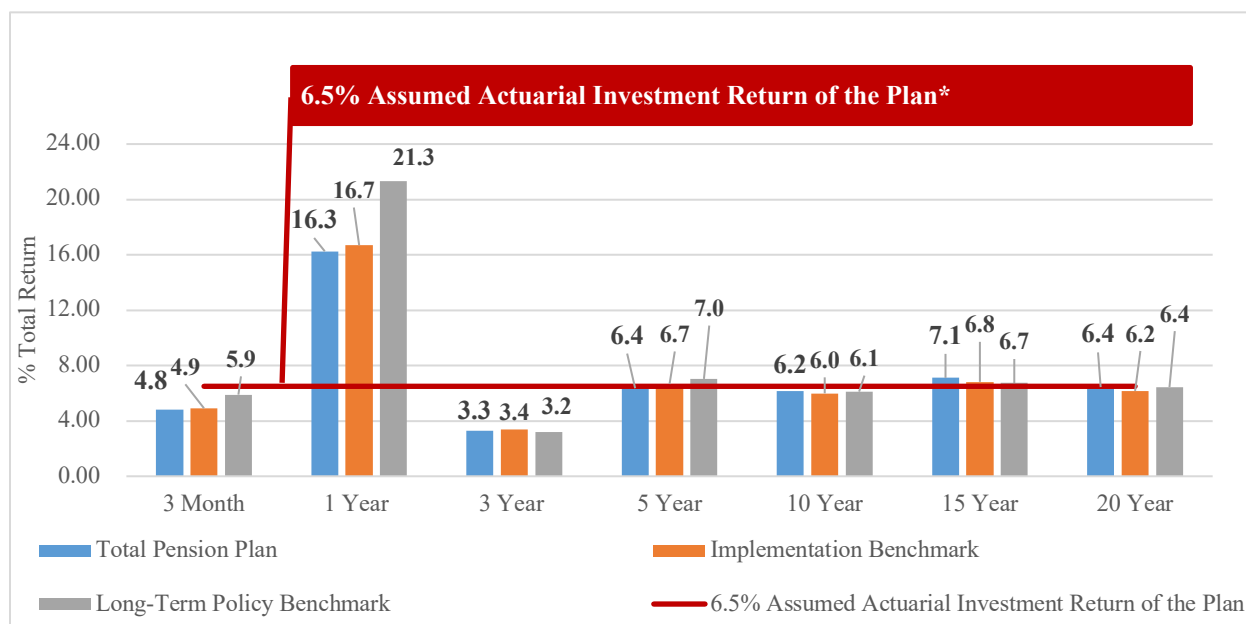
I. Investment Performance [§ 147-69.12(a)(6)(g)]

A. Market Environment Context

For the 3rd quarter of 2024, the U.S. economy grew at an annualized rate of 2.8% on an inflation-adjusted basis. The inflation rate for the United States was 2.4%, on a year over year basis, as of September 30, 2024. The unemployment rate ended the quarter at 4.1%. In September, the Federal Reserve lowered its key short-term rate by 50 basis points, ending the quarter at a range of 4.75% to 5.00%. The U.S. equity market was up 5.89% for the quarter, as measured by the S&P 500 index. The ten-year U.S. Treasury bond's yield ended the quarter at 3.78%, down nearly 61 basis points over the quarter. Investment grade corporate bond credit spreads decreased 4 basis points to end the quarter at 92 basis points. The broad U.S. corporate bond index increased 5.72% over the quarter, largely attributable to the fall in Treasury yields over the quarter.

B. Retirement Systems [§ 147-69.12(a)(5)(a,b)]

i. Total Fund (Investment Program) Performance for Periods Ending September 30, 2024 (%; Periods Greater than 1 Year are Annualized)



*The assumed actuarial investment return of the plan is the discount rate used to calculate the total pension liability as measured in the annual actuarial valuation. **In January of 2021, this return assumption was lowered from 7.0% to 6.5%. Prior to this, the return assumption was lowered from 7.2% to 7.0% in April of 2018.** For definitions of the Implementation Benchmark and the Long-Term Policy Benchmarks, and a comparison of the two, please see Appendix 2, Part A.

ii. IPS Asset Class Performance

| | Market Value (\$000) | 3 Mo | 1 Yr | 3 Yr | 5 Yr | 10 Yr | 15 Yr | 20 Yr |
|--|----------------------|-------------|--------------|---------------|--------------|-------------|-------------|-------------|
| Growth | 68,922,566 | 5.53 | 23.60 | 5.35 | 10.96 | 9.16 | 9.85 | 7.97 |
| Benchmark | | 5.26 | 22.61 | 6.45 | 10.78 | 8.42 | 9.12 | 7.48 |
| Public Equity | 52,892,479 | 7.14 | 31.29 | 6.10 | 11.96 | 9.44 | 10.09 | 8.19 |
| Benchmark | | 6.84 | 30.96 | 7.44 | 11.82 | 9.03 | 9.55 | 7.70 |
| Private Equity | 6,091,073 | (0.49) | 2.39 | 0.60 | 11.94 | 11.24 | 11.14 | 9.91 |
| Benchmark | | 1.06 | 5.10 | 3.59 | 11.03 | 9.72 | 11.55 | 11.27 |
| Non-Core Real Estate | 2,106,858 | (1.45) | (13.04) | (4.06) | (0.20) | 6.18 | 7.01 | 5.44 |
| Benchmark | | (0.56) | (6.08) | 1.33 | 3.44 | 5.19 | 6.18 | 5.91 |
| Opportunistic Fixed Income | 7,832,155 | 1.92 | 10.03 | 5.84 | 7.10 | 5.27 | 7.77 | - |
| Benchmark | | 3.50 | 10.67 | 6.04 | 6.86 | 4.20 | 4.28 | - |
| Rates & Liquidity | 44,775,034 | 4.42 | 10.82 | 0.30 | 1.33 | 2.49 | 3.60 | 4.23 |
| Benchmark | | 5.20 | 12.10 | (1.72) | 0.10 | 2.06 | 3.26 | 3.83 |
| IG Fixed Income & Cash | 35,406,511 | 5.28 | 12.48 | (1.17) | 0.67 | 2.29 | 3.48 | 4.14 |
| Benchmark | | 5.90 | 13.28 | (2.10) | (0.10) | 2.01 | 3.22 | 3.81 |
| Pension Cash | 9,368,524 | 1.29 | 5.18 | 3.18 | 2.23 | 1.76 | - | - |
| Benchmark | | 1.33 | 5.37 | 3.52 | 2.28 | 1.61 | - | - |
| Inflation Sensitive & Diversifiers | 12,247,627 | 2.71 | 1.33 | 3.11 | 3.91 | 4.19 | 3.45 | 3.93 |
| Benchmark | | 2.56 | 2.87 | 2.73 | 3.75 | 3.77 | 3.58 | 3.46 |
| Inflation Sensitive | 5,811,294 | 2.07 | 5.61 | 8.08 | 6.26 | 3.98 | 1.55 | 3.85 |
| Benchmark | | 2.53 | 7.93 | 5.26 | 4.84 | 2.41 | 1.20 | 4.14 |
| Core Real Estate | 6,436,334 | 3.30 | (2.39) | (0.93) | 2.09 | 5.07 | 6.41 | 5.46 |
| Benchmark | | 2.59 | (2.93) | (0.32) | 2.36 | 5.32 | 6.69 | 5.78 |
| Multi-Strategy | 2,650,881 | 3.10 | 12.50 | 5.28 | 4.25 | 4.62 | 6.67 | 5.40 |
| Benchmark | | 2.66 | 9.72 | 2.13 | 3.06 | 3.38 | 5.14 | 6.09 |
| Total Pension Plan | 128,596,109 | 4.82 | 16.25 | 3.28 | 6.36 | 6.15 | 7.11 | 6.44 |
| Implementation Benchmark | | 4.91 | 16.69 | 3.37 | 6.66 | 5.99 | 6.82 | 6.16 |
| Long-Term Policy Benchmark | | 5.90 | 21.33 | 3.21 | 7.04 | 6.12 | 6.74 | 6.44 |
| Assumed Actuarial Investment Return¹ | | 1.59 | 6.50 | 6.50 | 6.50 | 6.50 | 6.50 | 6.50 |

¹ The Assumed Actuarial Investment Return was decreased from 7.0% to 6.5% in January 2021.

