



May 10, 2021

To: Governor Roy Cooper
Council of State
Joint Legislative Commission on Government Operations
Commission on Governmental Operations
House Appropriations Committee
Senate Appropriations Committee
House Finance Committee
Senate Finance Committee
Fiscal Research Division
Office of State Budget Management

RE: Quarterly Investment Report for the Period Ended March 31, 2021

Dear Colleagues:

Attached is the Quarterly Investment Report for the state pension fund (Fund) for the period ending March 31, 2021. We continue to intently focus 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 – 1st Quarter 2021

The Fund, comprised of the retirement plans the N.C. Department of State Treasurer manages, reported gains of 1.73% percent for the quarter. Pension fund assets were valued at \$116.4 billion at March 31, 2021, up from \$114.9 billion at the end of the 4th quarter of 2020. These figures, and all the following performance figures, are reported net of all fees and expenses.

• Fee Reductions

As reported before, our investment management team continues to reduce costs significantly to provide value to members of the retirement plans. We have far exceeded my pledge of cutting \$100 million in management fees by realizing \$350 million of savings over my first term.

• Retirement Systems Boards of Trustees Lower Assumed Rate of Return to 6.5%. Treasurer Folwell only Second Treasurer in 60 Years to Lower Rate.

In January, the Teachers' and State Employees' Retirement System and Local Government Employees' Retirement System Boards of Trustees lowered the annual investment return assumption or rate of return for the principal North Carolina Retirement Systems by 50 basis points, from 7.0% to 6.5%. The rate has been lowered twice previously in the past four years. In 2017, it was lowered from 7.25% to 7.20%, and in 2018 the rate was further lowered to 7.0%. These changes were the first lowering of the rates in almost 60 years even though both plans have failed to achieve their assumed rates of return, on average, for the last 20 years.





The pension plans that comprise the North Carolina Retirement Systems have three sources of funds: contributions made by employees (6%), contributions made by employers (state agencies, school systems, and local governments), and investment gains. When a retirement system lowers its expected investment gains, additional funding for the pension system must come from other sources like the General Assembly and local governments in the form of employer contributions.

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 900,000 members who rely on our pension plans.

Warmest Regards,

Dale R. Folwell, CPA

State Treasurer of North Carolina

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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 March 31, 2021. 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 Programs
 - 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 March 31, 2021

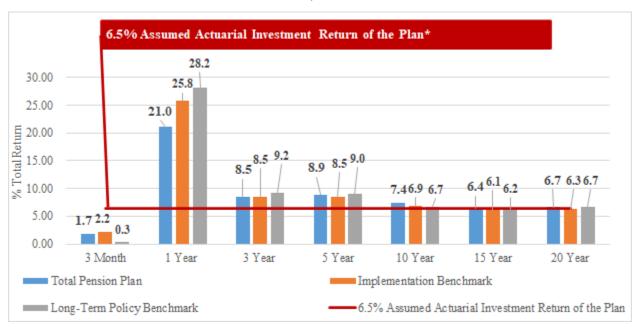
I. Investment Performance $[\S 147-69.12(a)(6)(g)]$

A. Market Environment Context

The US economy and capital markets strengthened throughout the quarter as favorable coronavirus news along with strong stimulus took hold. The S&P 500 was up nearly 6% for the quarter, resulting in the index being up nearly 56% from where it was one year prior. The yield on the 10-year US Treasury bond increased by nearly 80 basis points over the quarter, ending at 1.74%. Investment grade corporate bond credit spreads ended the quarter 6 basis points lower than where they started, resulting in the spreads being a few basis points lower than where they were prior to the pandemic on 12/31/2019. The broad index of corporate bonds lost nearly 4.5% over the quarter, driven by the increases in US Treasury yields. The Federal Reserve maintained its short-term interest rate target, ending the quarter at a range of 0.00 to 0.25%. Real Gross Domestic Product (GDP) came in at a 6.4% annualized rate of increase for Q1. The unemployment rate ended the quarter at 6.0%, down from 6.7% at the start of the quarter.

