



*Dale R. Folwell, CPA*

February 8, 2019

Delivered by: Electronic and U.S. Mail

Delivered to: Governor Roy Cooper  
North Carolina General Assembly  
Joint Legislative Commission on Governmental Operations  
North Carolina Council of State  
Charles Perusse – Office of State Budget Management, State Budget Director  
Debbie Young – Office of State Budget Management, Executive Assistant to the State Budget Director  
Lisa Hollowell – North Carolina General Assembly - Fiscal Research

RE: Quarterly Investment Report for the Period Ended December 31, 2018

Dear Colleagues:

Attached is the Quarterly Investment Report for the state pension fund (Fund) for the period ending December 31, 2018. We continue to be intently focused on reducing cost 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 fourth quarter that you may find helpful.

Specifically:

- Investment Performance – 4th Quarter 2018

The Fund, comprised of the retirement plans the N.C. Department of State Treasurer manages, reported losses of 4.7 percent for the quarter amid volatility in the stock market. Pension fund assets were valued at \$94.2 billion, down from \$99.5 billion at the end of the 3rd quarter of 2018. These figures, and all of the following performance figures, are reported net of all fees and expenses.

- Fee Reductions

Our investment management team continued to reduce costs significantly to provide more value to members of the pension plan. Fees paid to Wall Street investment managers have been cut by \$92 million since January 2017 for a projected savings of approximately \$368 million over four years. We have far exceeded my pledge of cutting \$100 million in management fees over four years.

- Retirement Systems Launches Online Application

The North Carolina Retirement Systems announced the launch of an online retirement application, a powerful new option for retirement available to members of the Teachers' and State Employees' (TSERS) and Local Governmental Employees' (LGERS) Retirement Systems. The online application creates efficiencies by allowing members of TSERS and LGERS who are ready to retire to log in to ORBIT, the web portal for participating public workers, to get a customized estimate of their benefits and start their retirement application. The application launched in November 2018. The following month, December 2018, more than 20 percent of all retirement applications processed were online applications. The Retirement Systems has received positive feedback from members and employers alike and anticipates that usage percentage to increase going forward.



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,

A handwritten signature in cursive script that reads "Dale R. Folwell, CPA".

Dale R. Folwell, CPA  
State Treasurer of North Carolina

## Outline

This quarterly report provides the information required under North Carolina General Statute (N.C.G.S.) § 147-69.12 and provides information on the overall performance of the State Treasurer's investment programs. The information in this report is as of December 31, 2018. 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, 2018

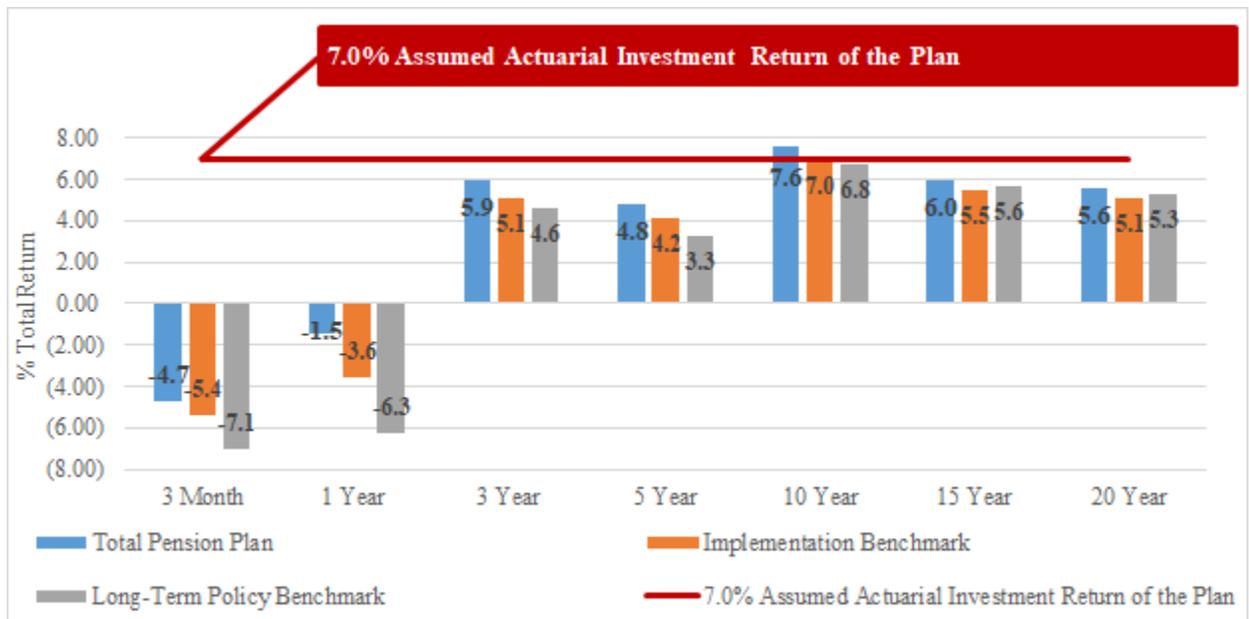
## I. Investment Performance [*§ 147-69.12(a)(6)(g)*]