For definitions of the Benchmarks, please see Appendix 2.

C. Cash Management Programs

i. STIF (Short -Term Investment Fund) [§ 147-69.12(a)(4), § 147-86.11(c)]

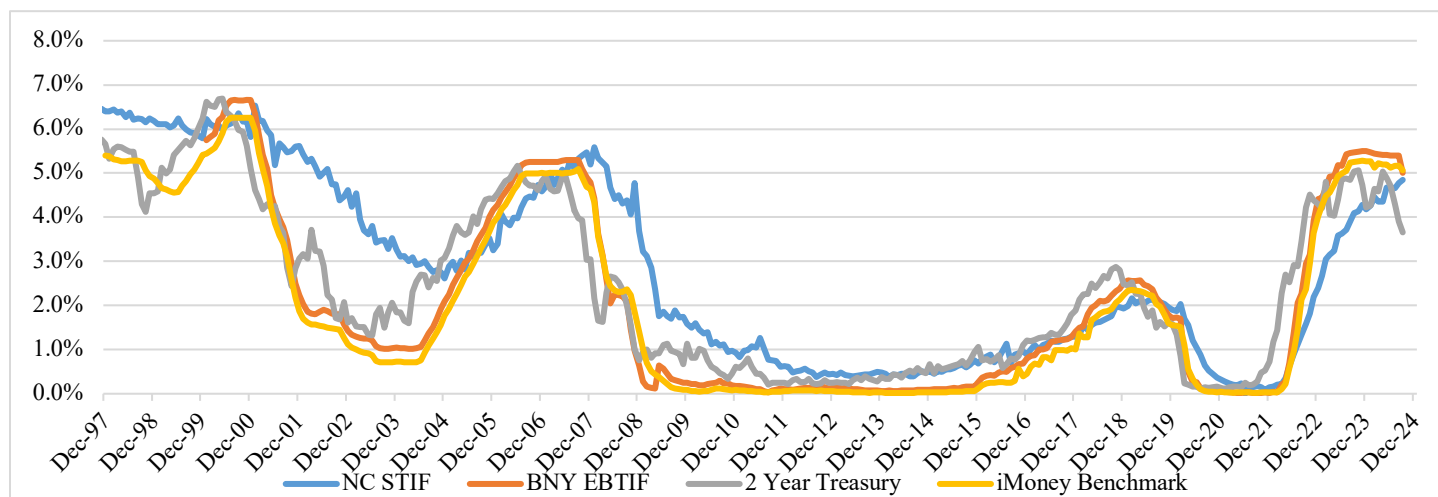
The STIF is responsible for managing the operating funds of the State. Investors include the State's General Fund, Highway Trust Fund, certain Retirement Systems funds, and other investors. The STIF is also where any bank balances are held for the State; please see part (ii) below for information about the quarter-end bank balances.

As of September 30, 2024, the STIF had the following characteristics:

| Total Assets | Duration | 3-Month Return | Benchmark 3-Month Return | 1-Month Annualized Cash Return | Fees |
|----------------|----------|----------------|--------------------------|--------------------------------|------|
| \$48.3 billion | 0.53 | 1.18% | 1.33% | 4.84% | N/A |

The benchmark for the cash management program, as outlined in the "Department of State Treasurer Investment Management Division Investment Policy Statement for North Carolina Retirement Systems" (IPS), is the iMoneyNet First Tier Institutional Money Market Funds Net Index.

For comparison purposes, the 1-month annualized cash return of the STIF is shown below, over time, versus the yields of other short-term benchmarks.



Notes: The BNY EBTIF is the Bank of New York Mellon Employee Benefit Temporary Investment Fund, a diversified institutional money market sweep vehicle. The iMoney Benchmark is the iMoneyNet First Tier Institutional Money Market Funds Net Index.

ii. Bank Balances [§ 147-69.12(a)(3)]

The State's total Bank Balance as of September 30, 2024, was \$209.3 million. For a list of each bank and other qualified depository institutions utilized by the State Treasurer and the most recent quarter-end cash balances, please see Appendix 1, Part A.

D. Other Investment Programs – Ancillary Governmental Participant Investment Program [§ 147-86.11(c)]

Pursuant to N.C.G.S. § 147-69.3, the Treasurer is responsible for one or more investment programs for the deposit and investment of assets pursuant to §§ 147-69.1 and 147-69.2, namely, the Ancillary Governmental Participant Investment Program (AGPI Program or AGPIP). The AGPI Program includes assets for, among others, the Escheat Fund, public hospitals, Local Government Other Post-Employment Benefits Trusts, Local Government Law Enforcement Special Separation Allowance Trusts, and the North Carolina Conservation Grant Fund, as well as entities such as the State Health Plan, the Disability Income Plan, and the State Educational Assistance Authority. For a complete listing of the AGPI Program participants, see the Other Investment Programs Statement in Appendix 1, Part B. While each of the AGPI Program participants has its particular investment authority as to how it may invest, all AGPI Program participants are

eligible for the STIF as referenced in part C (i) above. The following are other investment options maintained by the Treasurer for the AGPI Program.

i. BIF (Bond Index Fund) [§ 147-69.12(a)(6)]

The BIF invests in high quality debt securities, under N.C.G.S. § 147-69.2(b)(1)–(6). The BIF maintains a low-cost approach to investing in investment grade fixed income assets through a passive index strategy. The BIF is designed to produce a return consistent with its Bloomberg U.S. Aggregate Bond Index benchmark.

As of September 30, 2024, the BIF had the following characteristics:

| Total Assets | Duration | 3-Month Return | Benchmark 3-Month Return | Crediting Rate | Annual Fees |
|---------------------|-----------------|-----------------------|---------------------------------|-----------------------|--|
| \$1.7 billion | 6.0 | 4.96% | 5.20% | N/A | 2.5 bps on first \$750 million; 2.0 thereafter |

For a list of the entities invested in the BIF at quarter-end, please see the Other Investment Programs Statement in Appendix 1, Part B.

ii. EIF (Equity Index Fund) [§ 147-69.12(a)(6)]

The EIF invests primarily in U.S. and non-U.S. equity securities eligible under N.C.G.S. § 147-69.2(b)(8) with the objective of closely approximating the capitalization weighted total return of the markets for global publicly traded equity securities while maintaining a low-cost approach. The EIF is designed to produce a return consistent with its Morgan Stanley Capital International All Country World Index benchmark.

As of September 30, 2024, the EIF had the following characteristics:

| Total Assets | Duration | 3-Month Return | Benchmark 3-Month Return | Crediting Rate | Annual Fees |
|---------------------|-----------------|-----------------------|---------------------------------|-----------------------|--------------------|
| \$974.2 million | N/A | 6.63% | 6.61% | N/A | 2.0 bps |

For a list of the entities invested in the EIF at quarter-end, please see the Other Investment Programs Statement in Appendix 1, Part B.

iii. Escheat Fund [§§ 147-69.12(a)(6), 147-69.2A(b)]

As of September 30, 2024, the Escheat Fund had \$1,281.9 million in total invested assets. Of that total, \$1,101.2 million was in STIF and \$134.8 million in BIF.