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

i.Total Fund (Investment Program) Performance for Periods Ending March 31, 2021 (%; 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 was lowered from 7.0% to 6.5%. Prior to this, the return 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 Мо	1 Yr	3 Yr	5 Yr	10 Yr	15 Yr	20 Yr
Growth	57,740,289	5.45	45.88	12.86	13.43	10.03	7.28	7.32
Benchmark		5.81	45.99	11.19	11.87	8.67	6.53	6.50
Public Equity	41,128,323	4.12	60.49	13.87	14.55	10.25	7.59	7.58
Benchmark		5.10	57.10	11.78	12.83	8.97	6.76	6.57
Private Equity	6,713,915	13.16	29.77	18.15	14.96	12.40	10.02	7.20
Benchmark		14.56	23.09	14.44	12.72	11.57	10.75	9.81
Non-Core Real Estate	3,020,111	2.78	(0.26)	6.78	9.34	11.51	6.06	6.08
Benchmark		4.20	1.12	5.03	6.08	8.04	4.10	6.60
Opportunistic Fixed Income	6,877,940	7.00	17.24	5.57	7.24	5.98	6.08	-
Benchmark		3.39	24.19	5.00	6.16	2.63	1.87	-
Rates & Liquidity	45,197,260	(3.06)	1.15	4.78	3.34	4.18	5.27	5.53
Benchmark		(4.88)	(0.56)	4.88	3.33	4.34	5.11	5.35
IG Fixed Income & Cash	32,570,748	(4.17)	0.99	5.37	3.71	4.40	5.42	5.64
Benchmark		(5.05)	(0.60)	5.01	3.40	4.40	5.15	5.39
Pension Cash	12,626,512	0.06	0.66	1.62	1.40	-	-	-
Benchmark		0.01	0.21	1.36	1.11	0.58	-	-
Inflation Sensitive & Diversifiers	11,296,213	2.92	4.14	3.83	5.85	3.46	2.61	3.96
Benchmark		2.26	5.33	3.03	4.00	3.43	1.87	3.79
Inflation Sensitive	5,608,676	3.16	2.99	2.09	5.03	0.11	1.20	3.00
Benchmark		1.88	3.44	2.02	2.92	(0.67)	2.33	3.39
Core Real Estate	5,687,537	2.69	5.35	5.71	6.72	8.38	5.47	6.12
Benchmark		2.70	7.53	4.18	5.26	8.50	5.44	6.51
Multi-Strategy	2,233,696	2.72	12.79	2.73	5.50	6.99	5.21	-
Benchmark		2.20	18.07	3.36	5.57	6.05	5.68	-
Total Pension Plan	116,467,458	1.73	21.04	8.54	8.89	7.41	6.42	6.65
Implementation Benchmark		2.18	25.80	8.52	8.50	6.92	6.06	6.27
Long-Term Policy Benchmark		0.28	28.25	9.21	8.98	6.73	6.20	6.69
Assumed Actuarial Investment Return ¹		1.59	6.50	6.50	6.50	6.50	6.50	6.50

 $^{^{\}rm 1}$ 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, Part B.

B. Cash Management Programs

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

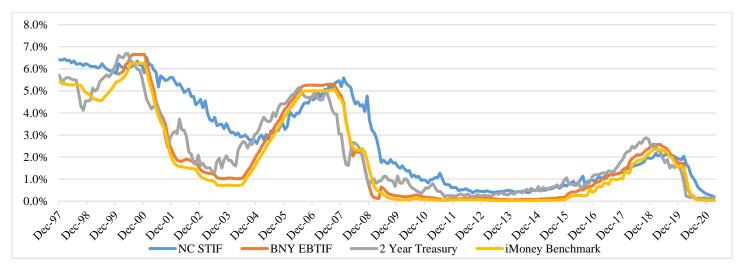
The STIF is responsible for managing the operating funds of the State. Investors include the State's General Fund, Highway Trust Fund, certain Retirement Systems funds, and other investors. The STIF is also where any bank balances are held for the State; please see part (ii) below for information about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

As of March 31, 2021, the STIF had the following characteristics:

Total Assets	Duration	3-Month Return	Benchmark 3- Month Return	1-Month Annualized Cash Return	Fees
\$39.6 billion	1.16 years	0.06%	0.01%	0.20%	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 March 31, 2021, was \$236.4 million. For a list of each bank and other qualified depository institutions utilized by the State Treasurer and the current quarter-end cash balances, please see Appendix 1, Part A.

C. Other Investment Programs – Ancillary Governmental Participant Investment Programs [§ 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). 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 B (i) above. The following are other investment options maintained by the Treasurer for the AGPI Program.

i. BIF [§ 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 Barclays U.S. Aggregate Bond Index benchmark.

As of March 31, 2021, the BIF had the following characteristics:

Total Assets	Duration	3-Month Return	Benchmark 3- Month Return	Crediting Rate	Fees
\$1.58 billion	6.4 years	-3.54%	-3.37%	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 [§ 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 March 31, 2021, the EIF had the following characteristics:

Total Assets	Duration	3-Month Return	Benchmark 3- Month Return	Crediting Rate	Fees
\$428.8 million	N/A	4.63%	4.57%	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 March 31, 2021, the Escheat Fund had \$913 million in total invested assets. Of that total, \$712 million was in STIF and \$138 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 March 31, 2021, the Escheat Fund held \$62.9 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	62,917	4.12	10.95	3.40	5.71	6.38
Benchmark		16.13	29.07	17.85	14.85	13.48

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	42,796,466	60,000,000	14,798,453	2.03	1.05	5,128,936	0.11

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.

D. 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 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. 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. \S 147-69.2 [\S 147-69.12(a)(5)(c)]

The following connects statutory guidelines to those in the IPS:

Gene	eral Statute § 147-69.2	Statutory Asset Classifications	IPS
		STIF	Cook
b (1) (6)]	At least 200/	Bank Balances	Cash
$b(1)-(6)^1$	At least 20%	External Fixed Income	Instrument Condo Eise d Instrum
		Long-Term Fixed Income	Investment Grade Fixed Income
b(6c)	No more than 7.5%	Other Fixed Income	Opportunistic Fixed Income
1-(7)	No more than 10%	Real Estate	Core Real Estate
b(7)	No more than 10%	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
1-(0)	No more than 8.75%	Alternatives	Private Equity
b(9)	No more than 8.75%	Alternatives	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)								
		Public Equity ¹	Long-Term	Cash ²	External Fixed Income ²	Alternatives 3	Real Estate	Inflation Protection ⁵	Other Fixed Income ⁶	Public Equity Limited Liability ⁷	Total
	Public Equity	\$39,342								\$1,786	\$41,128
ions	Private Equity					\$6,714					6,714
Millions)	Non-Core Real Estate						\$3,020				3,020
€	Opportunistic Fixed Income								\$6,878		6,878
Classification	IG Fixed Income		\$29,227		\$3,344						32,571
ific	Cash			\$12,627							12,627
Jase	Inflation Sensitive							\$5,609			5,609
IPS (Core Real Estate						5,688				5,688
	Multi-Strategy	•				2,234					2,234
	Total	\$39,342	\$29,227	\$12,627	\$3,344	\$8,948	\$8,708	\$5,609	\$6,878	\$1,786	\$116,467

