

**NORTH CAROLINA DEPARTMENT OF  
STATE TREASURER INVESTMENT PROGRAMS**

**FINANCIAL STATEMENTS  
WITH INDEPENDENT AUDITORS' REPORT**

**FISCAL YEAR ENDED JUNE 30, 2017**

**NORTH CAROLINA DEPARTMENT OF STATE TREASURER  
INVESTMENT PROGRAMS  
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*This audit required approximately 590 hours at a cost of \$77,650*

## INDEPENDENT AUDITORS' REPORT

Dale R. Folwell, CPA, State Treasurer  
North Carolina Department of State Treasurer

### **Report on the Financial Statements**

We have audited the accompanying financial statements of the External Investment Pool (the "Pool"), the Bond Index Investment Pool (the "BIF"), and the Equity Index Investment Account (the "EIF") of the North Carolina Department of State Treasurer Investment Programs, collectively referred to as "Investment Programs," as of and for the year then ended June 30, 2017, and the related notes to the financial statements, which collectively comprise the Investment Programs' basic financial statements as listed in the table of contents.

### ***Management's Responsibility for the Financial Statements***

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

### ***Auditors' Responsibility***

Our responsibility is to express opinions on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Pool's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Pool's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

### ***Opinions***

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the net position of the Investment Programs as of June 30, 2017, and the

respective changes in financial position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

**Other Matters**

*Required Supplementary Information*

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, as listed in the table of contents, be presented to supplement the financial statements. Such information, although not a part of the financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the financial statements, and other knowledge we obtained during our audit of the financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

*Other Information*

Our audit was conducted for the purpose of forming an opinion on the financial statements. The supplementary information is presented for purposes of additional analysis and is not a required part of the financial statements.

The supplementary information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. Such information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the supplementary Information is fairly stated, in all material respects, in relation to the financial statements as a whole.

**Other Reporting Required by Government Auditing Standards**

In accordance with *Government Auditing Standards*, we have also issued our report dated October 16, 2017 on our consideration of the internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Investment Programs' internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the internal control over financial reporting and compliance.



**CliftonLarsonAllen LLP**

Baltimore, Maryland  
October 16, 2017

**NORTH CAROLINA DEPARTMENT OF STATE TREASURER  
INVESTMENT PROGRAMS  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
FISCAL YEAR ENDED JUNE 30, 2017**

**Introduction**

This section of the financial statements of the North Carolina Department of State Treasurer Investment Programs ("State Treasurer Investments") presents our discussion and analysis of the External Investment Pool's ("the Pool") financial position as of June 30, 2017 and 2016, as well as the Bond Index Investment Pool's ("BIF") and the Equity Index Investment Account's ("EIF") financial position as of June 30, 2017. Since this discussion and analysis is designed to focus on current activities, it should be read in conjunction with the State Treasurer Investments' basic financial statements, which follow this section.

For the purposes of presenting the basic financial statements, investments of the Pool are allocated to broad classifications that follow the North Carolina General Statutes definitions in Section 147-69.2(b). These "portfolios" are described in Note 3 and include the Short Term Investment Fund ("STIF"), Long Term Investment Fund ("LTIF"), Equity Investment portfolio, Real Estate Investment portfolio, Alternative Investment portfolio, Opportunistic Fixed Income Investment portfolio, and the Inflation Sensitive Investment portfolio. Amounts associated with these portfolios are presented in the tables in Note 3. The classifications defined in the Investment Policy Statement of the Department of State Treasurer Investments are used for the purposes of Management's Discussion and Analysis of the economic and financial environment, investment performance, and risk management of the Pool. The Supplementary Information contains a mapping of the Investment Policy Statement's classifications to the statutory classifications which are used to prepare the basic financial statements of the Pool as of June 30, 2017.