Pursuant to N.C.G.S. § 147-69.2(b)(12), up to 20% of the Escheat Fund's assets may be invested in authorized Public Equity, Real Estate, and Alternative Investments. For the quarter ending September 30, 2024, the Escheat Fund held \$46.0 million in these types of investments. Performance data for these assets are shown below:

| | Market Value (\$000) | 3 Month | 1 Yr | 3 Yr | 5 Yr | 10 Yr |
|-----------------------------|-----------------------------|----------------|--------------|--------------|--------------|--------------|
| Escheat Alternatives | 45,951 | -0.38 | -3.55 | -2.96 | 3.21 | 2.36 |
| Benchmark | | 0.78 | 2.74 | 2.90 | 12.21 | 10.18 |

Additional financial information on the Escheat Fund is available in the Other Investment Programs statement in Appendix 1, Part B. Information on the Escheats Alternatives Benchmark is available in Appendix 2, Part B.

Within the Escheat Alternatives portfolio, pursuant to N.C.G.S. §§ 147-69.2A and 147-69.2(b)(12)(c), the State Treasurer is required to invest 10% of the Escheat Fund through the Venture Capital Multiplier Fund. This is included in the 20% limit laid out in N.C.G.S. § 147-69.2(b)(12). The Venture Capital Multiplier Fund is administered by a third-party professional investment management firm selected through a public procurement process by designees from the

Governor's Office, the Department of State Treasurer, the Speaker of the House of Representatives, and the President Pro Tempore of the Senate. This fund was created in November 2016. Performance and investment information through the most recent quarter-end are as follows:

| | Market Value | Commitment | Unfunded | IRR ¹ | TVPI ² | Distributions | DPI ³ |
|--|-------------------|-------------------|------------------|------------------|-------------------|-------------------|------------------|
| Venture Capital Multiplier Fund | 32,167,056 | 60,000,000 | 4,799,905 | 1.81 | 1.08 | 27,440,814 | 0.50 |

¹ Internal rate of return; ² Total value to paid in capital, or the sum of (distributions + ending value) divided by the total paid in or funded capital; ³ Distributions to paid in capital, or distributions divided by the total paid in or funded capital.

Note: Returns may reflect higher costs and lower returns in earlier years.

E. Other Investments with or on behalf of the State, Its Agencies, or Institutions

i. General Obligation Bond Proceeds Fund [§ 147-69.12(a)(6), § 147-86.11(c)]

The General Obligation Bond Proceeds Fund is managed by a private investment company under contract with the Department of State Treasurer. The investments are valued at amortized cost, which approximates fair value. The General Obligation Bond Proceeds Fund has a separate investment account for each state bond issue to comply with Internal Revenue Service regulations on bond arbitrage. Additional information on the fund may be found in the Other Investment Programs statement in Appendix 1, Part B.

II. North Carolina Retirement System Financial Information

A. Introduction to Differences Between IPS and Statute

N.C.G.S. § 147-69.2 prescribes limits on different kinds of investments the Treasurer is authorized to make with the assets of the Retirement Systems. The limits are expressed in terms of percentages of the overall assets invested and there are limits both on individual asset classes and in the aggregate.

During the fiscal year ending June 30, 2014, the Investment Management Division conducted an asset liability study to develop a new IPS (Investment Policy Statement) that would utilize some of the additional investment flexibility created by this statute, which had been updated in 2013. The IPS describing the asset class structure was finalized and became effective July 1, 2014. An updated asset liability study was completed during the fiscal year ending June 30, 2022. Following this updated study, the IPS was adjusted in several ways, but the asset class structure remained unchanged. The tables below compare the Investment Policy Statement's classifications to the statutory classifications. The numbers reflect net assets owned only by the NCRS funds in the statutory asset classes excluding securities lending, as of the quarter-end date for this report.

B. Concordance of IPS and N.C.G.S. § 147-69.2 [§ 147-69.12(a)(5)(c)]

The following connects statutory guidelines to those in the IPS:

| General Statute § 147-69.2 | | Statutory Asset Classifications | IPS |
|----------------------------|--------------------|---------------------------------|-------------------------------|
| b(1)-(6) ¹ | At least 20% | STIF | Cash |
| | | Bank Balances | |
| | | External Fixed Income | Investment Grade Fixed Income |
| | | Long-Term Fixed Income | |
| b(6c) | No more than 7.5% | Other Fixed Income | Opportunistic Fixed Income |
| b(7) | No more than 10% | Real Estate | Core Real Estate |
| | | | Non-Core Real Estate |
| b(8) | No more than 65% | Public Equity | Public Equity |
| b(8)(b) | No more than 8.5% | Public Equity Limited Liability | Public Equity |
| b(9) | No more than 8.75% | Alternatives | Private Equity |
| | | | Multi-Strategy |
| b(9a) | No more than 7.5% | Inflation Protection | Inflation Sensitive |

Guide to IPS "segment" groups: Green = Rates and Liquidity; Blue = Growth; Purple = Inflation Sensitive & Diversifiers; Orange = Multi-Strategy

¹ Per § 147-69.2(b)(6a), investments authorized by these sections (fixed income) and those authorized by § 147-69.1(c)(1)-(7) (cash management) are combined in calculating the 20% limit.

The following maps the market value balances of the retirement system at quarter-end to the respective statutory and IPS classifications:

| | | Statutory Classification (\$ Millions) | | | | | | | | | Total |
|----------------------------------|----------------------------|--|------------------------|-------------------|------------------------------------|---------------------------|--------------------------|-----------------------------------|---------------------------------|--|------------------|
| | | Public Equity ¹ | Long-Term ² | Cash ² | External Fixed Income ² | Alternatives ³ | Real Estate ⁴ | Inflation Protection ⁵ | Other Fixed Income ⁶ | Public Equity Limited Liability ⁷ | |
| IPS Classification (\$ Millions) | Public Equity | \$50,789 | | | | | | | | \$2,103 | \$52,892 |
| | Private Equity | | | | | \$6,091 | | | | | 6,091 |
| | Non-Core Real Estate | | | | | | \$2,107 | | | | 2,107 |
| | Opportunistic Fixed Income | | | | | | | | \$7,832 | | 7,832 |
| | IG Fixed Income | | \$31,996 | | \$3,411 | | | | | | 35,407 |
| | Cash | | | \$9,369 | | | | | | | 9,369 |
| | Inflation Sensitive | | | | | | | \$5,811 | | | 5,811 |
| | Core Real Estate | | | | | | 6,436 | | | | 6,436 |
| | Multi-Strategy | | | | | 2,651 | | | | | 2,651 |
| | Total | \$50,789 | \$31,996 | \$9,369 | \$3,411 | \$8,742 | \$8,543 | \$5,811 | \$7,832 | \$2,103 | \$128,596 |

¹ N.C.G.S. § 147-69.2(b)(8)(a),(c); ² N.C.G.S. § 147-69.1(c) and N.C.G.S. § 147-69.2(b)(1)-(6b); ³ N.C.G.S. § 147-69.2(b)(9); ⁴ N.C.G.S. § 147-69.2(b)(7);

⁵ N.C.G.S. § 147-69.2(b)(9a); ⁶ N.C.G.S. § 147-69.2(b)(6c); ⁷ N.C.G.S. § 147-69.2(b)(8)(b)

Note: For statutory compliance purposes, all public equity investments made through funds with limited liability structures are included in the category of investments authorized by N.C.G.S. § 147-69.2(b)(8)(b.). This kind of investment structure is limited to a maximum of 8.5% of the total fund.