 $^{^{1}\}text{N.C.G.S.} \ \S \ 147-69.2(b)(8)(a),(c); \\ ^{2}\text{N.C.G.S.} \ \S \ 147-69.1(c) \ \text{and} \ \text{N.C.G.S.} \ \S \ 147-69.2(b)(1)-(6b); \\ ^{3}\text{N.C.G.S.} \ \S \ 147-69.2(b)(9); \\ ^{4}\text{N.C.G.S.} \ \S \ 147-69.2(b)(9); \\ ^{4}\text{N.C.G.S.} \ \S \ 147-69.2(b)(9); \\ ^{5}\text{N.C.G.S.} \ \S \ 147-69.2(b)(6c); \\ ^{7}\text{N.C.G.S.} \ \S \ 147-69.2(b)(8)(b)$

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. One external manager, ValueAct Capital Management LP, is a limited liability partnership, and thus assets invested with this manager are included in the N.C.G.S. § 147-69.2(b)(8)(b.) limit of 8.5%. ValueAct Capital Management, however, has a different investment strategy than the other assets invested with managers through limited liability structures.

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

			Veh	icles	
		Short Term Investment Fund	Bond Index Fund	Equity Index Fund	Long-Term Investment Fund (QIB)
ts	Retirement Systems	•			•
& Clients	Cash Management Programs	•			
Trusts &	Ancillary Governmental Participant Investment Program	•	•	•	
T	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%	38.8%	✓
N.C.G.S. § 147-69.2(b)(8) for public equity	No more than 65%	35.3%	✓
N.C.G.S. § 147-69.2(b)(8)(b.) for public equity limited liability investment vehicles	No more than 8.5%	1.5%	✓
N.C.G.S. § 147-69.2(b)(6c) for other fixed income	No more than 7.5%	5.9%	✓
N.C.G.S. § 147-69.2(b)(7) for real estate	No more than 10%	7.5%	✓
N.C.G.S. § 147-69.2(b)(9) for private equity and other alternatives	No more than 8.75%	7.7%	✓
N.C.G.S. § 147-69.2(b)(9a) for inflation protection	No more than 7.5%	4.8%	✓
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%	27.4%	✓

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.

Note: As of March 31, 2021, the values associated with the Alternatives portfolio in the above Statutory Classification tables did not include \$8.9 million of assets. That \$8.9 million of assets is instead shown within the Cash classification. The Combining Statement of Net Position on page 14 properly presents the balances of the Alternative portfolio and Cash Pool.

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 occurred during the fiscal year ending March 31, 2021.

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

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 modest.

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 2020, 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 2019. The report showed that the funds' cost structure was below that of institutional peers. This leads to savings of roughly 19.7 basis points compared to the median peer. The Department continues to proactively target improvements in cost-efficiency, transparency, risk management, and compliance.

Calendar Year 2019 NCRS Costs of Investment Operations Compared to Peers

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

Total (Basis Points)

Median Peer51.8North Carolina Retirement Systems32.1Percentile0%

Source: CEM [Cost Effectiveness Measurement] Benchmarking Inc. The peer group consists of 14 U.S. public pension funds managing from \$54.1 billion to \$243.6 billion. The median peer managed an average of \$91.5 billion throughout the year versus NCRS' \$100.9 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:

 $\underline{https://files.nc.gov/nctreasurer/documents/files/IMD/GovernancePoliciesAndGuidelines/investment-policy-statement-for-\underline{ncrs.pdf}$

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/inv/Pages/IAC-Reports.aspx

The current Placement Agent, Political Contribution, and Connection Disclosure Policy may be accessed at the following link:

 $\frac{https://files.nc.gov/nctreasurer/documents/files/IMD/GovernancePoliciesAndGuidelines/placement-agency-political-contribution-and-connection-disclosure-policy.pdf}{}$

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 March 31, 2021

(dollars in thousands)

Summary of Bank Balances						
Balance as of 12/31/2020	\$	175,372				
Total Receipts	\$	59,155,835				
Total Payments	\$	59,094,754				
Balance as of 03/31/2021	\$	236,453				