### A. Market Environment Context

For the quarter ended December, 31 2018, Real Gross Domestic Product (GDP) has not been released as of the date of this document due to the government shutdown. The consensus estimate of real GDP for Q4 2018 is at a 2.6% annualized rate. The unemployment rate rose to 3.9%. Consumer price inflation decreased to 1.9% year over year, while core consumer price inflation (i.e., removing the volatile food and energy sectors), remained at 2.2% year over year. Global equity markets were down nearly 13% for the quarter. Yields on US Treasury bonds fell by nearly 40 basis points over the quarter, leading to positive price returns, as the flight to quality from stocks more than offset the impact of another 25 basis point rate increase from the US Federal Reserve (“Fed”). The Federal Reserve’s short-term interest rate target ended the quarter at a range of 2.25 to 2.50% in December. Corporate bonds experienced slightly negative returns for the quarter as investors became more averse to credit risk, offsetting any price increases that were associated with the fall in U.S. Treasury yields.

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

#### i.Total Fund (Investment Program) Performance for Periods Ending December 31, 2018 (%; 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. **This 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
<b>Growth</b>	<b>48,651,350</b>	<b>(9.41)</b>	<b>(3.89)</b>	<b>7.56</b>	<b>5.71</b>	<b>9.60</b>	<b>6.32</b>	<b>5.31</b>
<i>Benchmark</i>		<i>(9.73)</i>	<i>(6.22)</i>	<i>6.32</i>	<i>4.47</i>	<i>8.72</i>	<i>5.71</i>	<i>4.43</i>
Public Equity	34,329,452	(13.27)	(9.32)	6.59	4.39	10.08	6.10	5.14
<i>Benchmark</i>		<i>(13.16)</i>	<i>(10.05)</i>	<i>5.99</i>	<i>3.91</i>	<i>9.24</i>	<i>5.47</i>	<i>4.19</i>
Private Equity	5,428,885	3.56	18.32	11.99	11.83	8.46	8.95	6.88
<i>Benchmark</i>		<i>2.83</i>	<i>13.18</i>	<i>10.09</i>	<i>9.90</i>	<i>9.40</i>	<i>11.97</i>	<i>11.79</i>
Non-Core Real Estate	3,226,565	1.80	13.32	12.48	14.31	4.26	7.32	7.11
<i>Benchmark</i>		<i>1.22</i>	<i>8.83</i>	<i>7.15</i>	<i>8.11</i>	<i>2.05</i>	<i>7.31</i>	<i>7.41</i>
Opportunistic Fixed Income	5,666,449	(1.04)	5.69	6.61	4.06	7.44	-	-
<i>Benchmark</i>		<i>(3.96)</i>	<i>(5.21)</i>	<i>4.00</i>	<i>0.96</i>	<i>3.67</i>	<i>-</i>	<i>-</i>
<b>Rates &amp; Liquidity</b>	<b>31,957,319</b>	<b>1.38</b>	<b>(0.31)</b>	<b>2.28</b>	<b>3.06</b>	<b>4.63</b>	<b>4.93</b>	<b>5.44</b>
<i>Benchmark</i>		<i>1.64</i>	<i>(0.74)</i>	<i>2.33</i>	<i>3.37</i>	<i>4.40</i>	<i>4.72</i>	<i>5.23</i>
IG Fixed Income & Cash	28,014,349	1.48	(0.57)	2.34	3.13	4.66	4.95	5.46
<i>Benchmark</i>		<i>1.68</i>	<i>(0.83)</i>	<i>2.37</i>	<i>3.42</i>	<i>4.42</i>	<i>4.74</i>	<i>5.25</i>
Pension Cash	3,942,970	0.59	1.88	1.32	1.00	-	-	-
<i>Benchmark</i>		<i>0.53</i>	<i>1.81</i>	<i>0.99</i>	<i>0.61</i>	<i>-</i>	<i>-</i>	<i>-</i>
<b>Inflation Sensitive &amp; Diversifiers</b>	<b>11,737,199</b>	<b>0.88</b>	<b>6.32</b>	<b>7.29</b>	<b>4.68</b>	<b>1.88</b>	<b>4.08</b>	<b>4.80</b>
<i>Benchmark</i>		<i>0.29</i>	<i>2.85</i>	<i>5.16</i>	<i>3.96</i>	<i>0.88</i>	<i>3.58</i>	<i>4.80</i>
Inflation Sensitive	6,311,238	0.67	6.88	7.20	2.17	(1.52)	3.05	3.49
<i>Benchmark</i>		<i>0.30</i>	<i>2.16</i>	<i>3.82</i>	<i>0.07</i>	<i>(0.79)</i>	<i>4.21</i>	<i>4.01</i>
Core Real Estate	5,425,961	1.13	5.67	7.48	8.22	6.62	6.57	6.70
<i>Benchmark</i>		<i>0.26</i>	<i>3.65</i>	<i>6.75</i>	<i>8.73</i>	<i>5.94</i>	<i>7.02</i>	<i>7.40</i>
<b>Multi-Strategy</b>	<b>1,880,026</b>	<b>(7.88)</b>	<b>(4.79)</b>	<b>4.66</b>	<b>3.49</b>	<b>8.26</b>	<b>5.33</b>	<b>-</b>
<i>Benchmark</i>		<i>(8.77)</i>	<i>(6.51)</i>	<i>3.48</i>	<i>2.39</i>	<i>7.51</i>	<i>6.69</i>	<i>-</i>
<b>Total Pension Plan</b>	<b>94,225,893</b>	<b>(4.71)</b>	<b>(1.47)</b>	<b>5.93</b>	<b>4.83</b>	<b>7.63</b>	<b>6.00</b>	<b>5.62</b>
<i>Implementation Benchmark</i>		<i>(5.38)</i>	<i>(3.56)</i>	<i>5.06</i>	<i>4.15</i>	<i>6.97</i>	<i>5.48</i>	<i>5.09</i>
<i>Long-Term Policy Benchmark</i>		<i>(7.06)</i>	<i>(6.26)</i>	<i>4.62</i>	<i>3.29</i>	<i>6.76</i>	<i>5.64</i>	<i>5.32</i>
<i>Assumed Actuarial Investment Return<sup>1</sup></i>		<i>1.71</i>	<i>7.00</i>	<i>7.00</i>	<i>7.00</i>	<i>7.00</i>	<i>7.00</i>	<i>7.00</i>

