

February 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 December 31, 2020

Dear Colleagues:

Attached is the Quarterly Investment Report for the state pension fund (Fund) for the period ending December 31, 2020. 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 – 4th Quarter 2020

The Fund, comprised of the retirement plans the N.C. Department of State Treasurer manages, reported gains of 7.4% percent for the quarter. Pension fund assets were valued at \$114.9 billion at December 31, 2020, up from \$107.5 billion at the end of the 3rd quarter of 2020. These figures, and all the following performance figures, are reported net of all fees and expenses.

Fee Reductions

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 Division Lowers Assumed Rate of Return to 6.5%

The Teachers' and State Employees' Retirement System and Local Government Employees' Retirement System Boards of Trustees unanimously approved the lowering of the investment return assumption or rate of return (RoR) for the principal North Carolina Retirement Systems 50 basis points from 7.0% to 6.5% per year. In 2017, the rate was lowered from 7.25% to 7.20% and in 2018 it was further lowered to 7.0%. The Folwell Administration has lowered the RoR three times in just over four years. In comparison, the rate has been lowered only one other time in almost 60 years even though both plans have failed to achieve their assumed RoR, on average, for the last 20 years. The change will be recognized immediately for financial reporting and calculating





the funded percentage level, but for the purpose of determining employer contribution rates, the effect will be phased in over a period of five years.

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 retirement systems.

Warmest Regards,

Dale R. Folwell, CPA

State Treasurer of North Carolina

Vale T. Folull, CPA

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 December 31, 2020. 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 December 31, 2020

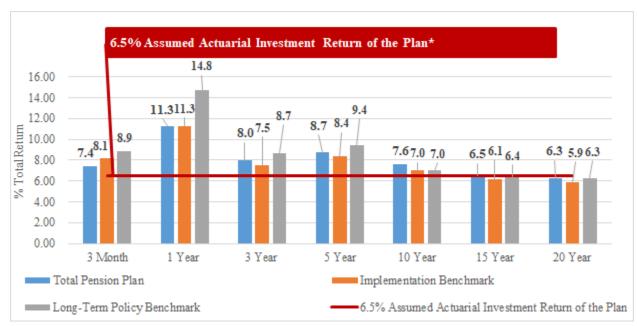
I. Investment Performance $[\S 147-69.12(a)(6)(g)]$

A. Market Environment Context

The US economy and capital markets strengthened throughout the quarter as favorable vaccine news provided hope to counter a steep spike in the pandemic and political uncertainty. The S&P 500 was up nearly 12% for the quarter, resulting in the index being up 18.4% from where it was on 12/31/2019. Investment grade corporate bond credit spreads ended the quarter 40 basis points lower than where they started, resulting in the spreads being a few basis points away from the prepandemic levels. The broad index of corporate bonds gained nearly 3.0% over the quarter. 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 4% annualized rate of increase for Q4. The unemployment rate ended the quarter at 6.7%, down from 7.8% at the start of the quarter.