The following provides a summary of the investment vehicles in which the various trusts and clients are invested:

| | | Vehicles | | | | |
|------------------|---|----------------------------|-----------------|-------------------|-----------------------|---------------------------------|
| | | Short Term Investment Fund | Bond Index Fund | Equity Index Fund | Escheats Alternatives | Long-Term Investment Fund (QIB) |
| Trusts & Clients | Retirement Systems | ● | | | | ● |
| | Cash Management Programs | ● | | | | |
| | Ancillary Governmental Participant Investment Program | ● | ● | ● | | |
| | Escheats Fund | ● | ● | | ● | |

C. Statutory Compliance – Statutory Asset Classes [§ 147-69.12(a)(5)(c); § 147-69.12(a)(1)]

The table below lists the maximum or minimum percentages of the total assets allowed and actual percentages as of the quarter-end.

| Statutory Citation | Minimum or Maximum Percentage of Fund | Percentage of Total Assets Invested | Compliant |
|---|--|-------------------------------------|-----------|
| N.C.G.S. §§ 147-69.1(c) and 147-69.2(b)(1)-(6b) for fixed income and cash | At least 20% | 34.8% | ✓ |
| N.C.G.S. § 147-69.2(b)(8) for public equity | No more than 65% | 41.1% | ✓ |
| N.C.G.S. § 147-69.2(b)(8)(b.) for public equity limited liability investment vehicles | No more than 8.5% | 1.6% | ✓ |
| N.C.G.S. § 147-69.2(b)(6c) for other fixed income | No more than 7.5% | 6.1% | ✓ |
| N.C.G.S. § 147-69.2(b)(7) for real estate | No more than 10% | 6.6% | ✓ |
| N.C.G.S. § 147-69.2(b)(9) for private equity and other alternatives | No more than 8.75% | 6.8% | ✓ |
| N.C.G.S. § 147-69.2(b)(9a) for inflation protection | No more than 7.5% | 4.5% | ✓ |
| N.C.G.S. § 147-69.2(b)(10a) for the 35% aggregate portfolio limit | The sum of rows 3 to 7; No more than 35% | 25.7% | ✓ |

Note: Percentage of Total Assets Invested is based on market values as of the most recent quarter-end. Undrawn capital commitments are not included in the calculations until they are called and invested.

In the event that the market value of any of subdivision (6c) or (7), sub-subdivision b. of subdivision (8), or subdivision (9) or (9a) of N.C.G.S. § 147-69.2 increases during a fiscal year by an amount greater than three percent (3%) of the market value of all invested assets of the Retirement Systems as of the prior fiscal year end, then that event will be noted in this report along with the expected impact on the risk profile of the assets. No such change has occurred fiscal year to date, as of September 30, 2024.

D. Fees – Statutory Asset Classes [§ 147-69.12(a)(1)]

The Investment Management Division utilizes external managers for a portion of the Retirement Systems. Over time, the Department of State Treasurer, with the advice and counsel of the Investment Advisory Committee, has used a relatively lower risk and lower cost approach to investing the North Carolina Retirement System trust funds. While costs have risen somewhat over time as more diverse external investment strategies were pursued, the all-in costs of investing the retirement trust fund remain low, especially in comparison to similarly situated institutional peers.

The fees incurred to external investment managers, by asset class, are outlined in the Combining Statement of Operations – Pension Trust Funds Investment Program in Appendix 1, Part B. In addition to the fees shown in this statement, internal administrative expenses of the Funds and (for the internally managed portfolios) trade transaction costs are paid by the Treasurer. These charges are reported on the Combined Statement of Operations in Appendix 1, Part B.

During the calendar year 2023, the Department engaged CEM Benchmarking, a leading independent cost and performance analysis firm, to review the cost structure of the funds for the calendar year 2022. The report showed that the funds' cost structure was significantly below that of institutional peers. This led to savings of roughly 28.4 basis points compared to the median peer. The Department continues to proactively target improvements in cost-efficiency, transparency, risk management, and compliance.

Calendar Year 2023 NCRS Costs of Investment Operations Compared to Peers

(Expressed in basis points where 50 basis points equals 0.50%)

| | Total (Basis Points) |
|-----------------------------------|----------------------|
| Median Peer | 57.4 |
| North Carolina Retirement Systems | 25.3 |
| Percentile | 0% |

Source: CEM [Cost Effectiveness Measurement] Benchmarking Inc. The peer group consists of 14 U.S. public pension funds managing from \$67.5 billion to \$314.1 billion. The median peer managed an average of \$110.6 billion throughout the year versus NCRS' \$113.4 billion. In CEM's methodology, total cost excludes carry / performance fees for real estate, infrastructure, natural resources, and private equity funds. Performance fees are included for public market asset classes and hedge funds. All such fees and expenses have been deducted from all investment returns reported by NCRS.

E. Green Managers and Funds [§ 147-69.12(a)(2)]

There is no consensus on a validation group or process to certify green managers for investments, and the statute provides no definition of the term “sustainable practices” that would enable the Treasurer to determine which companies and funds would fall under this provision. Thus, it is not possible to report any relevant data at this time.

F. Locations on Website [§ 147-69.12(a)(6)(f,i,j)]

The current Investment Policy Statement may be accessed at the following link:

<https://www.nctreasurer.com/media/1501/open>

A list of new commitments to external investment managers may be found within the periodic IAC Performance Review presentations at the following link: <https://www.nctreasurer.com/divisions/investment-management/investment-advisory-committee>

The current Investment Transaction Disclosure Policy may be accessed at the following link:

<https://www.nctreasurer.com/documents/files/imdiac/investment-transaction-disclosure-policy/open>

Additional information on the use of placement agents by investment managers is available on request.

Appendix 1: Financial Information

Part A: Department of State Treasurer Bank Balances

| DEPARTMENT OF STATE TREASURER BANK BALANCES AS OF September 30, 2024 (dollars in thousands) | |
|--|---------------------|
| Summary of Bank Balances | |
| Balance as of 06/30/2024 | \$ 317,605 |
| Total Receipts | \$ 64,936,907 |
| Total Payments | \$ 65,045,172 |
| Balance as of 09/30/2024 | \$ 209,340 |
| Bank Balances as of September 30, 2024 | |
| <i>Bank</i> | <i>Bank Balance</i> |
| Wells Fargo | \$ 27,510 |
| Bank of America | \$ 48,641 |
| Truist | \$ 7,803 |
| PNC | \$ 320 |
| First Citizens | \$ 13,323 |
| Atlantic Union | \$ 1,750 |
| Bank of Tennessee | \$ 4 |
| Bank OZK | \$ 2,500 |
| First Community Bank | \$ 1,000 |
| First Horizon Bank | \$ 15,311 |
| Fidelity Bank | \$ 6,973 |
| First Bank | \$ 17,900 |
| First Federal Savings Bank | \$ 750 |
| First National Bank | \$ 13,949 |
| HomeTrust Bank | \$ 1,000 |
| Lumbee Guaranty Bank | \$ 3,750 |
| M&F Bank | \$ 2,500 |
| Peoples Bank | \$ 2,395 |
| Pinnacle Bank | \$ 2,500 |
| South State Bank | \$ 1,100 |
| Southern Bank & Trust | \$ 22,280 |
| TD Bank | \$ 2,250 |
| Townebank | \$ 2,731 |
| United Community Bank | \$ 7,600 |
| Uwharrie Bank | \$ 3,500 |
| Total* | \$ 209,340 |
| *This number reflects the balance in the State treasury credited to all State funds, including not only the General Fund but also other funds. | |