<sup>1</sup> The Assumed Actuarial Investment Return was decreased from 7.2% to 7.0% in April 2018.

For definitions of the Benchmarks, please see Appendix 2, Part B.

## B. Cash Management Programs

### i. STIF [§ 147-69.12(a)(4)]

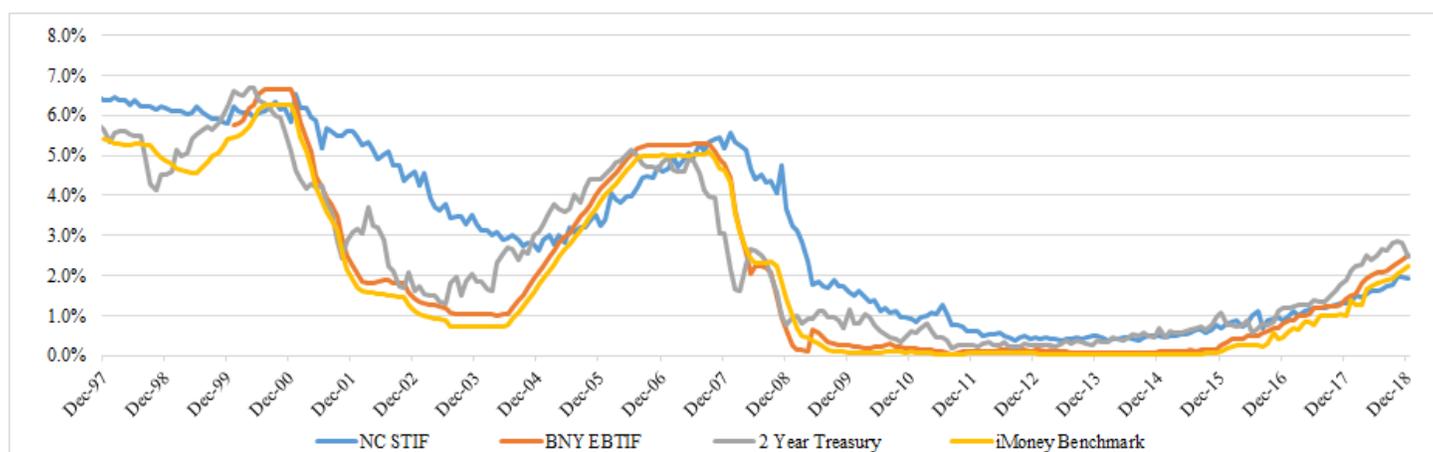
The STIF is responsible for managing the operating funds of the State. Investors include the State’s General Fund, Highway Trust Fund, certain Retirement Systems funds, and other investors. The STIF is also where any bank balances are held for the State; please see part (ii) below for information about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

As of December 31, 2018, the STIF had the following characteristics:

Total Assets	Duration	3-Month Return	Benchmark 3-Month Return	Crediting Rate	Fees
\$20.3 billion	0.88 years	0.49%	0.53%	1.93%	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 crediting rate 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, 2018 was \$222.3 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