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

i.Total Fund (Investment Program) Performance for Periods Ending December 31, 2020 (%; 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 Mo	1 Yr	3 Yr	5 Yr	10 Yr	15 Yr	20 Yr
Growth	58,195,253	13.89	17.83	11.24	12.25	9.99	7.33	6.39
Benchmark		13.13	14.54	9.03	10.69	8.60	6.55	5.54
Public Equity	42,484,683	16.47	22.23	12.34	13.62	10.32	7.74	6.70
Benchmark		15.59	16.17	9.63	11.77	8.97	6.81	5.61
Private Equity	6,133,119	10.06	18.86	15.00	12.54	11.70	9.20	4.88
Benchmark		8.99	12.75	10.87	9.95	10.88	10.28	8.64
Non-Core Real Estate	2,975,301	4.69	0.45	7.76	9.46	11.89	6.16	6.05
Benchmark		3.09	0.38	4.97	5.50	8.28	4.57	6.66
Opportunistic Fixed Income	6,602,150	6.53	2.85	4.04	5.24	5.85	-	-
Benchmark		6.13	7.47	2.99	5.32	2.51	-	-
Rates & Liquidity	43,419,655	0.76	7.34	5.32	4.63	4.57	5.39	5.84
Benchmark		0.61	8.50	5.96	5.13	4.89	5.34	5.78
IG Fixed Income & Cash	33,989,322	0.94	9.34	6.25	5.28	4.91	5.61	6.01
Benchmark		0.63	8.80	6.12	5.27	4.97	5.40	5.82
Pension Cash	9,430,333	0.10	1.06	1.73	1.46	-	-	-
Benchmark		(0.01)	0.48	1.47	1.11	0.58	-	-
Inflation Sensitive & Diversifiers	11,151,701	3.18	(1.86)	3.46	5.17	3.60	2.61	3.90
Benchmark		2.55	0.00	2.53	4.04	3.56	2.04	3.83
Inflation Sensitive	5,558,369	2.68	(3.50)	1.73	3.95	0.33	0.99	2.88
Benchmark		1.77	0.69	1.63	2.84	(0.60)	2.97	3.27
Core Real Estate	5,593,332	3.67	(0.13)	5.32	6.54	8.40	5.49	6.08
Benchmark		3.45	(0.92)	3.55	5.44	8.65	5.58	6.53
Multi-Strategy	2,211,553	6.22	(4.13)	1.58	4.76	6.91	5.36	-
Benchmark		6.03	0.16	2.28	4.87	5.92	6.09	-
Total Pension Plan	114,978,162	7.40	11.30	8.00	8.73	7.58	6.53	6.28
Implementation Benchmark		8.14	11.27	7.53	8.37	7.02	6.12	5.89
Long-Term Policy Benchmark		8.85	14.76	8.68	9.41	7.00	6.40	6.30
Assumed Actuarial Investment Return ¹		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, Part B.

B. Cash Management Programs

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

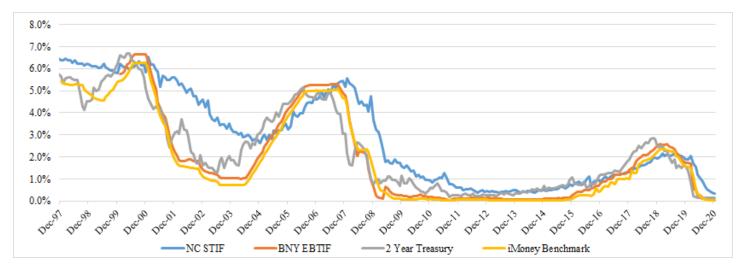
The STIF is responsible for managing the operating funds of the State. Investors include the State's General Fund, Highway Trust Fund, certain Retirement Systems funds, and other investors. The STIF is also where any bank balances are held for the State; please see part (ii) below for information about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

As of December 31, 2020, the STIF had the following characteristics:

Total Assets	Duration	3-Month Return	Benchmark 3- Month Return	1-Month Annualized Cash Return	Fees
\$36.0 billion	0.75 years	0.10%	-0.01%	0.32%	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 December 31, 2020, was \$175.4 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 December 31, 2020, the BIF had the following characteristics:

Total Assets	Duration	3-Month Return	Benchmark 3- Month Return	Crediting Rate	Fees
\$1.7 billion	6.1 years	0.66%	0.67%	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 December 31, 2020, the EIF had the following characteristics:

Total Assets	Duration	3-Month Return	Benchmark 3- Month Return	Crediting Rate	Fees
\$406 million	N/A	14.75%	14.68%	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 December 31, 2020, the Escheat Fund had \$921 million in total invested assets. Of that total, \$718 million was in STIF and \$143 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 December 31, 2020, the Escheat Fund held \$59.8 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	59,798	2.52	6.59	2.08	3.88	6.45
Benchmark		10.31	17.34	13.74	11.96	12.66

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	41,955,794	60,000,000	16,344,464	2.30	1.05	4,398,059	0.10

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. § 147-69.2 [§ 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) ¹	At least 20%	Bank Balances	Cash
	At least 20%	External Fixed Income	Investment Grade Fixed Income
		Long-Term Fixed Income	Investment Grade Fixed income
b(6c)	No more than 7.5%	Other Fixed Income	Opportunistic Fixed Income
h(7)	No more than 10%	Real Estate	Core Real Estate
b(7)	No more man 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
b (0)	No more than 8.75%	Alternatives	Private Equity
b(9)	No more than 8.73%	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	\$40,886								\$1,599	\$42,485
ions	Private Equity					\$6,133					6,133
Millions)	Non-Core Real Estate						\$2,975				2,975
•	Opportunistic Fixed Income								\$6,602		6,602
atio	IG Fixed Income		\$30,848		\$3,141						33,989
Classification	Cash			\$9,430							9,430
Jass	Inflation Sensitive							\$5,558			5,558
IPS C	Core Real Estate						5,593				5,593
П	Multi-Strategy					2,212					2,212
	Total	\$40,886	\$30,848	\$9,430	\$3,141	\$8,345	\$8,569	\$5,558	\$6,602	\$1,599	\$114,978