Bank Balances as of December 31, 2020						
Bank	Bank Bal	ance				
Wells Fargo	\$	60,976				
Bank of America	\$	74,948				
SunTrust	\$	2,885				
PNC	\$	255				
First Citizens	\$	10,796				
BB&T	\$	4,727				
Bank of Tennessee	\$	3				
Bank OZK	\$	704				
First Horizon Bank	\$	8,613				
Fidelity Bank	\$	7,723				
First Bank	\$	14,425				
First Federal Savings Bank	\$	1,000				
First National Bank	\$	10,689				
HomeTrust Bank	\$	1,000				
KS Bank	\$	100				
Lumbee Guaranty Bank	\$	2,750				
M&F Bank	\$	2,250				
Peoples Bank	\$	1,000				
Pinnacle Bank	\$	750				
Select Bank	\$	1,000				
South State Bank	\$	1,100				
Southern Bank & Trust	\$	14,159				
Surrey Bank	\$	750				
TD Bank	\$	1,500				
Townebank	\$	2,750				
Union Bank	\$	1,000				
United Community Bank	\$	6,600				
Uwharrie Bank	\$	2,000				
Total*	\$	236,453				

^{*}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

Unaudited

DEPARTMENT OF STATE TREASURER COMBINED STATEMENT OF NET POSITION March 31, 2021

(dollars in thousands)

_	Short-term Investment Fund	Pension Trust Funds Investment Program Subtotal		Intrafund Eliminations	 Total
Net Assets:					
Investment Securities:					
Cash Equivalents \$	3,099,926	\$ -	\$	-	\$ 3,099,926
Certificates of Deposit	-	-		-	-
Repurchase Agreements	1,120,000	-		-	1,120,000
U.S. Treasury Bills/ Notes/ Bonds	13,199,819	6,799,266		-	19,999,085
U.S. Government Agency Notes/ Bonds	21,908,781	758,646		-	22,667,427
GNMA Certificates	-	10,394,401		-	10,394,401
Corporate Obligations	-	11,606,005		-	11,606,005
Other Investments	-	2,190,023		-	2,190,023
Investments in Equity Securities	-	40,650,882		-	40,650,882
Investments in Equity Trusts & Limited Liability Entities**	-	477,441		-	477,441
Investments in Real Estate Trust Funds & Partnerships	-	8,707,648		-	8,707,648
Investments in Alternative Partnerships	-	8,956,343		-	8,956,343
Investments in Credit Partnerships	-	6,877,940		-	6,877,940
Investments in Inflation Partnerships and Other Invest.	-	4,058,363		-	4,058,363
Total Investment Securities \$	39,328,526	\$ 101,476,958	\$	_	\$ 140,805,484
Cash in Bank	236,454	-		_	236,454
Deposits in Short-term Investment Fund	-	14,821,638		(14,821,638)	-
Other Assets, Net of Liabilities	84,378	168,862		-	253,240
Total Net Assets	39,649,358	\$ 116,467,458	\$	(14,821,638)	\$ 141,295,178
Participant Equity:					
General Fund \$	8,258,352	\$ -	\$	-	\$ 8,258,352
Other Funds Which Earn Interest					
for General Fund	3,291,717	-		-	3,291,717
Highway Fund	920,197	-		-	920,197
Highway Trust Fund	643,747	-		-	643,747
University Trust Funds	3,206,163	-		-	3,206,163
Pension Trust Funds	1,108,999	116,467,458		_	117,576,457
Other Independent Trust Funds	6,465,193	-		_	6,465,193
Local Political Subdivisions	867,772	-		_	867,772
Licensing Boards	65,580	-		_	65,580
Other Investment Funds	14,821,638	-	•	(14,821,638)	-
Total Participant Equity \$	39,649,358	 116,467,458	\$	(14,821,638)	\$ 141,295,178
Percent of Total	28.06%	82.43%		-10.49%	100.00%

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

^{**}See description of Equity Investment Fund in note on following pages

		DEF	ARTMENT OF	DEPARTMENT OF STATE TREASURER	LER					Unaudited
J	COMBINING STATEMENT OF NET POSITION - PENSION TRUST FUNDS INVESTMENT PROGRAM March 31, 2021 (dollars in thousands)	EMENT OF NE	T POSITION - P. March (dollars in t	TON - PENSION TRUST March 31, 2021 (dollars in thousands)	FUNDS INVESTA	IENT PROGRAN	=			
	Cash Investment Fund	Long-tem 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 Inflation Protection Investment Investment Fund Fund	nflation Protection Investment Fund	Totals
Net Assets: Investment Securities: Cach and Cach Emiradants		1		,	,	,		,		
U.S. Treasury Bills/Notes/ Bonds		6.552.777		246.489	6.799.266
U.S. Government Agency Notes/Bonds		758,646								758,646
GNMA Certificates		10,394,401								10,394,401
Corporate Obligations		10,782,044							823,961	11,606,005
Other Investments	1,699,206		•	•			•		490,817	2,190,023
Investments in Equity Securities				40,650,882						40,650,882
Investments in Equity Trusts & Limited Liability Entities					477,441					477,441
Investments in Real Estate Trust Funds & Partnerships						8,707,648				8,707,648
Investments in Alternative Partnerships							8,956,343			8,956,343
Investments in Credit Partnerships								6,877,940		6,877,940
Investments in Inflation Partnerships and Other Invest.									4,058,363	4,058,363
Total Investment Securities	\$ 1,699,206	28,487,868		40,650,882	477,441	8,707,648	8,956,343	6,877,940	5,619,630 \$	101,476,958
Cash in Bank	•	•								•
Deposits in Short-term Investment Fund	10,918,574	559,519	3,343,545							14,821,638
Other Assets, Net of Liabilities	•	179,816							(10,954)	168,862
Total Net Assets	\$ 12,617,780 \$	29,227,203 \$	3,343,545	40,650,882 \$	477,441 \$	8,707,648 \$	8,956,343	\$ 6,877,940 \$	5,608,676 \$	116,467,458
Participant Equity.				4	į					
Pension Trust Funds	5 12,617,780	29,227,203		40,650,882	4//,441	8,707,648			3,608,6/6	116,46/,438
Total Participant Equity	\$ 12,617,780 \$	29,227,203 \$	3,343,545 \$	40,650,882 \$	477,441 \$	8,707,648 \$	8,956,343 \$	\$ 6,877,940 \$	5,608,676 \$	116,467,458
Percent of Total	10.83%	25.09%	2.87%	34.90%	0.41%	7.48%	7.69%	5.91%	4.82%	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: One external manager, ValueAct Capital Management LP is 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 are included in the "Public Equity" category. The "Public Equity" category includes all assets invested in long strategies.