Part B: Combined Statement of Net Positions (Fiscal Year to Date)

- Combined Statement of Net Position
- Combining Statement of Net Position – Pension Trust Funds Investment Program
- Other Investment Programs
- Combined Statement of Operations
- Combining Statement of Operations – Pension Trust Funds Investment Program

DEPARTMENT OF STATE TREASURER
COMBINED STATEMENT OF NET POSITION
SEPTEMBER 30, 2024
(dollars in thousands)

Unaudited

| | Short-term Investment Fund | *Pension Trust Funds Investment Program Subtotal | Intrafund Eliminations | Total |
|---|----------------------------------|--|---------------------------|----------------|
| Net Position: | | | | |
| Investment Securities: | | | | |
| Cash Equivalents | \$ - | \$ - | \$ - | \$ - |
| Certificates of Deposit | - | - | - | - |
| Repurchase Agreements | 2,050,000 | - | - | 2,050,000 |
| U.S. Treasury Bills/ Notes/ Bonds | 22,551,545 | 8,333,808 | - | 30,885,353 |
| U.S. Government Agency Notes/ Bonds | 23,258,000 | 611,363 | - | 23,869,363 |
| GNMA Certificates | - | 11,177,985 | - | 11,177,985 |
| Corporate Obligations | - | 14,069,711 | - | 14,069,711 |
| Other Investments | - | 8,282,857 | - | 8,282,857 |
| Investments in Equity Securities | - | 50,789,586 | - | 50,789,586 |
| Investments in Equity Trusts & Limited Liability E | - | 2,103,409 | - | 2,103,409 |
| Investments in Real Estate Trust Funds & Partner | - | 8,543,192 | - | 8,543,192 |
| Investments in Alternative Partnerships | - | 8,741,439 | - | 8,741,439 |
| Investments in Credit Partnerships | - | 7,832,156 | - | 7,832,156 |
| Investments in Inflation Partnerships and Other Ir | - | 4,009,819 | - | 4,009,819 |
| Total Investment Securities | \$ 47,859,545 | \$ 124,495,325 | \$ - | \$ 172,354,870 |
| Cash in Bank | 209,340 | - | - | 209,340 |
| Payable for securities not settled | - | - | - | - |
| Deposits in Short-term Investment Fund | - | 3,835,297 | (3,835,297) | - |
| Other Assets | 302,710 | 286,362 | - | 589,072 |
| Other Liabilities | (47,187) | (20,875) | - | (68,062) |
| Total Net Position | \$ 48,324,408 | \$ 128,596,109 | \$ (3,835,297) | \$ 173,085,220 |
| Participant Equity: | | | | |
| General Fund | \$ 13,944,509 | \$ - | \$ - | \$ 13,944,509 |
| Other Funds Which Earn Interest for General Fund | 10,092,320 | - | - | 10,092,320 |
| Highway Fund | 23,324 | - | - | 23,324 |
| Highway Trust Fund | 2,588,815 | - | - | 2,588,815 |
| University Trust Funds | 4,564,276 | - | - | 4,564,276 |
| Pension Trust Funds | 1,386,826 | 128,596,109 | - | 129,982,935 |
| Other Independent Trust Funds | 11,178,798 | - | - | 11,178,798 |
| Local Political Subdivisions | 625,550 | - | - | 625,550 |
| Licensing Boards | 84,693 | - | - | 84,693 |
| Other Investment Funds | 3,835,297 | - | (3,835,297) | - |
| Total Participant Equity | \$ 48,324,408 | \$ 128,596,109 | \$ (3,835,297) | \$ 173,085,220 |
| Percent of Total | 27.92% | 74.30% | -2.22% | 100.00% |

*The Trust Funds Investment Program is presented at market value. Trust Funds detail is included on Combining Statement of Net Position.

DEPARTMENT OF STATE TREASURER
COMBINING STATEMENT OF NET POSITION - PENSION TRUST FUNDS INVESTMENT PROGRAM

SEPTEMBER 30, 2024

(dollars in thousands)

| | Cash Investment Fund | Long-term Investment Fund | External Fixed Inc. Investment Fund | Long-Only Public Equity Investment Fund | Hedged Public Equity Investment Fund * | Real Estate Investment Fund | Alternatives Investment Fund | Other Fixed Income Investment Fund | Inflation Protection Investment Fund | Totals |
|---|----------------------------|---------------------------------|---|---|--|-----------------------------------|------------------------------------|--|--|-------------|
| Net Position: | | | | | | | | | | |
| Investment Securities: | | | | | | | | | | |
| Cash and Cash Equivalents | \$ - | - | - | - | - | - | - | - | \$ - | - |
| U.S. Treasury Bills/ Notes/ Bonds | - | 8,023,110 | - | - | - | - | - | - | 310,698 | 8,333,808 |
| U.S. Government Agency Notes/ Bonds | - | 611,363 | - | - | - | - | - | - | - | 611,363 |
| GNMA Certificates | - | 11,177,985 | - | - | - | - | - | - | - | 11,177,985 |
| Corporate Obligations | - | 11,732,005 | 1,525,753 | - | - | - | - | - | 811,953 | 14,069,711 |
| Other Investments | 6,812,391 | - | 788,861 | - | - | - | - | - | 681,605 | 8,282,857 |
| Investments in Equity Securities | - | - | - | 50,789,071 | - | - | 515 | - | - | 50,789,586 |
| Investments in Equity Trusts & Limited Liability Entities | - | - | - | 2,101,393 | 2,016 | - | - | - | - | 2,103,409 |
| Investments in Real Estate Trust Funds & Partnerships | - | - | - | - | - | 8,543,192 | - | - | - | 8,543,192 |
| Investments in Alternative Partnerships | - | - | - | - | - | - | 8,741,439 | - | - | 8,741,439 |
| Investments in Credit Partnerships | - | - | - | - | - | - | - | 7,832,156 | - | 7,832,156 |
| Investments in Inflation Partnerships and Other Invest. | - | - | - | - | - | - | - | - | 4,009,819 | 4,009,819 |
| Total Investment Securities | \$ 6,812,391 | 31,544,463 | 2,314,614 | 52,890,464 | 2,016 | 8,543,192 | 8,741,954 | 7,832,156 | 5,814,075 | 124,495,325 |
| Cash in Bank | - | - | - | - | - | - | - | - | - | - |
| Deposits in Short-term Investment Fund | 2,556,133 | 204,717 | 1,074,447 | - | - | - | - | - | - | 3,835,297 |
| Other Assets | - | 250,000 | 21,566 | - | - | - | - | - | 14,796 | 286,362 |
| Other Liabilities | - | (3,296) | - | - | - | - | - | - | (17,579) | (20,875) |
| Total Net Position | \$ 9,368,524 | 31,995,884 | 3,410,627 | 52,890,464 | 2,016 | 8,543,192 | 8,741,954 | 7,832,156 | 5,811,292 | 128,596,109 |
| Participant Equity: | | | | | | | | | | |
| Pension Trust Funds | \$ 9,368,524 | 31,995,884 | 3,410,627 | 52,890,464 | 2,016 | 8,543,192 | 8,741,954 | 7,832,156 | 5,811,292 | 128,596,109 |
| Total Participant Equity | \$ 9,368,524 | 31,995,884 | 3,410,627 | 52,890,464 | 2,016 | 8,543,192 | 8,741,954 | 7,832,156 | 5,811,292 | 128,596,109 |
| Percent of Total | 7.29% | 24.88% | 2.65% | 41.13% | 0.00% | 6.64% | 6.80% | 6.09% | 4.52% | 100.00% |

* In terms of calculating performance, all public equity investments with long strategies are grouped together, and all public equity investments with hedged strategies are grouped together.