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

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%	37.8%	✓
N.C.G.S. § 147-69.2(b)(8) for public equity	No more than 65%	37.0%	✓
N.C.G.S. § 147-69.2(b)(8)(b.) for public equity limited liability investment vehicles	No more than 8.5%	1.4%	✓
N.C.G.S. § 147-69.2(b)(6c) for other fixed income	No more than 7.5%	5.7%	✓
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%	7.3%	✓
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%	26.7%	✓

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 occurred during the fiscal year ending December 31, 2020.

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 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

Uwharrie Bank

Total*

DEPARTMENT OF STATE TREASURER BANK BALANCES

AS OF December 31, 2020						
(dollars in thousands)						
Summary of Bank						
Balance as of 09/30/2020		395,820				
Total Receipts		48,731,856				
Total Payments		48,952,304				
Balance as of 12/31/2020	\$	175,372				
Bank Balances as of Dece	_					
Bank	Bank Balance					
Wells Fargo	\$	48,930				
Bank of America	\$	35,560				
SunTrust	\$	728				
PNC	\$	228				
First Citizens	\$	3,880				
BB&T	\$	3,465				
Bank of Tennessee	\$	3				
Bank OZK	\$	2,000				
First Horizon Bank	\$	7,606				
Fidelity Bank	\$	7,723				
First Bank	\$	14,425				
First Federal Savings Bank	\$	1,000				
First National Bank	\$	10,110				
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	\$	2,005				
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				

2,000

175,372

^{*}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 **DECEMBER 31, 2020**

(dollars in thousands)

	Short-term Investment Fund	*Pension Trust Funds Investment Program Subtotal		Total
Net Assets:				
Investment Securities:				
Cash Equivalents \$	4,638,633	\$ -	\$ -	\$ 4,638,633
Certificates of Deposit	-	-	-	-
Repurchase Agreements	3,855,000	-	-	3,855,000
U.S. Treasury Bills/ Notes/ Bonds	12,089,477	7,543,778	-	19,633,255
U.S. Government Agency Notes/ Bonds	15,189,800	809,815	-	15,999,615
GNMA Certificates	-	10,249,713	-	10,249,713
Corporate Obligations	-	12,650,329	-	12,650,329
Other Investments	-	1,504,243	-	1,504,243
Investments in Equity Securities	-	42,064,932	-	42,064,932
Investments in Equity Trusts & Limited Liability Entities**	_	419,751	-	419,751
Investments in Real Estate Trust Funds & Partnerships	-	8,568,633	-	8,568,633
Investments in Alternative Partnerships	-	8,344,672	-	8,344,672
Investments in Credit Partnerships	-	6,602,150	-	6,602,150
Investments in Inflation Partnerships and Other Invest.	-	4,055,125	-	4,055,125
Total Investment Securities \$	35,772,910			\$ 138,586,051
Cash in Bank	175,372	-	_	175,372
Deposits in Short-term Investment Fund	-	11,960,912	(11,960,912)	-
Other Assets, Net of Liabilities	57,354	204,108	-	261,462
Total Net Assets \$	36,005,636	\$ 114,978,161	\$ (11,960,912)	\$ 139,022,885
Participant Equity:				
General Fund \$	7,432,927	\$ -	\$ -	\$ 7,432,927
Other Funds Which Earn Interest				
for General Fund	2,790,429	-	-	2,790,429
Highway Fund	691,287	-	-	691,287
Highway Trust Fund	439,572	-	-	439,572
University Trust Funds	3,090,691	-	-	3,090,691
Pension Trust Funds	1,134,699	114,978,161	-	116,112,860
Other Independent Trust Funds	7,563,650	-	-	7,563,650
Local Political Subdivisions	842,331	-	-	842,331
Licensing Boards	59,138	-	-	59,138
Other Investment Funds	11,960,912	-	(11,960,912)	_
Total Participant Equity \$	36,005,636	\$ 114,978,161	\$ (11,960,912)	\$ 139,022,885
Percent of Total	25.90%	82.70%	-8.60%	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