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, 2018, the BIF had the following characteristics:

<b>Total Assets</b>	<b>Duration</b>	<b>3-Month Return</b>	<b>Benchmark 3-Month Return</b>	<b>Crediting Rate</b>	<b>Fees</b>
\$1.6 billion	5.62 years	1.59%	1.64%	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, 2018, the EIF had the following characteristics:

<b>Total Assets</b>	<b>Duration</b>	<b>3-Month Return</b>	<b>Benchmark 3-Month Return</b>	<b>Crediting Rate</b>	<b>Fees</b>
\$503.6 million	N/A	-12.68%	-12.75%	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, 2018, the Escheat Fund had \$698.3 million in total assets. \$519.8 million of this total was invested in the STIF and \$122.3 million was invested in the 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, 2018, the Escheat Fund held \$56.2 million in these types of investments. Performance data for these assets are shown below:

	<b>Market Value (\$000)</b>	<b>3 Month</b>	<b>1 Yr</b>	<b>3 Yr</b>	<b>5 Yr</b>	<b>10 Yr</b>
<b>Escheat Alternatives</b>	<b>56,189</b>	<b>2.07</b>	<b>8.90</b>	<b>7.38</b>	<b>6.13</b>	<b>6.16</b>
<b>Benchmark</b>		<b>3.28</b>	<b>14.39</b>	<b>11.00</b>	<b>11.81</b>	<b>10.42</b>

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 <sup>1</sup>	TVPI <sup>2</sup>	Distributions	DPI <sup>3</sup>
Venture Capital Multiplier Fund	27,733,163	60,000,000	31,275,830	0.49%	1.00	1,301,087	0.05

<sup>1</sup> Internal rate of return; <sup>2</sup> Total value to paid in capital, or the sum of (distributions + ending value) divided by the total paid in or funded capital; <sup>3</sup> 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)]

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:

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

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

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

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

		Statutory Classification (\$ Millions)								Total	
		Public Equity <sup>1</sup>	Long-Term <sup>2</sup>	Cash <sup>2</sup>	External Fixed Income <sup>2</sup>	Alternatives <sup>3</sup>	Real Estate <sup>4</sup>	Inflation Protection <sup>5</sup>	Other Fixed Income <sup>6</sup>		Public Equity Limited Liability <sup>7</sup>
IPS Classification (\$ Millions)	Public Equity	\$33,013								\$1,316	\$34,329
	Private Equity					\$5,429					5,429
	Non-Core Real Estate						\$3,227				3,227
	Opportunistic Fixed Income								\$5,666		5,666
	IG Fixed Income		\$24,965		\$3,049						28,014
	Cash			\$3,943							3,943
	Inflation Sensitive							\$6,311			6,311
	Core Real Estate						5,426				5,426
	Multi-Strategy					1,880					1,880
<b>Total</b>	<b>\$33,013</b>	<b>\$24,965</b>	<b>\$3,943</b>	<b>\$3,049</b>	<b>\$7,309</b>	<b>\$8,653</b>	<b>\$6,311</b>	<b>\$5,666</b>	<b>\$1,316</b>	<b>\$94,226</b>	

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

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

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

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

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

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

Statutory Citation	Minimum or Maximum Percentage of Fund	Percentage of Total Assets Invested	Compliant
N.C.G.S. § 147-69.1(c) and 147-69.2(b)(1)-(6b) for fixed income and cash	At least 20%	33.9%	✓
N.C.G.S. § 147-69.2(b)(8) for public equity	No more than 65%	36.4%	✓
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%	6.0%	✓
N.C.G.S. § 147-69.2(b)(7) for real estate	No more than 10%	9.2%	✓
N.C.G.S. § 147-69.2(b)(9) for private equity and other alternatives	No more than 8.75%	7.8%	✓
N.C.G.S. § 147-69.2(b)(9a) for inflation protection	No more than 7.5%	6.7%	✓
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%	31.0%	✓

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, 2018.

### 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 2018, 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 2017. The report showed that the funds' cost structure was below that of most institutional peers. This leads to savings of roughly 13.7 basis points compared to the median peer. Importantly, after deducting all fees, incentives, and expenses, the trust fund exceeded its performance benchmarks. This outperformance is a positive for plan beneficiaries, employers, and taxpayers. At the same time, the Department continues to proactively target improvements in cost-efficiency, transparency, risk management, and compliance.

## Calendar Year 2017 NCRS Costs of Investment Operations Compared to Peers

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

	Total (Basis Points)
Median Peer	56.6
North Carolina Retirement Systems	42.9
Percentile	15%

Source: CEM [Cost Effectiveness Measurement] Benchmarking Inc. The peer group consists of 14 U.S. public pension funds managing from \$48 billion to \$195 billion. The median peer managed an average of \$87 billion throughout the year versus NCRS' \$94 billion. In CEM's methodology, total cost excludes carry / performance fees for real estate, infrastructure, natural resources, and private equity funds. Performance fees are included for public market asset classes and hedge funds. All such fees and expenses have been deducted from all investment returns reported by NCRS.