Note: ValueAct Capital Management LP and Ballie Gifford Co Investment are included in the Long-Only Public Equity Investment Fund group on this combining statement; however, on the "Concordance of IPS and NCGS § 147-69.2" table in Part II, Section B of this report, the assets invested with Value Act and Ballie Gifford are included in the "Public Equity Limited Liability" category, not the "Public Equity" category. The "Public Equity" category includes all assets invested in long strategies.

**DEPARTMENT OF STATE TREASURER
OTHER INVESTMENT PROGRAMS**

Unaudited

September 30, 2024

(dollars in thousands)

| | Bond Index Fund | Equity Index Fund | Escheats Alternative Investments | General Obligation Bond Proceeds | Totals |
|--|-----------------------|-------------------------|--|--|-----------|
| STATEMENT OF NET POSITION | | | | | |
| Net Position: | | | | | |
| Deposits in Equity Index Fund | \$ - | 974,215 | - | - | 974,215 |
| Deposits in Bond Index Fund | 1,704,084 | - | - | - | 1,704,084 |
| Deposits in Alternative Investment Fund | - | - | 45,951 | - | 45,951 |
| Deposits in Municipal Bonds | - | - | - | 135,107 | 135,107 |
| Other Assets | - | - | - | - | - |
| Total Net Position | \$ 1,704,084 | \$ 974,215 | \$ 45,951 | 135,107 | 2,859,357 |
| STATEMENT OF OPERATIONS | | | | | |
| (for the Current Fiscal Year ended September 30, 2024) | | | | | |
| Revenues: | | | | | |
| Investment Income: | | | | | |
| Investment Earnings | \$ 12,491 | 459 | 860 | 1,771 | 15,581 |
| Other Income | - | - | - | - | - |
| Subtotal | 12,491 | 459 | 860 | 1,771 | 15,581 |
| Net Unrealized Appreciation/Depreciation | 67,249 | 60,146 | (985) | - | 126,410 |
| Total Investment Income | 79,740 | 60,605 | (125) | 1,771 | 141,991 |
| Expenditures: | | | | | |
| Management Fees | - | (41) | (13) | - | (54) |
| Other Cost | - | - | (37) | - | (37) |
| Total Expenditures | - | (41) | (50) | - | (91) |
| Net Investment Income (Loss) | \$ 79,740 | \$ 60,564 | \$ (175) | 1,771 | 141,900 |

| AGPIP Participants: | Bond Index Fund | Equity Index Fund | Escheats Alternatives |
|---|-----------------------|-------------------------|--------------------------|
| Albemarle and Tideland MHRHIT | X | X | |
| Albemarle RH OPEB | X | X | |
| Apex OPEB Trust | X | X | |
| Appalachian DHD OPEB | | | |
| Archdale LEOSSA | X | X | |
| Buncombe County | X | X | |
| Cebarnus County OPEB | | | |
| City of Asheville | X | X | |
| City of Concord | X | X | |
| City of Greensboro | X | X | |
| City of Greenville | X | X | |
| City of Raleigh CRRR | X | X | |
| City of Raleigh LEOSSA | X | X | |
| City of Raleigh OPEB | X | X | |
| City of Sanford | X | X | |
| Clean Water | X | | |
| Columbus Regional | | X | |
| Community College Systems | X | | |
| Conservation EE II | X | X | |
| Conservation Grant Endowment | X | X | |
| Cornelius LEOSSA | | X | |
| Cornelius OPEB | | X | |
| County of Currituck LEOSSA | | | |
| County of Currituck OPEB | | | |
| County of Dare | X | X | |
| County of Dare LEOSSA | X | X | |
| County of Guilford | X | X | |
| County of Harnett OPEB | X | X | |
| Cumberland OPEB Trust | | | |
| Disability Income | X | | |
| Drinking Water | X | | |
| Ecosystem Restoration Fund | X | X | |
| ElednCities OPEB | X | X | |
| Employee Benefit Trust | X | | |
| Forsyth County | X | X | |
| Greensboro LEOSSA | X | X | |
| Greenville Utilities Commission OPEB | X | X | |
| Guilford County LEOSSA | | X | |
| Harnett LEOSSA Trust | X | X | |
| Holly Springs OPEB | | X | |
| Isothermal Planning & Development OPEB | X | X | |
| Kill Devil Hills OPEB | | X | |
| Lake Norman Charter School | | | |
| Margaret Pardee Hospital | X | X | |
| Martin County OPEB | X | X | |
| Mecklenburg County | X | X | |
| NC Muni Power Catawba Unit 1 DTF | X | X | |
| NC Muni Power Catawba Unit 2 DTF | X | X | |
| NC Student Loan Fund | | | |
| NCAOC NC Association of County Commissioners OPEB Trust | X | X | |
| Northeast Academy for Aerospace & Advance Technologies | | | |
| Orange County OPEB | X | | |
| Partners Behavioral | | | |
| Pine Lake Preparatory Charter School | | | |
| Pinnacle Classical Academy Charter School | | | |
| Raleigh Housing Authority | X | X | |
| Register of Deeds | X | | |
| Riparian Buffer Restoration Fund | X | X | |
| Rowan Cebarnus Community College | X | | |
| State Property Fire Insurance | X | | |
| State Public Education Property Insurance Fund | X | | |
| State Treasurer Escheats | X | | X |
| Swin County | | | |
| Town of Cornelius (General Fund) | | X | |
| Town of Morganton | X | | |
| Town of Wake Forest LEOSSA | | | |
| Town of Wake Forest OPEB | | | |
| Town of Williamston | X | X | |
| Trillium Health OPEB | X | X | |
| Trillium ECBH | | | |
| UNC SEAA Student Loan | | | |
| Union County | X | X | |
| Union County Separation Allowance Benefit Trust | | | |
| Wake County OPEB Trust | X | X | |
| Wake County Medical Center | X | X | |
| Wildlife Endowment | | X | |

DEPARTMENT OF STATE TREASURER
COMBINED STATEMENT OF OPERATIONS
THROUGH THE QUARTER ENDED SEPTEMBER 30, 2024
(dollars in thousands)

Unaudited

| | Short-term Investment Fund | Pension Trust Funds Investment Program Subtotal* | Intrafund Eliminations | Total |
|--|----------------------------------|--|---------------------------|--------------|
| Revenues: | | | | |
| Investment Income: | | | | |
| Investment Earnings | \$ 561,806 | \$ 1,094,828 | \$ - | \$ 1,656,634 |
| Intra-Pool Interest Earnings | - | 45,055 | (45,055) | - |
| Income from Securities Lending | 6,607 | 1,257 | - | 7,864 |
| Commission Recapture | - | - | - | - |
| Other Income | - | 2,926 | - | 2,926 |
| Subtotal | 568,413 | 1,144,066 | (45,055) | 1,667,424 |
| Net Unrealized Depreciation | - | 4,827,061 | - | 4,827,061 |
| Total Investment Income (Loss) | 568,413 | 5,971,127 | (45,055) | 6,494,485 |
| Expenditures: | | | | |
| Treasurer's Allocated Cost | (971) | (2) | - | (973) |
| Management Fees | - | (22,832) | - | (22,832) |
| Placement Fees** | - | - | - | - |
| Incentive Fees | - | (24,120) | - | (24,120) |
| Dividend Withholding Tax | - | (3,973) | - | (3,973) |
| Other Cost | (746) | (9,143) | - | (9,889) |
| Total Expenditures | (1,717) | (60,070) | - | (61,787) |
| Net Investment Income (Loss) | \$ 566,696 | \$ 5,911,057 | \$ (45,055) | \$ 6,432,698 |
| Total Investment Income (Loss) Allocated: | | | | |
| General Fund | \$ 232,442 | \$ - | \$ - | \$ 232,442 |
| Highway Fund | - | - | - | - |
| Highway Trust Fund | 28,440 | - | - | 28,440 |
| University Trust Funds | 57,219 | - | - | 57,219 |
| Pension Trust Funds | 20,785 | 5,911,057 | - | 5,931,842 |
| Other Independent Trust Funds | 125,195 | - | - | 125,195 |
| Local Political Subdivisions | 6,548 | - | - | 6,548 |
| Licensing Boards | 1,002 | - | - | 1,002 |
| Other Investment Funds | 95,065 | - | (45,055) | 50,010 |
| Total Investment Income (Loss) Allocated \$ | 566,696 | 5,911,057 | (45,055) | 6,432,698 |

Cash Return, Fiscal Year-to-Date (Annualized) 4.76%

*Pension Trust Funds detail is included on the Combining Statement of Operations-Pension Trust Funds Investment Program.