	DEPARTMENT OF STATE TREASURER COMBINING STATEMENT OF NET POSITION - PENSION TRUST FUNDS INVESTMENT PROGRAM DECEMBER 31, 2020 (Addisc in thousands)	DEI	DEPARTMENT OF STATE TREASURER F NET POSITION - PENSION TRUST FUN DECEMBER 31, 2020 (Authors in thousands)	JENT OF STATE TREASU SITION - PENSION TRUST DECEMBER 31, 2020	RER FUNDS INVESTA	MENT PROGRA!	M			Unaudited
	Cash Investment	Long-term Investment	External Fixed Inc. Investment	Long-Only Public Equity Investment	Hedged Public Equity Investment	Real Estate Investment	Alternatives Investment	Other Fixed Income Inflation Protection Investment Investment	Inflation Protection Investment	F 1
Net Assets:	rung	rana	rung	rung	Lang	rung	rung	rung	rang	10(48)
Investment Securities:										
Cash and Cash Equivalents								•		•
U.S. Treasury Bills/ Notes/ Bonds		7,324,998							218,780	7,543,778
U.S. Government Agency Notes/Bonds		809,815								809,815
GNMA Certificates		10,249,713								10,249,713
Corporate Obligations		11,847,639							802,690	12,650,329
Other Investments	1,030,431								473,812	1,504,243
Investments in Equity Securities				42,064,932						42,064,932
Investments in Equity Trusts & Limited Liability Entities					419,751					419,751
Investments in Real Estate Trust Funds & Partnerships						8,568,633				8,568,633
Investments in Alternative Partnerships							8,344,672			8,344,672
Investments in Credit Partnerships								6,602,150		6,602,150
Investments in Inflation Partnerships and Other Invest.									4,055,125	4,055,125
Total Investment Securities	\$ 1,030,431	30,232,165		42,064,932	419,751	8,568,633	8,344,672	6,602,150	5,550,407 \$	102,813,141
Cash in Bank	•	•								
Deposits in Short-term Investment Fund	8,399,902	419,720	3,141,290							11,960,912
Other Assets, Net of Liabilities	•	196,146							7,962	204,108
Total Net Assets	\$ 9,430,333 \$	30,848,031	3,141,290 \$	\$ 42,064,932 \$	419,751 \$	8,568,633 \$	8,344,672	\$ 6,602,150 \$	5,558,369 \$	114,978,161
Participant Equity: Pension Trust Funds	\$ 9,430,333	30,848,031	3.141.290	42.064.932	419.751	8.568.633	8.344.672	6.602.150	5.558.369	114,978,161
Total Participant Equity	\$ 9,430,333 \$	30,848,031	3,141,290		419,751 \$	8,568,633 \$	8,344,672 \$	\$ 6,602,150 \$	5,558,369 \$	114,978,161
Percent of Total	8.20%	26.83%	2.73%	36.59%	0.37%	7.45%	7.26%	5.74%	4.83%	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 DECEMBER 31, 2020

in thousands

	•	ii diododido				
	_	Bond Index Fund	Equity Index Fund	Escheats Alternative Investments	General Obligation Bond Proceeds	Totals
STATEMENT OF NET POSITION						
Net Assets:						
Deposits in Equity Index Fund	\$	-	405,975	-	-	405,975
Deposits in Bond Index Fund		1,657,802	-	-	-	1,657,802
Deposits in Alternative Investment Fund		-	-	59,798	-	59,798
Other Assets	_	_	_		634,712	634,712
Total Net Assets	\$_	1,657,802 \$	405,975 \$	59,798	634,712	2,758,287
STATEMENT OF OPERATIONS						
(for the fiscal year ended December 31, 2020)						
Revenues:						
Investment Income:						
Investment Earnings	\$	18,870	94,922	(2,917)	213	111,088
Other Income		-	_	-	-	-
Subtotal		18,870	94,922	(2,917)	213	111,088
Net Unrealized Appreciation/Depreciation		2,142	3,528	7,583		13,253
Total Investment Income		21,012	98,450	4,666	213	124,341
Expenditures:						
Management Fees		(183)	(66)	(183)	(90)	(522)
Other Cost		_	_	1	-	1
Total Expenditures		(183)	(66)	(182)	(90)	(521)
Net Investment Income (Loss)	\$	20,829 \$	98,384 \$	4,484	123	123,820
Participants:		Bond Index Fund	Equity Index Fund	Escheats Alternatives		
Albemarle and Tideland MHRHIT	_	X	X			
Albemarle RH OPEB		X	x			