The BIF (Note 7) is an external government sponsored bond index investment pool in which the Treasurer is authorized to invest funds for governmental entities (Ancillary Governmental Participant Investment Program or "AGPIP") which are outside the Retirement Systems defined as The Teachers' and State Employees' Retirement System, Consolidated Judicial Retirement System, Legislative Retirement System, Firefighters' and Rescue Squad Workers' Pension Fund, North Carolina National Guard Pension Fund, Local Governmental Employees' Retirement System, and Retiree Health Benefit Fund.

The EIF (Note 8) is an equity index investment account for AGPIP where the Treasurer has contracted with an external party to invest in a commingled equity index investment trust.

**Financial Statements**

The Pool, BIF, and EIF's basic financial statements include the statement of fiduciary net position and statement of changes in fiduciary net position, which have been presented in accordance with accounting principles generally accepted in the United States as applicable to governmental entities.

The statement of fiduciary net position provides information on the financial position of the Pool, BIF, and EIF for the fiscal year ended June 30, 2017. The statement of changes in fiduciary net position presents the results of the investing activities during the fiscal year ended June 30, 2017. The notes to the financial statements offer additional discussion that is essential to the full understanding of the data presented in the financial statements. The notes give more detail about accounting policies, significant account balances and activities, material risks, obligations, contingencies and subsequent events, if any.

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**Statements of Fiduciary Net Position**

The following statements of fiduciary net position present the assets, liabilities and net position held in trust (assets minus liabilities) of the Pool as of the end of each of the respective fiscal years and are point in time financial statements.

**Statements of Fiduciary Net Position**

	<b>As of June 30</b>	
	<b>2017</b>	<b>2016</b>
	<i>(In Thousands)</i>	
<b>Assets</b>		
Cash and cash equivalents	\$ 324,943	\$ 399,043
Securities lending collateral	724,516	3,596,867
Investments, at fair value	109,861,609	103,625,981
Receivables	413,471	492,823
Total assets	\$ 111,324,539	\$ 108,114,714
<b>Liabilities</b>		
Other payables	\$ 95,840	\$ 199,056
Obligations under securities lending	724,516	3,596,867
Total liabilities	820,356	3,795,923
<b>Net Position</b>		
Net position held in trust	\$ 110,504,183	\$ 104,318,791

The following statement of fiduciary net position presents the assets, liabilities and net position held in trust (assets minus liabilities) of the BIF as of the end of the fiscal year and is a point in time financial statement.

**Statement of Fiduciary Net Position**

	<b>As of June 30</b>
	<b>2017*</b>
	<i>(In Thousands)</i>
<b>Assets</b>	
Investments, at fair value	\$ 1,586,606
Receivables	19,719
Total assets	\$ 1,606,325
<b>Liabilities</b>	
Other payables	19,864
Total liabilities	19,864
<b>Net Position</b>	
Net position held in trust	\$ 1,586,461

\*Comparative information is not available because BIF was created during fiscal year 2017.

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The following statement of fiduciary net position presents the assets, liabilities and net position held in trust (assets minus liabilities) of the EIF as of the end of the fiscal year and is a point in time financial statement.

**Statement of Fiduciary Net Position**

	<b>As of June 30</b>
	<b>2017*</b>
	<i>(In Thousands)</i>
<b>Assets</b>	
Investments, at fair value	\$ 411,837
Total assets	\$ 411,837
 <b>Net Position</b>	
Net position held in trust	\$ 411,837

\*Comparative information is not presented because EIF was not reported as combined individual accounts in the prior year.

**Analysis of Statements of Fiduciary Net Position**

Total investments in the Pool increased to approximately \$110 billion during the fiscal year ended June 30, 2017, as gains from operations outpaced distributions and redemptions from the Pool. Securities lending cash collateral declined by roughly \$2.9 billion (80%). The decrease in securities lending collateral resulted from a change in the lending guidelines aimed at reducing risk within the securities lending program.

BIF was created in August 2016 when \$1.6 billion of AGPIP assets were moved from the Pool's LTIF. All of these assets were previously considered part of the External Investment Pool under LTIF in 2016 and earlier years.

\$364 million of AGPIP assets were migrated from two legacy funds to the EIF in August 2016. \$128 million of this was from OPEB accounts which were previously reported as part of the External Investment Pool in 2016 and earlier years.