**By policy and practice, neither the Department of State Treasurer nor the funds bear the cost of placement agent fees.

DEPARTMENT OF STATE TREASURER
COMBINING STATEMENT OF OPERATIONS - PENSION TRUST FUNDS INVESTMENT PROGRAM
THROUGH THE QUARTER ENDED SEPTEMBER 30, 2024

(dollars in thousands)

| Revenues: | Cash Investment Fund | Long-term Investment Fund | External Fixed Inc. Investment Fund | Long-Only Public Equity Investment Fund | Hedged Public Equity Investment Fund | Real Estate Investment Fund | Alternative Investment Fund | Other Fixed Income Investment Fund | Inflation Protection Investment Fund | Totals |
|---|----------------------|---------------------------|-------------------------------------|---|--------------------------------------|-----------------------------|-----------------------------|------------------------------------|--------------------------------------|--------------|
| Investment Income: | | | | | | | | | | |
| Investment Earnings | \$ 89,117 | 304,685 | 26,141 | 357,687 | - | 55,919 | 157,358 | 41,145 | 62,776 | \$ 1,094,828 |
| Intra-Pool Interest Earnings | 30,569 | 2,027 | 12,459 | - | - | - | - | - | - | 45,055 |
| Income from Securities Lending | - | 1,207 | 21 | - | - | - | - | - | 29 | 1,257 |
| Commission Recapture | - | - | - | - | - | - | - | - | - | - |
| Other Income | - | - | 2,926 | - | - | - | - | - | - | 2,926 |
| Subtotal | 119,686 | 307,919 | 41,547 | 357,687 | - | 55,919 | 157,358 | 41,145 | 62,805 | 1,144,066 |
| Net Unrealized Appreciation (Depreciation) | - | 1,410,197 | 17,514 | 3,175,385 | (6) | 126,097 | (73,486) | 109,166 | 62,194 | 4,827,061 |
| Total Investment Income (Loss) | 119,686 | 1,718,116 | 59,061 | 3,533,072 | (6) | 182,016 | 83,872 | 150,311 | 124,999 | 5,971,127 |
| Expenditures: | | | | | | | | | | |
| Treasurer's Allocated Cost | - | (1) | - | (1) | - | - | - | - | - | (2) |
| Management Fees | - | - | - | (2,540) | - | (4,890) | (11,567) | (2,304) | (1,531) | (22,832) |
| Incentive Fees | - | - | - | - | - | (667) | (18,494) | (44) | (4,915) | (24,120) |
| Placement Fees* | - | - | - | - | - | - | - | - | - | - |
| Dividend Withholding Tax | - | - | - | (4,179) | - | (50) | 294 | - | (38) | (3,973) |
| Other Cost | (15) | (622) | (70) | (771) | - | (1,246) | (4,738) | (748) | (933) | (9,143) |
| Total Expenditures | (15) | (623) | (70) | (749) | - | (6,853) | (34,505) | (3,096) | (7,417) | (60,070) |
| Net Investment Income (Loss) | \$ 119,671 | \$ 1,717,493 | \$ 58,991 | \$ 3,525,581 | \$ (6) | \$ 175,163 | \$ 49,367 | \$ 147,215 | \$ 117,582 | \$ 5,911,057 |
| Total Investment Income (Loss) Allocated: | | | | | | | | | | |
| General Fund | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Highway Fund | - | - | - | - | - | - | - | - | - | - |
| Highway Trust Fund | - | - | - | - | - | - | - | - | - | - |
| University Trust Funds | - | - | - | - | - | - | - | - | - | - |
| Pension Trust Funds | 119,671 | 1,717,493 | 58,991 | 3,525,581 | (6) | 175,163 | 49,367 | 147,215 | 117,582 | 5,911,057 |
| Other Independent Trust Funds | - | - | - | - | - | - | - | - | - | - |
| Local Political Subdivisions | - | - | - | - | - | - | - | - | - | - |
| Licensing Boards | - | - | - | - | - | - | - | - | - | - |
| Other Investment Funds | - | - | - | - | - | - | - | - | - | - |
| Total Investment Income (Loss) Allocated | \$ 119,671 | \$ 1,717,493 | \$ 58,991 | \$ 3,525,581 | \$ (6) | \$ 175,163 | \$ 49,367 | \$ 147,215 | \$ 117,582 | \$ 5,911,057 |
| Total Return, 12, 24, and 36 and 60 months: | | | | | | | | | | |
| 12 months | 5.18% | 13.39% | 5.89% | 31.39% | 3.08% | -5.20% | 5.20% | 10.03% | 5.61% | 16.25% |
| 24 months | 4.50% | 6.46% | 4.49% | 25.89% | 1.68% | -7.75% | 4.00% | 8.23% | 7.42% | 11.64% |
| 36 months | 3.18% | -1.75% | 3.12% | 6.10% | -0.46% | -1.64% | 1.93% | 5.84% | 8.08% | 3.28% |
| 60 months | 2.23% | 0.39% | 2.23% | 11.96% | 8.07% | 1.52% | 10.03% | 7.10% | 6.26% | 6.36% |

* By policy and practice, neither the Department of State Treasurer nor the funds bear the cost of placement agent fees.

Appendix 2: References

Part A: Implementation vs. Long-Term Policy Benchmark

The Implementation Benchmark is a blend of the Asset Class Benchmarks at policy weights. It is currently weighted as follows: 55% Growth Benchmark, 33% Rates & Liquidity Benchmark, 11% Inflation Sensitive & Diversifiers Benchmark, and 1% Multi-Strategy Benchmark.

The Long-Term Policy Benchmark is comprised of 56% MSCI ACWI IMI Net, 28% ICE BofA 5+ Years U.S. Treasury Index, 6.5% Bloomberg Commodity Index, 5% ICE BofA 3 Month Treasury Bill Index, and 4.5% ICE BofA 1-3 Years U.S. Inflation-Linked Treasury Index.

The Implementation Benchmark represents the Retirement System's current strategic policy allocations, and thus allows for the evaluation of (1) the impact of manager selection and (2) the impact of tactical variations away from the strategic policy allocations. The Long-Term Policy Benchmark represents the Retirement System's passively managed equivalent and allows for evaluation of the active asset allocation decisions made across the Retirement System. Taken together, these two benchmarks may provide insights as to how the Retirement System is performing versus reasonably comparable hypothetical portfolios.

Part B: Other Benchmark Definitions

The Growth Benchmark is a blend of the Public Equity Benchmark, Private Equity Benchmark, Non-Core Real Estate Benchmark, and Opportunistic FI Benchmark at policy weights.