		-	
	Bond	Equity	Escheats
man and a second	Index	Index	Alternatives
Participants:	Fund	Fund	
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	
City of Asheville	X	X	
City of Concord	X	X	
City of Greensboro	X	X	
City of Greenville	X	X	
City of Sanford	X	X	
Clean Water	X		
Columbus Regional		X	
Community College Systems	X		
Conservation Easement Endowment Fund	X		
Conservation EE II		X	
Conservation Grant Endowment	X	X	
Comelius LEOSSA			
Comelius OPEB			
County of Dare	X	X	
County of Guilford	X	X	
County of Harnett OPEB	X	X	
Cumberland OPEB Trust			
Disability Income	X		
DMS Nutrient Offset	X		
Drinking Water	X		
EEP Wetlands Trust	X		
ElectriCities OPEB		X	
Employee Benefit Trust	X		
Forsyth County	X	X	
Greensboro LEOSSA	X	X	
Greenville Utilities Commission OPEB	X	X	
Guilford County LEOSSA		X	
Hamett LEOSSA Trust	X	X	
Holly Springs OPEB			
Isothermal Planning & Development OPEB	X	X	
Kill Devil Hills OPEB		X	
Margaret Pardee Hospital	X	X	
Martin County OPEB	X	X	
Mecklenburg County	X	X	
NC Student Loan Fund			
New Hanover Hospital			
Orange County OPEB	X	X	
Partners Behavioral			
Public School 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	
UNC SEAA Student Loan			
Union County	X	X	
Watauga Medical Center	X	X	
Wildlife Endowment	X	X	

Unaudited

DEPARTMENT OF STATE TREASURER COMBINED STATEMENT OF OPERATIONS FOR THE QUARTER ENDED DECEMBER 31, 2020

(dollars in thousands)

	Short-term Investment Fund		nsion Trust Funds vestment Program Subtotal*	F	Intrafund Liminations	Total
Revenues:	_		_			_
Investment Income:						
Investment Earnings	\$ 96,609	\$	2,106,908	\$	- \$	2,203,517
Intra-Pool Interest Earnings	-		34,471		(34,471)	-
Income from Securities Lending	1,543		1,117			2,660
Commission Recapture	-		-			-
Other Income		_	6			6
Subtotal	98,152		2,142,502		(34,471)	2,206,183
Net Unrealized Appreciation/Depreciation		_	10,273,709			10,273,709
Total Investment Income	98,152		12,416,211		(34,471)	12,479,892
Expenditures:						
Treasurer's Allocated Cost	(1,921)		(15)		-	(1,936)
Management Fees	-		(118,942)		-	(118,942)
Placement Fees**	-		-		-	-
Incentive Fees	-		(54,456)		-	(54,456)
Dividend Withholding Tax	-		(5,547)		-	(5,547)
Other Cost	(3,606)		(12,432)			(16,038)
Total Expenditures	(5,527)		(191,392)	<u> </u>	-	(196,919)
Net Investment Income (Loss)	\$ 92,625 \$	\$	12,224,819	\$	(34,471) \$	12,282,973
Total Investment Income Allocated:						
General Fund	\$ 14,403	\$	-	\$	- \$	14,403
Highway Fund	1,267		-		-	1,267
Highway Trust Fund	1,147		-		-	1,147
University Trust Funds	10,682		-		-	10,682
Pension Trust Funds	4,500		12,224,819		-	12,229,319
Other Independent Trust Funds	23,337		-		-	23,337
Local Political Subdivisions	2,648		-		-	2,648
Licensing Boards	170		-		-	170
Other Investment Funds	34,471		-		(34,471)	-
Total Investment Income Allocated	\$ 92,625 \$	\$	12,224,819	\$	(34,471) \$	12,282,973

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

0.53%

^{*}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.