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**Statements of Changes in Fiduciary Net Position**

The following statements of changes in net position present the net investment income earned by the Pool as well as expenses, net pension fund and other withdrawals.

**Statements of Changes in Fiduciary Net Position**

	<b>Fiscal Years Ended June 30</b>	
	<b>2017</b>	<b>2016</b>
	<i>(In Thousands)</i>	
<b>Additions</b>		
Investment income		
Interest and dividend income	\$ 1,790,296	\$ 1,688,550
Net appreciation (depreciation) in fair value of investments	3,788,528	(460,338)
Other investment income	4,435,960	218,612
Securities lending income	23,823	50,823
Total investment income	\$ 10,038,607	\$ 1,497,647
<b>Deductions</b>		
Investment management expenses	499,368	513,697
Other and administrative expenses	86,733	90,963
Securities lending expenses	7,709	11,634
Total deductions	\$ 593,810	\$ 616,294
Net increase in net position resulting from operations	9,444,797	881,353
<b>Distributions to participants</b>		
Distributions paid and payable	(9,444,797)	(881,353)
<b>Share transactions</b>		
Reinvestment of distributions	9,447,240	878,643
Net share purchases (redemptions)	(3,261,848)	(669,211)
Changes in net position	6,185,392	209,432
Net position held in trust:		
Beginning of year	104,318,791	104,109,359
End of year	\$ 110,504,183	\$ 104,318,791

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MANAGEMENT'S DISCUSSION AND ANALYSIS  
FISCAL YEAR ENDED JUNE 30, 2017**

The following statement of changes in net position presents the net investment income earned by the BIF as well as expenses and other purchases and withdrawals.

**Statement of Changes in Fiduciary Net Position**

	<b>Fiscal Year Ended June 30</b>
	<b>2017*</b>
	<i>(In Thousands)</i>
<b>Additions</b>	
Investment income	
Interest and dividend income	\$ 40,257
Net depreciation in fair value of investments	(47,568)
Other investment loss	(8,622)
Total investment loss	\$ (15,933)
<b>Deductions</b>	
Investment management expenses	323
Total deductions	\$ 323
Net decrease in net position resulting from operations	(16,256)
<b>Distributions to participants</b>	
Distributions paid and payable	16,256
<b>Share transactions</b>	
Reinvestment of distributions	(16,256)
Net share purchases	1,602,717
Changes in net position	1,586,461
Net position held in trust:	
Beginning of year	-
End of year	\$ 1,586,461

\*Comparative information is not available because BIF was created during fiscal year 2017.

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The following statement of changes in net position presents the net investment income earned by the EIF as well as expenses and other purchases and withdrawals.

**Statement of Changes in Fiduciary Net Position**

	<b>Fiscal Year Ended June 30</b>
	<b>2017*</b>
	<i>(In Thousands)</i>
<b>Additions</b>	
Investment income	
Interest and dividend income	\$ 3,823
Net depreciation in fair value of investments	(2,757)
Other investment income	65,424
Total investment income	\$ 66,490
<b>Deductions</b>	
Investment management expenses	723
Total deductions	\$ 723
Net increase in net position resulting from operations	65,767
<b>Distributions to participants</b>	
Distributions paid and payable	(65,767)
Transfer (out) in	
<b>Share transactions</b>	
Reinvestment of distributions	65,767
Net share purchases	346,070
Changes in net position	411,837
Net position held in trust:	
Beginning of year	-
End of year	\$ 411,837

\* Comparative information is not presented because EIF was not reported as combined individual accounts in the prior year.

**Analysis of Changes in Fiduciary Net Position**

The Pool had net appreciation of \$3.8 billion in fiscal year 2017, an increase of \$4.2 billion over fiscal year 2016. The gain was primarily due to strong growth in the Pool's investment assets, as outlined in the Economic and Portfolio Discussion. Interest and dividend income also increased by \$102 million from fiscal year 2016. The increase was primarily due to higher yields within the LTIF and STIF portfolios. Net share redemptions from the Pool increased by \$2.6 billion, due in part to benefit payments of \$2.7 billion outpacing \$1.0 billion of new money being paid into STIF. Additionally, roughly \$1.6 billion in Ancillary Governmental Participant Investment Program assets were removed from the Pool in August 2016 and were moved to the BIF and EIF funds.