The Public Equity Benchmark is the dynamically weighted combination of the MSCI ACWI IMI Net (Long-Only) and a beta adjusted MSCI ACWI IMI Net (Hedged Equity).

The Private Equity Benchmark is comprised of the following Burgiss Private Capital indices: 45% Buyout, 25% Venture Capital, and 30% Distressed.

The Non-Core Real Estate Benchmark is comprised of the following Burgiss Private Capital indices: 80% U.S. Non-Core Real Estate (Opportunistic and Value-Added) and 20% Non-U.S. Non-Core Real Estate (Opportunistic and Value-Added).

The Opportunistic Fixed Income Benchmark is comprised of 50% HFRX Distressed Securities Index, 20% HFRX Relative Value Index, 15% Credit Suisse Leveraged Loan Index, and 15% ICE BofA High Yield Index.

The Rates & Liquidity Benchmark is a blend of the IG Fixed Income Benchmark and the Cash Benchmark at policy weights.

The IG Fixed Income Benchmark is comprised 10% iMoneyNet First Tier Institutional Money Market Funds Net Index and 90% custom ICE BofA Core Investment Grade Index. The custom ICE BofA core index is comprised of the following weightings: 30% ICE BofA 5+ Years Governments, 35% ICE BofA 5+ Years Investment Grade Corporates, and 35% ICE BofA Mortgage Master.

The Cash Benchmark is the iMoneyNet First Tier Institutional Money Market Funds Net Index.

The Inflation Sensitive & Diversifiers Benchmark is a blend of the Inflation Sensitive Benchmark and the Core Real Estate Benchmark at policy weights.

The Inflation Sensitive Benchmark is the dynamically weighted combination of the ICE BofA 1-3 Years U.S. Inflation-Linked Treasury Index (TIPS), the Bloomberg Commodities Index (Commodities), and a combination of the benchmarks of investments classified within Private Natural Resources or Other Real Assets and Diversifiers.

The Core Real Estate Benchmark is comprised of 80% Custom NCREIF ODCE Net and 20% FTSE EPRA NAREIT Global Index.

The Multi-Strategy Benchmark is comprised of a dynamically weighted combination of the HFRX ED: Multi-Strategy Index, net of fees, and the market value weighted benchmarks for any other total fund strategies within the Portfolio.

The Escheat Alternatives Benchmark is a blended benchmark of Burgiss Private Capital, High Yield, and Bank Loan indices.

Part C: Definitions and Procedures

The following is information that the Department of State Treasurer provides regarding its internal procedures for submitting statutorily required reports, as well as definitions of terms used within this report.

REQUIRED INVESTMENT REPORTS

(a) The State Treasurer shall issue all the reports required by N.C.G.S. § 147-69.12 concerning the State Treasurer's investment programs on or before the dates required by law. The State Treasurer may also issue voluntary reports or include in mandatory reports additional information that is not required by the statute.

(b) Reports required by different statutory provisions may be combined, so long as the combined report provides all the information required by each statutory provision.

(c) Failure by any Department of State Treasurer employee to comply with any provision of this Section may result in disciplinary action up to and including dismissal.

TRANSMISSION OF REPORTS

(a) The State Treasurer will issue reports directly or through a deputy authorized under N.C.G.S. § 147-75.

(b) To fulfill the report delivery requirements set out in N.C.G.S. § 147-69.12(d):

(1) E-mail delivery shall be used to send reports to the Joint Legislative Commission on Government Operations, chairs of the House of Representatives and Senate Appropriations Committees, chairs of the House of Representative and Senate Finance Committees, Fiscal Research Division, Governor, Council of State, and State Auditor.

(2) A paper copy shall also be sent to the Joint Legislative Commission on Government Operations, unless the Commission indicates that a paper copy is not necessary.

(3) The website of the State Treasurer shall have a publicly accessible page that collects recent reports required by the North Carolina General Statutes concerning the State Treasurer's investment programs. Reports shall be collected for at least ten years.

(4) E-mail delivery or website portal delivery, at the State Treasurer's discretion, shall be used to send reports, where required by N.C.G.S. § 147-69.12(d), to other officials, institutions, boards, commissions, or agencies investing in a State Treasurer investment program, including but not limited to the State Treasurer's Ancillary Governmental Participant Investment Program (AGPIP).

SCOPE OF REPORTING; LEVEL OF DETAIL

(a) Each statutory investment report shall include all State Treasurer investments, unless the statute specifically requests only certain types of investments.

(b) For internally managed portfolios, the State Treasurer may make aggregated reports for each strategy that describe performance and assets at the portfolio level, rather than listing each asset within the internally managed portfolio.

(c) Unless otherwise specified by the Department of State Treasurer in the report, all reports shall use generally accepted accounting principles and performance measurement methodologies as adopted by the State Treasurer in its policies and procedures. The State Treasurer shall periodically review and update such policies and procedures and make them available upon request.

DEFINITIONS OF TERMS

In the State Treasurer's required investment reports, the following words and phrases shall have the meanings defined below:

- (1) "Bank balance" means money held by the State Treasurer in a bank or savings institution.
- (2) "Cash management programs" means the Short-Term Investment Fund, bank balances, and any other future investment fund or strategy designed primarily to preserve capital and maintain a strong liquidity profile, as well as achieve competitive relative returns.
- (3) "Duration" of an investment refers to the sensitivity of an investment's price to changes in interest rates. The figure estimates the % change in price for a 100 basis point change in yields. A duration of 1.0 would equate to a 1.0% decrease in the price of bonds when yields rise by 100 basis points. The calculation involves the present value of the investment, its yield, coupon payment, maturity date and other features, and is measured in terms of years. A higher figure suggests higher interest rate sensitivity. The duration of a portfolio is calculated as the weighted average of all of the underlying securities' duration.
- (4) "Fee" means a charge against the State Treasurer or a State Treasurer investment. The State Treasurer's reports shall include under "fees" all of the following types of charges:
 - (i) Management fees;
 - (ii) Incentive compensation, carried interest, incentive fees, or performance fees; and
 - (iii) Placement fees.
- (5) "Expense" means the Department of State Treasurer's administrative costs attributable to and charged to the investment portfolio. The State Treasurer's reports shall include under "expenses" all of the following types of charges, as communicated to the State Treasurer:
 - (i) Administrative expenses;
 - (ii) Commissions, asset fees, or custody fees;
 - (iii) Partnership or organizational expenses;
 - (iv) Pass-through expenses; and
 - (v) The portion of the Department of State Treasurer's administrative costs attributable to and charged to the investment portfolio or investment fund.
- (6) "Investment manager" means a person or entity, other than Department of State Treasurer employees, given authority or discretion by the State Treasurer to make decisions concerning State Treasurer investments.
- (7) "Placement fee" or "placement agent fee" means a net fee, after any offsets, (i) to a placement agent or (ii) to any other entity, other than the investment manager itself or one of its employees or affiliates, that an investment manager directly or indirectly engaged in order to obtain investment from the State Treasurer.
- (8) "Rate of return" refers to the time-weighted return of each period shown, with adjustments made for cash inflows and outflows to limit distorting effects. Periods of greater than one year are annualized. All returns shown are net of all investment manager fees and all related State Treasurer expenses.
- (9) "State Treasurer investments" shall mean all investments of any kind by the Treasurer of the State of North Carolina or Department of State Treasurer, including but not limited to securities held directly, securities held in separate accounts pursuant to third-party investment management agreements, interests in limited liability investment vehicles or other investment companies as defined under generally accepted United States accounting principles as promulgated by the Financial Accounting Standards Board.
- (10) "Website portal delivery" means a secure method of accessing messages on a website portal set up by the Department of State Treasurer.