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

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

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

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

<https://www.nctreasurer.com/inv/Policies/InvestmentPolicyForNCRetirementSystems.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>

Information on the use of placement agents by investment managers may be accessed at the following link:

<https://www.nctreasurer.com/inside-the-department/OpenGovernment/Pages/Placement-Agent-Disclosures.aspx>

## Appendix 1: Financial Information

### Part A: Department of State Treasurer Bank Balances

<b>DEPARTMENT OF STATE TREASURER BANK BALANCES AS OF December 31, 2018 (dollars in thousands)</b>	
<b>Summary of Bank Balances</b>	
<b>Balance as of 09/30/2018</b>	<b>\$ 169,038</b>
Total Receipts	\$ 46,446,403
Total Payments	\$ 46,393,099
<b>Balance as of 12/31/2018</b>	<b>\$ 222,342</b>
<b>Bank Balances as of December 31, 2018</b>	
<i>Bank</i>	<i>Bank Balance</i>
Wells Fargo	\$ 109,512
Bank of America	\$ 23,349
SunTrust	\$ 1,976
PNC	\$ 307
First Citizens	\$ 4,904
BB&T	\$ 5,505
Pinnacle Bank	\$ 850
Bank of Tennessee	\$ 2
Bank OZK	\$ 2,000
Capital Bank	\$ 6,000
Entegra Bank	\$ 2,000
Fidelity Bank	\$ 8,398
First Bank	\$ 10,647
First Federal Savings Bank	\$ 1,000
First National Bank	\$ 9,771
HomeTrust Bank	\$ 1,000
KS Bank	\$ 100
Lumbee Guaranty Bank	\$ 2,750
M&F Bank	\$ 2,250
Peoples Bank	\$ 1,000
South State Bank	\$ 1,091
Southern Bank & Trust	\$ 14,098
Surrey Bank	\$ 750
TD Bank	\$ 1,500
Townebank	\$ 2,000
Union Bank	\$ 982
United Community Bank	\$ 6,600
Uwharrie Bank	\$ 2,000
<b>Total*</b>	<b>\$ 222,342</b>

\*This number reflects the balance in the State treasury credited to all State funds, including not only the General Fund but also other funds.

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

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

**DEPARTMENT OF STATE TREASURER**  
**COMBINED STATEMENT OF NET POSITION**  
**DECEMBER 31, 2018**  
(dollars in thousands)

**Unaudited**

	Short-term Investment Fund	*Pension Trust Funds Investment Program Subtotal	Intrafund Eliminations	Total
<b>Net Assets:</b>				
<b>Investment Securities:</b>				
Cash Equivalents	\$ -	\$ -	\$ -	\$ -
Certificates of Deposit	27,500	-	-	27,500
Repurchase Agreements	1,100,000	-	-	1,100,000
U.S. Treasury Bills/ Notes/ Bonds	5,278,498	6,511,828	-	11,790,326
U.S. Government Agency Notes/ Bonds	13,605,969	705,900	-	14,311,869
GNMA Certificates	-	8,973,413	-	8,973,413
Corporate Obligations	-	9,321,376	-	9,321,376
Other Investments	-	3,121,557	-	3,121,557
Investments in Equity Securities	-	4,308	-	4,308
Investments in Equity Trusts & Limited Liability Entities**	-	34,329,452	-	34,329,452
Investments in Real Estate Trust Funds & Partnerships	-	8,652,526	-	8,652,526
Investments in Alternative Partnerships	-	7,304,603	-	7,304,603
Investments in Credit Partnerships	-	5,666,449	-	5,666,449
Investments in Inflation Partnerships and Other Invest.	-	5,309,202	-	5,309,202
<b>Total Investment Securities</b>	<b>\$ 20,011,967</b>	<b>\$ 89,900,614</b>	<b>\$ -</b>	<b>\$ 109,912,581</b>
Cash in Bank	222,342	-	-	222,342
Deposits in Short-term Investment Fund	-	4,130,044	(4,130,044)	-
Other Assets, Net of Liabilities	86,030	195,236	-	281,266
<b>Total Net Assets</b>	<b>\$ 20,320,339</b>	<b>\$ 94,225,894</b>	<b>\$ (4,130,044)</b>	<b>\$ 110,416,189</b>
<b>Participant Equity:</b>				
General Fund	\$ 5,289,350	\$ -	\$ -	\$ 5,289,350
Other Funds Which Earn Interest for General Fund	1,756,440	-	-	1,756,440
Highway Fund	100,967	-	-	100,967
Highway Trust Fund	375,371	-	-	375,371
University Trust Funds	2,527,220	-	-	2,527,220
Pension Trust Funds	503,724	94,225,894	-	94,729,618
Other Independent Trust Funds	4,889,547	-	-	4,889,547
Local Political Subdivisions	707,814	-	-	707,814
Licensing Boards	39,862	-	-	39,862
Other Investment Funds	4,130,044	-	(4,130,044)	-
<b>Total Participant Equity</b>	<b>\$ 20,320,339</b>	<b>\$ 94,225,894</b>	<b>\$ (4,130,044)</b>	<b>\$ 110,416,189</b>
Percent of Total	18.40%	85.34%	-3.74%	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