DEPARTMENT OF STATE TREASURER OTHER INVESTMENT PROGRAMS March 31, 2021

in thousands

STATEMENT OF NET POSITION Panel		Bond Index		Escheats Alternative	General Obligation	
Not settled					_	Totals
Deposits as Equity Indices Front 1,585,64 2.0 2.0	STATEMENT OF NET POSITION					
Deposition in Remarks brained 1,588,564						100.017
Deposition Authoritative Investment Fund Part				-	-	
Total Net Assets	_	1,388		62.917	-	
## STATIMENT OF OPERATIONS (For the rane months ended March 11, 2021) Revenues: Control Co				-	532,934	
Care the new member ended March 31, 2021 121,919 122 121,919 124 121,919 124 121,919 124 121,919 124 121,919 124 121,919 124 121,919 124 121,919 124	Total Net Assets	\$ 1,588	,564 \$ 428,847	\$ 62,917	532,934	2,613,262
Care the new member ended March 31, 2021 121,919 122 121,919 124 121,919 124 121,919 124 121,919 124 121,919 124 121,919 124 121,919 124 121,919 124	STATEL THE OF OPERATIONS					
Revention:						
District						
Substant	Investment Income:					
Substoat	Investment Earnings	\$ 28	,002 95,971	(2,336)	282	121,919
Total Investinet Appreciation Operaciation G5,365 21,347 9,221						
Total Investment Income				* * *	282	
Expenditures:					282	
Management Fees		(3)	,505) 117,516	7,103	262	67,422
Total Expenditures	_		(183) (99)	(239)	(150)	(671)
Net Investment Income (Loss) S G7.546) S 117.219 S 6.947 132 86,732	Other Cost		<u> </u>	1		1
Participants	Total Expenditures		· · · · · · · · · · · · · · · · · · ·			(670)
Participants: Fund	Net Investment Income (Loss)	\$ (37	,546) \$ 117,219	\$ 6,947	132	86,752
Participants: Fund		Bond	Equity			
Pattop ants			Index			
Albemark P.H. OPEB				Attelliatives		
Apes OPEB Trust						
Archdel EDOSA Buncombe Country X X City of Asheville X X City of Greensboro X X X City of Greensboro X X X Clean Water Community College Systems X Community College Systems X Conservation Easement Endowment Fund X Conservation Easement Endowment Fund X Conservation Teasement Endowment Fund X Conservation Teasement Endowment X County of Guildrod County of Cou	Apex OPEB Trust					
Buncombe County	**		u u			
City of Concord						
City of Greensboro X X City of Sanford X X Clam Water X X Community College Systems X Conservation Easement Endowment Fund X Conservation Ell II X County of County of Date X County of Ell II X County of Guidend X County of Hamet OPEB X Umberland OPEB Trust X Dissibility Income X DMS Nutrient Offset X Dissibility Income X DMS Nutrient Offset X Dissibility Income X Days off	City of Asheville	X	x			
City of Greenville						
City of Sanford						
Columbus Regional Community College Systems X Conservation Easement Endowment Fund Conservation Ei II	City of Sanford	x	x			
Community College Systems		X	v			
Conservation Easement Endowment Fund		x	×			
Comesius LEJOSSA Comelius LEJOSSA Comelius LEJOSSA Comelius CPEB County of Date X	Conservation Easement Endowment Fund	X				
Comelius DFEB						
County of Dare		^	^			
County of Guilford						
County of Hamest OPEB Cumberland OPEB Trust Disability Income DMS Nutrient Offset DMS Nutrient Offset DMS Nutrient Offset DFINING Water Ecosystem Restoration Fund Electricities OPEB X Employee Benefit Trust Employee Benefit Trust X Forsyth County X Greensboro LEOSSA X Greenville Utilities Commission OPEB X Guilford County LEOSSA X Guilford County LEOSSA X Holly Springs OPEB SISSHEMBER AND						
Disability Income X DMS Nutrient Offset X Drinking Water X Ecosystem Restoration Fund Electrificities OPEB X Employee Benefit Trust X Forsyth County X Greensboro LEOSSA X Greenville Utilities Commission OPEB X Guilford County LEOSSA X Hamett LEOSSA Trust X Holly Springs OPEB Isothemal Planning & Development OPEB Isothemal Planning & Development OPEB X Margaret Pardee Hospital X Margaret Pardee Hospital X Martin County OPEB X X Mecklenburg County X X X NC Student Loan Fund New Hanover Hospital Orange County OPEB X X X X Register of Deeds X X X Register of Deeds X X X X X X X X X X X X X X X X X X X						
DMS Nutrient Offset DMS Nutrient Offset Ecosystem Restoration Fund ElectriCities OPEB Employee Benefit Trust X Forsyth County Forsyth County Creensboro LEOSSA X Greensboro LEOSSA X Greensboro LEOSSA X Hamet LEOSSA Trust Holly Springs OPEB X Hamet LEOSSA Trust Holly Springs OPEB X KII Devil Hills OPEB X Margaret Pardee Hospital Martin County OPEB X Martin County OPEB X NC Student Loan Fund New Hanover Hospital Orange County OPEB X Ratiege Housing Authority Register of Deeds Rowan Cabarrus Community College X Rowan Cabarrus Community College X State Prublic Education Property Insurance Fund X Rowan Cabarrus Community College X State Property Fire Insurance X State Property Fire Insurance X State Property Fire Insurance X Rowan Cabarrus Community College X State Property Fire Insurance X X STATE STATE X STATE X STATE X STAT						