Province		COMBININ	COMBINING STATEMENT O	DEPARTME NT OF OPERATIC FOR THE QUART	DEPARTMENT OF STATE TREASURER F OPERATIONS - PENSION TRUST FUN: THE QUARTER ENDED DECEMBER 31, (dollars in thousands)	DEPARTMENT OF STATE TREASURER F OPERATIONS - PENSION TRUST FUNDS INVESTMENT PROGRAM THE QUARTER ENDED DECEMBER 31, 2020 (dollars in thousands)	NVESTMENT 0	PROGRAM			Unaudited
Interest Enumings 5 656 538,655		Cash Investment Fund	Long-tern 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 1 Investment Fund	Inflation Protection Investment Fund	Totals
Interest Entimigs 5 666 538,653 . 904,644 . 129,649 586,417 79,877 Interest Entimigs 5 6.02 1.84 7.003 . 1.84	Revenues:										
Interest Exemings 26,420 8.18 7.203 9.04,604 1.10 1	ıgs		538,653	•	904,604	٠	239,649	368,417	79,877	(24,928) \$	2,106,908
on Securities Landing on Recognite on Reco	Intra-Pool Interest Earnings	26,420	848	7,203	. •			, •			34,471
on Recapture 6 in the control of the	Income from Securities Lending	•	1,117	•	•	•		•	•		1,117
alter between the control of the con	Commission Recapture		•	•	•						
a discay depreciation Detectation	Other Income	9									9
strict bits of the control o	Subtotal	27,062	540,618	7,203	904,604	•	239,649	368,417	778,67	(24,928)	2,142,502
Allocated Cost	Net Unrealized Appreciation/Depreciation		(15,659)	•	8,164,815	24,898	128,554	981,055	641,277	348,769	10,273,709
Allocated Cost Trees ess ess ess ess ess ess ess	Total Investment Income	27,062	524,959	7,203	9,069,419	24,898	368,203	1,349,472	721,154	323,841	12,416,211
Columbia	Expenditures:										
Columbia	Treasurer's Allocated Cost	•	(5)	•	(9)		(1)	(1)	(1)	(1)	(15)
Column C	Management Fees	•			(10,984)	(1,405)	(36,462)	(35,122)	(23,299)	(11,670)	(118,942)
Column C	Incentive Fees	•	•	•	•	•	(16,395)	(13,042)	(6,847)	(18,172)	(54,456)
(41)	Placement Fees*	•	•								
(41) (1,389) (141) (1,420) (1,427) (4,447) (4,544) (1,290) 5 21,021 \$ 23,493 \$ 313,731 \$ 1,296,763 \$ 689,757 \$ 2 5 27,021 \$ 23,493 \$ 313,731 \$ 1,296,763 \$ 689,757 \$ 2 5 \$ 27,021 \$ 23,493 \$ 313,731 \$ 1,296,763 \$ 689,757 \$ 2 27,021 \$ 22,236 \$ 7,062 9,051,643 \$ 23,493 \$ 313,731 \$ 1,296,763 \$ 689,757 \$ 2 1 65% 1 10,69% 1 1,79% 2 2,23% 2 3,493 \$ 313,731 \$ 1,296,763 \$ 689,757 \$ 2 2 1,7021 \$ 22,23% 2 3,493 3 113,731 \$ 1,296,763 \$ 689,757 \$ 2 2 1,7021 \$ 22,23% 2 3,493 3 113,731 \$ 1,296,763 \$ 689,757 \$ 2 2 1,7021 \$ 21,704% 2 3,493 3 113,731 \$ 1,296,763 \$ 689,757 \$ 2 2 2,7021 \$ 21,706 2 0,051,643 3 13,746 3 13,746 <td< th=""><td>Dividend Withholding Tax</td><td>•</td><td>•</td><td></td><td>(5,360)</td><td></td><td>(187)</td><td></td><td></td><td></td><td>(5,547)</td></td<>	Dividend Withholding Tax	•	•		(5,360)		(187)				(5,547)