Unaudited

COMBINING STATEMENT OF NET POSITION - PENSION TRUST FUNDS INVESTMENT PROGRAM

DECEMBER 31, 2018

(dollars in thousands)

	Cash Investment Fund	Long-term Investment Fund	External Fixed Inc. Investment Fund	Long-Only Public Equity Investment Fund	Hedged Public Equity Investment Fund*	Real Estate Investment Fund	Alternatives Investment Fund	Other Fixed Income Investment Fund	Inflation Protection Investment Fund	Totals
<b>Net Assets:</b>										
Investment Securities:										
Cash and Cash Equivalents	\$ -								\$ -	
U.S. Treasury Bills/ Notes/ Bonds	-	6,189,389							322,439	6,511,828
U.S. Government Agency Notes/ Bonds	-	705,900							-	705,900
GNMA Certificates	-	8,973,413							650,145	8,973,413
Corporate Obligations	3,092,564	8,671,231							28,993	9,321,376
Other Investments	-						4,308			4,308
Investments in Equity Securities	-			33,748,720	580,732					34,329,452
Investments in Equity Trusts & Limited Liability Entities	-					8,652,526				8,652,526
Investments in Real Estate Trust Funds & Partnerships	-						7,304,603			7,304,603
Investments in Alternative Partnerships	-							5,666,449		5,666,449
Investments in Credit Partnerships	-								5,309,202	5,309,202
Investments in Inflation Partnerships and Other Invest.	-								6,310,779	6,310,779
<b>Total Investment Securities</b>	\$ 3,092,564	\$ 24,539,933	\$ -	\$ 33,748,720	\$ 580,732	\$ 8,652,526	\$ 7,308,911	\$ 5,666,449	\$ 6,310,779	\$ 89,900,614
Cash in Bank	-									
Deposits in Short-term Investment Fund	850,406	230,145	3,049,493	-	-	-	-	-	-	4,130,044
Other Assets, Net of Liabilities	-	194,777	-	-	-	-	-	-	459	195,236
<b>Total Net Assets</b>	\$ 3,942,970	\$ 24,964,855	\$ 3,049,493	\$ 33,748,720	\$ 580,732	\$ 8,652,526	\$ 7,308,911	\$ 5,666,449	\$ 6,311,238	\$ 94,225,894
<b>Participant Equity:</b>										
Pension Trust Funds	\$ 3,942,970	\$ 24,964,855	\$ 3,049,493	\$ 33,748,720	\$ 580,732	\$ 8,652,526	\$ 7,308,911	\$ 5,666,449	\$ 6,311,238	\$ 94,225,894
<b>Total Participant Equity</b>	\$ 3,942,970	\$ 24,964,855	\$ 3,049,493	\$ 33,748,720	\$ 580,732	\$ 8,652,526	\$ 7,308,911	\$ 5,666,449	\$ 6,311,238	\$ 94,225,894
<b>Percent of Total</b>	4.18%	26.49%	3.24%	35.82%	0.62%	9.18%	7.76%	6.01%	6.70%	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 Limited Liability" category. The "Public Equity" category includes all assets invested in long strategies.

**DEPARTMENT OF STATE TREASURER  
OTHER INVESTMENT PROGRAMS  
DECEMBER 31, 2018**

**Unaudited**

in thousands

	Bond Index Fund	Equity Index Fund	Escheats Alternative Investments	General Obligation Bond Proceeds	Totals
<b>STATEMENT OF NET POSITION</b>					
Net Assets:					
Deposits in Equity Index Fund	\$ -	503,571			503,571
Deposits in Bond Index Fund	1,553,652				1,553,652
Deposits in Alternative Investment Fund			56,189		56,189
Other Assets				456,755	456,755
<b>Total Net Assets</b>	<b>\$ 1,553,652</b>	<b>\$ 503,571</b>	<b>\$ 56,189</b>	<b>456,755</b>	<b>2,570,167</b>