Drinking Water	,					
ElectriCities OPEB						
Employee Benefit Trust Forsyth County Forsyth Coun		X				
Forsyth County Greensboro LEOSSA Greenville Utilities Commission OPEB X X Greenville Utilities Commission OPEB X X Hamett LEOSSA Tust X Holly Springs OPEB Isothemal Planning & Development OPEB X KIII Devil Hills OPEB X Margaret Pardee Hospital X Martin County OPEB X X Martin County OPEB X X X Mortin County OPEB X X X X X X X X X X X X X X X X X X X		x	Х			
Greenville Utilities Commission OPEB	Forsyth County		х			
Guilford County LEOSSA X X X X X X X X X X X X X X X X X X						
Hamett LEOSSA Trust Holly Springs OPEB Isothermal Planning & Development OPEB X Kill Devil Hills OPEB X Margaret Pardee Hospital X Martin County OPEB X Mecklenburg County X X X Mecklenburg County X X X X X X X X X X X X X X X X X X X		Х				
Isothermal Planning & Development OPEB X X X X X X X X X X X X X X X X X X X	Harnett LEOSSA Trust	X				
Kill Devil Hills OPEB Margaret Pardee Hospital X Martin County OPEB X Mecklenburg County X NC Student Loan Fund New Hanover Hospital Orange County OPEB X X Partners Behavioral State Public Education Property Insurance Fund Raleigh Housing Authority X Register of Deeds X Rowan Cabarrus Community College X State Property Fire Insurance X State Treasurer Escheats X Town of Morganton Town of Williamston X X X X X X X X X X X X X		v	v			
Martin County OPEB X X X Mecklenburg County X X X NC Student Loan Fund New Hanover Hospital Orange County OPEB X X X Partners Behavioral State Public Education Property Insurance Fund X Raleigh Housing Authority X X X Register of Deeds X Rowan Cabarrus Community College X State Property Fire Insurance X State Treasurer Escheats X X Town of Morganton X Town of Williamston X X Trillium Health OPEB X X X UNC SEAA Student Loan Union County X X X Watauga Medical Center X X		^				
Mecklenburg County NC Student Loan Fund New Hanover Hospital Orange County OPEB XXX Partners Behavioral State Public Education Property Insurance Fund XRaleigh Housing Authority XXX Register of Deeds XX Rowan Cabarrus Community College XX State Property Fire Insurance XX State Treasurer Escheats XX Town of Morganton XX Town of Williamston XX XX XX XX XX XX XX XX XX X						
NC Student Loan Fund New Hanover Hospital Orange County OPEB X X Partners Behavioral State Public Education Property Insurance Fund X Raleigh Housing Authority X X Royan Cabarrus Community College X State Property Fire Insurance X State Treasurer Escheats X X Town of Morganton X Town of Williamston X X Tillium Health OPEB X X UNC SEAA Student Loan Union County X X Watauga Medical Center X X						
Orange County OPEB X X X Partners Behavioral State Public Education Property Insurance Fund X Raleigh Housing Authority X X Register of Deeds X Rowan Cabarrus Community College X State Property Fire Insurance X State Treasurer Escheats X X Town of Morganton X Town of Williamston X X Tillium Health OPEB X X UNC SEAA Student Loan Union County X X Watauga Medical Center X X		^	^			
Partners Behavioral X State Public Education Property Insurance Fund X Raleigh Housing Authority X Register of Deeds X Rowan Cabarrus Community College X State Property Fire Insurance X State Treasurer Escheats X Town of Morganton X Town of Williamston X Trillium Health OPEB X Union County X Watauga Medical Center X						
State Public Education Property Insurance Fund X Raleigh Housing Authority X X Register of Deeds X Rowan Cabarrus Community College X State Property Fire Insurance X State Treasurer Escheats X X Town of Morganton X Town of Williamston X X Trillium Health OPEB X X X UNC SEAA Student Loan Union County X X Watauga Medical Center X X X		X	X			
Register of Deeds	State Public Education Property Insurance Fund					
Rowan Cabarrus Community College X State Property Fire Insurance X State Treasurer Escheats X Town of Morganton X Town of Williamston X Trillium Health OPEB X UNC SEAA Student Loan Union County X Watauga Medical Center X	Raleigh Housing Authority		Х			
State Property Fire Insurance						
Town of Morganton X Town of Williamston X X Trillium Health OPEB X X UNC SEAA Student Loan V V Union County X X Watauga Medical Center X X	State Property Fire Insurance	X				
Town of Williamston X X Trillium Health OPEB X X UNC SEAA Student Loan V X Union County X X Watauga Medical Center X X				X		
Trillium Health OPEB X X UNC SEAA Student Loan X X Union County X X Watauga Medical Center X X			x			
Union County X X Watauga Medical Center X X	Trillium Health OPEB					
Watauga Medical Center X X						