(41)	Other Cost	(41)	(1,389)	(141)	(1,426)		(1,427)	(4,544)	(1,250)	(2,214)	(12,432)
\$ 27,021 \$ 123,565 \$ 7,062 \$ 9,051,643 \$ 23,493 \$ 313,731 \$ 1,296,763 \$ 689,757 \$ \$ S S	Total Expenditures	(41)	(1,394)	(141)	(17,776)	(1,405)	(54,472)	(52,709)	(31,397)	(32,057)	(191,392)
5 S			523,565	\$ 7,062	\$ 9,051,643	\$ 23,493 \$	\$ 313,731 \$	1,296,763			12,224,819
S	Total Investment Janama Allanated.										
27,021 523,565 7,062 9,051,643 23,493 313,731 1,296,763 689,757 27,021 523,565 7,062 9,051,643 23,493 313,731 1,296,763 689,757 5 27,021 523,565 5 7,062 9,051,643 5 313,731 5 1,296,763 689,757 5 1,06% 10,099% 1,179% 22,239% -5,829% 0,069% 12,019% 2,855% -3.5 1,65% 10,71% 1,619% 25,049% 3,139% 6,289% 11,139% 4,049% 1,7 1,73% 6,739% 1,619% 12,349% 0,039% 6,28% 11,139% 5,249% 3,29% 0,039% 6,28% 11,139% 5,249% 3,249% 3,249% 3,249% 3,249% 3,249% 3,249% 3,349% 3,249% 3,549% 3,549% 3,549% 3,549% 3,549% 3,549% 3,549% 3,549% 3,549% 3,549% 3,549% 3,549% 3,549% 3,549%				٠	•	٠			•		
27,021 523,565 7,062 9,051,643 23,493 313,731 1,296,763 689,757 27,021 \$ 223,565 \$ 7,062 \$ 9,051,643 \$ 23,493 \$ 313,731 \$ 1,296,763 689,757 1,06% 10,09% 1,17% 22,23% 23,493 \$ 313,731 \$ 1,296,763 \$ 689,757 1,65% 10,71% 1,61% 22,23% -5,82% 0,06% 12,01% 2,889,757 \$ 1,73% 6,73% 1,61% 25,04% 3,13% 10,96% 11,15% 4,04% 1,7 1,46% 5,70% 1,35% 1,35% 1,35% 5,24% 3,9	7										
27,021 523,565 7,062 9,051,643 23,493 313,731 1,296,763 689,757 3 27,021 \$ 523,565 \$ 7,062 \$ 9,051,643 \$ 23,493 \$ 313,731 \$ 1,296,763 \$ 689,757 1,06% 10,09% 1,17% 22,23% 23,493 \$ 313,731 \$ 1,296,763 \$ 689,757 \$ 3.5 1,65% 10,71% 1,61% 22,23% -5,82% 0,06% 12,01% 2,885% -3.5 1,73% 6,73% 1,61% 25,04% 3,13% 6,28% 11,15% 4,04% 1,7 1,46% 5,70% 1,35% 1,35% 1,05% 5,24% 3,9 2,70% 7,79% 1,05% 5,24% 3,9	Highway Trust Fund										
27,021 523,565 7,062 9,051,643 23,493 313,731 1,296,763 689,757 1 2,021,643 2,493 23,493 313,731 313,731 689,757 689,757 313,731 689,757 313,731 313,732 313,732 313,732 313,732 313,732 313,732 313,732 313,732 311,113,60 311,113,60 311,1	University Trust Funds										
1.06% 10.09% 1.17% 22.23% 5.82% 0.03% 12.01% 2.85% 3.13% 3.11113% 3.11113% 3.11113% 3.11113% </th <td>Pension Trust Funds</td> <td>27,021</td> <td>523,565</td> <td>7,062</td> <td>9,051,643</td> <td>23,493</td> <td>313,731</td> <td>1,296,763</td> <td>757,689</td> <td>291,784</td> <td>12,224,819</td>	Pension Trust Funds	27,021	523,565	7,062	9,051,643	23,493	313,731	1,296,763	757,689	291,784	12,224,819