	Bond Index Fund	Equity Index Fund	Escheats Alternative Investments	General Obligation Bond Proceeds	Totals
<b>STATEMENT OF OPERATIONS</b> (for the year ended June 30, 2018)					
Revenues:					
Investment Income:					
Investment Earnings	\$ 18,685	9,898	941	4,127	33,651
Other Income					-
Subtotal	18,685	9,898	941	4,127	33,651
Net Unrealized Appreciation/Depreciation	6,242	(57,183)	2,037	-	(48,904)
<b>Total Investment Income</b>	<b>24,927</b>	<b>(47,285)</b>	<b>2,978</b>	<b>4,127</b>	<b>(15,253)</b>
Expenditures:					
Management Fees	(174)	(57)	(34)	(86)	(351)
Other Cost			(195)		(195)
<b>Total Expenditures</b>	<b>(174)</b>	<b>(57)</b>	<b>(229)</b>	<b>(86)</b>	<b>(546)</b>
<b>Net Investment Income (Loss)</b>	<b>\$ 24,753</b>	<b>\$ (47,342)</b>	<b>\$ 2,749</b>	<b>4,041</b>	<b>(15,799)</b>

	Bond Index Fund	Equity Index Fund	Escheats Alternatives
<b>Participants:</b>			
Albemarle and Tideland MHRHIT		•	
Albemarle Regional Health	•	•	
Buncombe County	•	•	
City of Asheville	•	•	
City of Concord	•		
City of Greensboro	•	•	
City of Greenville	•	•	
City of Sanford	•	•	
Clean Water - Department of Environmental Quality	•		
Columbus Regional Healthcare System		•	
Community Colleges	•		
County of Dare	•	•	
County of Guilford	•	•	
County of Union	•	•	
Disability Income Plan of Noth Carolina	•		
DMS Nutrient Offset	•		
Drinking Water - Department of Environmental Quality	•		
Ecosystem Enhancement Program Wetlands Trust	•		
Escheats Fund	•		•
Forsyth County	•	•	
Greensboro LEOSSA	•	•	
Greenville Utilities Commission	•	•	
Guilford County LEOSSA	•	•	
Housing Authority of the City of Raleigh	•	•	
Isothermal Planning and Development Commission	•	•	
Margaret R. Pardee Hospital	•	•	
Martin County OPEB	•	•	
Mecklenburg County	•	•	
NC Conservation Easement Endowment	•		
NC Conservation Grant Endowment	•	•	
NC Employee Benefit Trust	•		
NC Student Loan Fund	•		
New Hanover Memorial Hospital, Inc.		•	
Orange County Government	•	•	
Public Schools Insurance Fund	•		
Register of Deeds	•		
Rowan-Cabarrus Community College	•		
State Property Fire Insurance	•		
Swain County	•		
Town of Williamston	•	•	
Trillium Health Resources	•	•	
UNC SEAA Student Loan	•		
Watauga Medical Center, Inc.	•		
Wildlife Endowment	•	•	

**DEPARTMENT OF STATE TREASURER**  
**COMBINED STATEMENT OF OPERATIONS**  
**FOR THE QUARTER ENDED DECEMBER 31, 2018**  
(dollars in thousands)

**Unaudited**

	Short-term Investment Fund	Pension Trust Funds Investment Program Subtotal*	Intrafund Eliminations	Total
<b>Revenues:</b>				
<b>Investment Income:</b>				
Investment Earnings	\$ 202,853	\$ 3,460,911	\$ -	\$ 3,663,764
Intra-Pool Interest Earnings		41,765	(41,765)	-
Income from Securities Lending	1,802	3,724	-	5,526
Commission Recapture		522	-	522
Other Income		6,134	-	6,134
Subtotal	<u>204,655</u>	<u>3,513,056</u>	<u>(41,765)</u>	<u>3,675,946</u>
Net Unrealized Appreciation/Depreciation		<u>(5,814,314)</u>	<u>-</u>	<u>(5,814,314)</u>
Total Investment Income	<u>204,655</u>	<u>(2,301,258)</u>	<u>(41,765)</u>	<u>(2,138,368)</u>
<b>Expenditures:</b>				
Treasurer's Allocated Cost	(1,457)	(33)	-	(1,490)
Management Fees		(152,215)	-	(152,215)
Placement Fees**		-	-	-
Incentive Fees		(133,709)	-	(133,709)
Dividend Withholding Tax		(6,999)	-	(6,999)
Other Cost	(1,544)	(22,839)	-	(24,383)
Total Expenditures	<u>(3,001)</u>	<u>(315,795)</u>	<u>-</u>	<u>(318,796)</u>
Net Investment Income (Loss)	<u>\$ 201,654</u>	<u>\$ (2,617,053)</u>	<u>\$ (41,765)</u>	<u>\$ (2,457,164)</u>
<b>Total Investment Income Allocated:</b>				
General Fund	\$ 71,417	\$ -	\$ -	\$ 71,417
Highway Fund	1,509	-	-	1,509
Highway Trust Fund	7,590	-	-	7,590
University Trust Funds	23,912	-	-	23,912
Pension Trust Funds	6,922	(2,617,053)	-	(2,610,131)
Other Independent Trust Funds	41,839	-	-	41,839
Local Political Subdivisions	6,321	-	-	6,321
Licensing Boards	379	-	-	379
Other Investment Funds	41,765	-	(41,765)	-
Total Investment Income Allocated	<u>\$ 201,654</u>	<u>\$ (2,617,053)</u>	<u>\$ (41,765)</u>	<u>\$ (2,457,164)</u>