Unaudited

DEPARTMENT OF STATE TREASURER COMBINED STATEMENT OF OPERATIONS FOR THE QUARTER ENDED March 31, 2021

(dollars in thousands)

Revenues:	_	Short-term Investment Fund		nsion Trust Funds vestment Program Subtotal*	_ 1	Intrafund Eliminations	Total
Investment Income:							
Investment Earnings	\$	121,159	\$	4,172,616	\$	- \$	4,293,775
Intra-Pool Interest Earnings		-		44,323		(44,323)	-
Income from Securities Lending		2,171		1,659		-	3,830
Commission Recapture		-		-		-	-
Other Income		-		6		-	6
Subtotal	_	123,330		4,218,604		(44,323)	4,297,611
Net Unrealized Appreciation/Depreciation		-		10,223,552		<u>-</u>	10,223,552
Total Investment Income	_	123,330	_	14,442,156		(44,323)	14,521,163
Expenditures:							
Treasurer's Allocated Cost		(2,835)		(21)		-	(2,856)
Management Fees		-		(160,326)		-	(160,326)
Placement Fees**		-		-		-	-
Incentive Fees		-		(56,114)		-	(56,114)
Dividend Withholding Tax		-		(7,475)		-	(7,475)
Other Cost		(4,427)		(17,156)		-	(21,583)
Total Expenditures		(7,262)		(241,092)			(248,354)
Net Investment Income (Loss)	\$	116,068 \$	\$	14,201,064	\$	(44,323) \$	14,272,809
Total Investment Income Allocated:							
General Fund	\$	18,161	\$	-	\$	- \$	18,161
Highway Fund		1,761		-		-	1,761
Highway Trust Fund		1,542		-		-	1,542
University Trust Funds		13,015		-		-	13,015
Pension Trust Funds		5,488		14,201,064		-	14,206,552
Other Independent Trust Funds		28,077		-		-	28,077
Local Political Subdivisions		3,239		-		-	3,239
Licensing Boards		212		-		-	212
Other Investment Funds		44,573		-		(44,323)	250
Total Investment Income Allocated	S	116,068 \$	\$	14,201,064	\$	(44,323) \$	14,272,809

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

0.43%

^{*}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.