S 27,021 S 523,565 S 7,062 S 9,051,643 S 23,493 S 313,731 S 1,296,763 S 689,757 S 1,06% 10,09% 1,117% 22,239% -5,82% 0,066% 12,019% 2,85% -3. 1,63% 10,71% 1,61% 25,04% 3,13% 5,139% 10,96% 10,15% 4,04% 1,7 1,73% 6,73% 1,61% 12,34% 0,039% 6,28% 11,15% 4,04% 1,7 1,46% 5,70% 1,35% 13,62% 2,70% 7,79% 10,35% 5,24% 3,5	Other Independent Trust Funds	•	•	•	•			•			
\$ 27,021 \$ 523,565 \$ 7,062 \$ 9,051,643 \$ 23,493 \$ 313,731 \$ 1,296,763 \$ 689,757 \$ 1.06% 10.09% 1.17% 22.23% -5.82% 0.06% 12.01% 2.85% -3. 1.63% 10.71% 1.61% 25.04% 3.13% 5.13% 10.96% 3.23% -0. 1.73% 6.73% 1.61% 12.34% 0.03% 6.28% 11.15% 4.04% 1.7 1.46% 5.70% 1.35% 13.62% 2.70% 7.79% 10.35% 5.24% 3.5	Local Political Subdivisions	•	•	•	•			•			•
5 27,021 S 523,565 S 7,062 S 9,051,643 S 23,493 S 313,731 S 1,296,763 S 689,757 S 1.06% 10.09% 1.17% 22.23% -5.82% 0.06% 12.01% 2.85% -3. 1.63% 10.71% 1.61% 25.04% 3.13% 5.13% 10.96% 3.23% -0. 1.73% 6.73% 1.61% 12.34% 0.03% 6.28% 11.15% 4.04% 1.7 1.46% 5.70% 1.35% 13.62% 2.70% 7.79% 7.79% 10.35% 5.24% 3.5	Licensing Boards	•	•	•	•			•			
\$ 27,021 \$ 523,565 \$ 7,062 \$ 9,051,643 \$ 23,493 \$ 313,731 \$ 1,296,763 \$ 689,757 \$ 1.06% 10.09% 1.17% 22.23% -5.82% 0.06% 12.01% 2.85% -3. 1.65% 10.71% 1.61% 25.04% 3.13% 5.13% 10.96% 3.23% -0. 1.73% 6.73% 1.61% 12.34% 0.03% 6.28% 11.15% 4.04% 1.7 1.46% 5.70% 1.35% 13.62% 2.70% 7.79% 10.35% 5.24% 3.5	Other Investment Funds		•	•		•		•			
1.06% 10.09% 1.17% 22.23% -5.82% 0.06% 12.01% 2.85% 1.65% 10.71% 1.61% 25.04% 3.13% 5.13% 10.96% 3.23% 1.73% 6.73% 1.61% 25.04% 0.03% 6.28% 11.15% 4.04% 1.46% 5.70% 1.35% 13.62% 2.70% 7.79% 10.35% 5.24%	Total Investment Income Allocated \$	27,021 \$			\$ 9,051,643	\$ 23,493 \$	\$ 313,731 \$	1,296,763			12,224,819
1.06% 10.09% 1.17% 22.23% -5.82% 0.06% 12.01% 2.85% 1.65% 10.71% 1.61% 25.04% 3.13% 5.13% 10.96% 3.23% 1.73% 6.73% 1.61% 12.34% 0.03% 6.28% 11.15% 4.04% 1.46% 5.70% 1.35% 13.62% 2.70% 7.79% 10.35% 5.24%	Total Return. 12, 24, and 36 and 60 months:										
1.65% 10.71% 1.61% 25.04% 3.13% 5.13% 10.96% 3.23% 1.73% 6.73% 1.61% 12.34% 0.03% 6.28% 11.15% 4.04% 1.46% 5.70% 1.35% 13.62% 2.70% 7.79% 10.35% 5.24%	12 months	1.06%	10.09%	1.17%	22.23%	-5.82%	%90.0	12.01%	2.85%	-3.50%	11.30%
1.73% 6.73% 1.61% 12.34% 0.03% 6.28% 11.15% 4.04% 1.46% 5.70% 1.35% 13.62% 2.70% 7.79% 10.35% 5.24%	24 months	1.65%	10.71%	1.61%	25.04%	3.13%	5.13%	10.96%	3.23%	-0.74%	13.08%
1.46% 5.70% 1.35% 13.62% 2.70% 7.79% 10.35% 5.24%	36 months	1.73%	6.73%	1.61%	12.34%	0.03%	6.28%	11.15%	4.04%	1.73%	8.00%
	60 months	1.46%	5.70%	1.35%	13.62%	2.70%	7.79%	10.35%	5.24%	3.95%	8.74%

*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.