**Cash Return, Fiscal Year-to-Date (Annualized) 1.84%**

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

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

**DEPARTMENT OF STATE TREASURER**  
**COMBINING STATEMENT OF OPERATIONS - PENSION TRUST FUNDS INVESTMENT PROGRAM**  
**FOR THE QUARTER ENDED DECEMBER 31, 2018**

(dollars in thousands)

	Cash Investment Fund	Long-term Investment Fund	External Fixed Inc. Investment Fund	Long-Only Public Equity Investment Fund	Hedged Public Equity Investment Fund	Real Estate Investment Fund	Alternative Investment Fund	Other Fixed Income Investment Fund	Inflation Protection Investment Fund	Totals
<b>Revenues:</b>										
Investment Income:										
Investment Earnings	\$ 32,230	492,330	(2)	2,083,696	272,088	263,234	263,851	114,374	(60,890)	\$ 3,460,911
Intra-Pool Interest Earnings	12,093	2,455	27,217							41,765
Income from Securities Lending		1,125		2,399						3,724
Commission Recapture				522						522
Other Income	243			5,891						6,134
Subtotal	44,566	495,910	27,215	2,092,708	272,088	263,234	263,851	114,374	(60,890)	3,513,056
Net Unrealized Appreciation/Depreciation	-	(104,552)	(27,215)	(5,945,927)	(277,249)	52,700	158,242	19,202	283,270	(5,814,314)
Total Investment Income	44,566	391,358	27,215	(3,853,219)	(5,161)	315,934	422,093	133,576	222,380	(2,301,258)
<b>Expenditures:</b>										
Treasurer's Allocated Cost		(9)		(14)		(3)	(3)	(2)	(2)	(33)
Management Fees				(14,759)	(3,081)	(41,417)	(41,656)	(31,585)	(19,717)	(152,215)
Incentive Fees						(51,073)	(57,350)	(12,897)	(12,389)	(133,709)
Placement Fees*				(6,328)		(96)	(67)	(308)		0
Dividend Withholding Tax				(1,611)		(2,664)	(9,674)	(2,806)	(4,871)	(6,999)
Other Cost	(12)	(1,119)	(82)	(22,912)	(3,081)	(95,233)	(108,750)	(47,290)	(37,287)	(22,839)
Total Expenditures	(12)	(1,128)	(82)	(22,912)	(3,081)	(95,233)	(108,750)	(47,290)	(37,287)	(315,795)
Net Investment Income	\$ 44,554	\$ 390,230	\$ 27,133	\$ (3,876,131)	\$ (8,242)	\$ 220,681	\$ 313,343	\$ 86,286	\$ 185,093	\$ (2,617,053)
<b>Total Investment Income Allocated:</b>										
General Fund	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Highway Fund	-	-	-	-	-	-	-	-	-	-
Highway Trust Fund	-	-	-	-	-	-	-	-	-	-
University Trust Funds	-	-	-	-	-	-	-	-	-	-
Pension Trust Funds	44,554	390,230	27,133	(3,876,131)	(8,242)	220,681	313,343	86,286	185,093	(2,617,053)
Other Independent Trust Funds	-	-	-	-	-	-	-	-	-	-
Local Political Subdivisions	-	-	-	-	-	-	-	-	-	-
Licensing Boards	-	-	-	-	-	-	-	-	-	-
Other Investment Funds	-	-	-	-	-	-	-	-	-	-
Total Investment Income Allocated	\$ 44,554	\$ 390,230	\$ 27,133	\$ (3,876,131)	\$ (8,242)	\$ 220,681	\$ 313,343	\$ 86,286	\$ 185,093	\$ (2,617,053)
<b>Total Return, 12, 24, and 36 and 60 months:</b>										
12 months	1.88%	-82.00%	1.62%	-9.32%	-5.89%	8.62%	11.51%	5.69%	6.88%	-1.47%
24 months	1.50%	1.96%	1.36%	6.23%	1.64%	9.87%	11.95%	6.37%	7.20%	5.77%
36 months	1.32%	2.48%	1.17%	6.59%	2.41%	9.61%	9.93%	6.61%	7.20%	5.95%
60 months	1.00%	3.27%	1.19%	4.39%	2.52%	11.10%	9.69%	4.06%	2.35%	4.85%

\* 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 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 this Rule and 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) “Section” means all the subsections within this Section .0100 of Title 20 of the North Carolina Administrative Code.
- (10) “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.
- (11) “Website portal delivery” means a secure method of accessing messages on a website portal set up by the Department of State Treasurer.