Cash Long-tem Externation Investment Income		Long-Only Public Equity Investment Fund 2,384,667 2,384,667 2,384,667 10,705,772 (8) (7,706)	Hedged Public Equity Investment Fund 3 82,585 82,588	Real Estate Investment Fund 348,173 348,173 261,449 609,622 (14,283) (17,150)	Alternative Investment Fund 435,033 435,033 1,771,838 2,206,871	Other Fixed Income Inflation Protection Investment Investment Fund Fund Fund 134,514 134,514 1051,492 1,051,492	Inflation Protection Investment Fund 70,128 \$	į
Income: 11 Earnings 12 784 799,314 12 1098 13 708 1,098 10 10 10 10 10 10 10 10 10 10 10 10 10 1	9,457	2,384,667	3 - - - - - - - - - - - - - - - - - - -			134,514	128	Totals
Income: 11 Earnings 13,768 1,098 1,098 1,098 1,098 1,098 1,098 1,099 1,	9,457	2,384,667	3 3 82,588 82,588	348,173 348,173 261,449 609,622 (2) (44,283) (17,150)	435,033 	134,514		
Interest Earnings 33,768 1,098 on Securities Lending - 1,659 on Securities Lending - 1,659 on Recapture - 6 one 6 - 1,659 interest Earnings 34,558 802,071 dired Appreciation Depreciation 34,558 (895,289) ivestment Income 34,558 (895,289) ivestment Income Allocated (69) (1,969) interest Earlier	9,457	2,384,667 8,321,105 10,705,772 (8) (77,706)	82,585 82,585 82,588	348,173 261,449 609,622 (2) (44,283) (17,150)	435,033 1,771,838 2,206,871	134,514		4172616
on Recapture	9,457	2,384,667 8,321,105 10,705,772 (8)	82,588 82,588 82,588	348,173 261,449 609,622 (2) (44,283) (17,150)	435,033 1,771,838 2,206,871	134,514		44,323
1,000 1,00	9,457	2,384,667 8,321,105 10,705,772 (\$) (\$7,706)	82,585 82,588 (1,405)	348,173 261,449 609,622 (2) (44,283) (17,150)	435,033 1,771,838 2,206,871	134,514		1,659
Iliangle Page Pag	9,457	2,384,667 8,321,105 10,705,772 (8) (27,706)	82,588 82,588 (1,405)	348,173 261,449 609,622 (2) (44,283) (17,150)	435,033 1,771,838 2,206,871	134,514		•
al itized Appreciation	9,457	2,384,667 8,321,105 10,705,772 (8) (27,706)	82,588 82,588 (1,405)	348,173 261,449 609,622 (2) (44,283) (17,150)	435,033 1,771,838 2,206,871	134,514 1,051,492		9
like d Appreciation Depreciation - (1,697,359) westment Income 34,558 (895,288) Allocated Cost - - ees - - ith holding Tax - - ith holding Tax - - ith holding Tax - - ith ncome (Loss) \$ 34,489 \$ int Income Allocated: - - and - - - and - - - inst Funds - - - al Subdivisions - - - al Subdivisions - - - ands - - - and thent Funds - - - al Subdivisions - - - ands - - - and thent Funds - - - al Subdivisions - - - and the	9,457	(8) (27,706)	82,588 82,588 - (1,405)	261,449 609,622 (2) (44,283) (17,150)	1,771,838 2,206,871	1,051,492	70,128	4,218,604
Allocated Cost	9,457	10,705,772 (8) (27,706)	82,588	(2) (44,283) (17,150)	2,206,871		432,442	10,223,552
Allocated Cost	(244)	(8)	(1,405)	(44,283) (17,150)	(2)	1,186,006	502,570	14,442,156
(69) (1,969) (1,969) (1,969) (1,969) (1,969) (1,969) (1,976) ((244)	(8)	(1,405)	(2) (44,283) (17,150)	2			
(69) (1,969) (1,969) (1,969) (1,969) (1,969) (1,976) ((244)	(27,706)	(1,405)	(17,150)	1	(1)	(1)	(21)
(69) (1,969) (1,969) (1,969) (1,969) (1,969) (1,976) ((244)			(17,150)	(41,575)	(27,146)	(18,211)	(160,326)
(69) (1,969) (1,969) (1,969) (1,969) (1,969) (1,976) ((244)	- 0000	•		(14,341)	(8,589)	(16,034)	(56,114)
(69) (1,969) \$\begin{array}{c} (69) & (1,976) \\ (1,976) & (1,976) \\ ((244)	(000 0)						•
(69) (1,969) \$ 34,489 \$ (897,264) 	(244)	(607,1)	•	(266)				(7,475)
\$ \frac{(69)}{34,489} \\$ \frac{(1,976)}{(897,264)}\$ \$ \frac{1}{2} \\ \$ \f	(244)	(2,137)		(2,952)	(4,410)	(2,604)	(2,771)	(17,156)
\$ 34,489 \$ (897,264)		(37,060)	(1,405)	(64,653)	(60,328)	(38,340)	(37,017)	(241,092)
s - S S S S S S S S -	9,213 \$	10,668,712 \$	81,183 \$	544,969 \$	2,146,543	\$ 1,147,666 \$	\$ 465,553 \$	14,201,064
Funds :								
1 Funds			\$ - \$		•	s - s	s - s	•
1 Funds								•
1 Funds								•
34,489 (897; ands								•
nds	9,213	10,668,712	81,183	544,969	2,146,543	1,147,666	465,553	14,201,064
Allocated \$ 34,489 \$ (897)								•
ne Allocated \$ 34,489 \$ (897;								•
ne Allocated \$ 34,489 \$ (897;								•
\$ 34,489 \$ (897,								•
	9,213 \$	10,668,712 \$	8 81,183 \$	544,969 \$	2,146,543 \$	\$ 1,147,666 \$	\$ 465,553 \$	14,201,064
Total Return, 12, 24, and 36 and 60 months:								
0.66% 0.85%	0.76%	60.49%	32.95%	3.27%	25.16%	17.24%	2.99%	21.04%
1.36% 6.07%	1.39%	20.07%	7.61%	5.03%	15.57%	6.38%	1.45%	10.69%
1.62% 5.76%	1.52%	13.87%	3.77%	6.13%	13.78%	5.57%	2.09%	8.54%
60 months 1.40% 3.95%	1.32%	14.55%	4.47%	7.82%	12.31%	7.24%	5.03%	8.89%

 * 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: 58% Growth Benchmark, 29% Rates & Liquidity Benchmark, 11% Inflation Sensitive & Diversifiers Benchmark, and 2% Multi-Strategy Benchmark.

The Long-Term Policy Benchmark is comprised of 57% MSCI ACWI IMI Net, 33% BOAML 5+ Years U.S. Treasury Index, 6% Bloomberg Commodity Index, and 4% BOAML 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 Group Private iQ indices: 50% Buyout, 20% Venture Capital, and 30% Distressed.

The Non-Core Real Estate Benchmark is comprised of the following Burgiss Group Private iQ 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 a comprised of 50% HFRX Distressed Securities Index, 20% HFRX Relative Value Index, 15% Credit Suisse Leveraged Loan Index, and 15% BOAML 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 BOAML Core Investment Grade Index. The custom BOAML core index is comprised of the following weightings: 30% BOAML 5+ Years Governments, 35% BOAML 5+ Years Investment Grade Corporates, and 35% BOAML 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 Bank of America Merrill Lynch 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% 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 the total blended Burgiss Private iQ Private Equity index.

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(e) 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 Programs (AGPIPs).

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 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.