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BIF had net depreciation in fair value of \$48 million in fiscal year 2017, driven largely by rising interest rates.

EIF had net depreciation in fair value of \$3 million due to timing of participant cash flows; this was more than offset, however, by other investment income, much of which was realized gains from strong performance in legacy equity funds.

### **Legislative Restrictions**

The State Treasurer is required to comply with General Statutes 147-86.41 through 147-86.49, the Sudan Divestment Act, which requires the Retirement Systems to develop a list of entities engaging in the prohibited conduct quarterly, refrain from making investment in such companies and divesting from the same within 15 months of being listed. General Statutes 147-86.55 through 147-86.63, the Iran Divestment Act, requires the State Treasurer to develop a list of entities engaging in prohibited activities annually, refrain from contracting with or making investments in such companies, and divesting from the same within 180 days of being listed. Indirect investments through structures such as index funds, commingled funds, limited partnerships, or derivative instruments are excepted from the statutes under General Statutes 147-86.42(8) and 147-86.57(3).

### **Economic Discussion**

Roughly eight years into its recovery, the U.S. economy continues to grow, albeit modestly, with falling unemployment rates and relatively low inflation. For the year ended June 30, 2017, Gross Domestic Product ("GDP") adjusted for inflation and seasonality increased at a rate of 2.1%; the unemployment rate dropped further to 4.4%; consumer price inflation was a modest 1.6% year over year; and core consumer price inflation (i.e., removing the volatile food and energy sectors) was 1.7% year over year. The Federal Reserve successfully completed three additional rate hikes during the fiscal year, increasing the target federal funds rate by 0.25% each time in December 2016, March 2017, and June 2017 and ending the year at a target range of 1.00-1.25%. These moves were widely expected by the financial markets, which have continued to closely track and anticipate further moves from the Federal Reserve. Despite a series of unexpected political events and tensions throughout the fiscal year, market volatility remained relatively subdued, thanks in part to improving corporate profits and generally accommodative central bank policies around the globe. Oil prices experienced some volatility during the fiscal year, making gains in late 2016 which were later reversed in 2017. On net overall, the price of Brent Crude was relatively unchanged throughout the fiscal year, moving from roughly \$48 to \$47. Given the pace of rate hikes from the Federal Reserve, improved GDP growth, and an uptick in inflation, U.S. interest rates ended the fiscal year higher across the curve. The gains were fairly evenly distributed, with movements averaging around 0.75-0.80%, although the very long end of the curve did experience some flattening. Both investment grade and high-yield corporate bonds (i.e., credit quality ratings) experienced compression in their yield premiums compared to similar duration U.S. Treasury bonds during the year, on the back of improving corporate fundamentals (tighter yield spreads being positive for performance). High-yield bonds in particular posted strong returns given their relatively low interest rate sensitivity. Investment grade bonds, however, experienced some offsetting headwinds from rising interest rates across the yield curve. Corporate default rates trended slightly lower throughout the year, supported by improving corporate fundamentals and some stabilization in commodity prices.

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INVESTMENT PROGRAMS  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
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**External Investment Pool Portfolio Discussion**

The discussion below refers to classifications in the Investment Policy Statement. The Supplementary Information contains a mapping of the Investment Policy Statement's classifications to the statutory classifications.

The Pool's Public Equity investments returned a robust 19.0% for the fiscal year, outperforming the benchmark's 18.1%. Stock returns were generally strong across the globe, with international markets posting some of the largest gains. The Russell 3000 Index in the US returned 18.5%, with the largest gains seen in smaller market capitalization stocks (24.6% for the Russell 2000 Index). Internationally, the MSCI ACWI ex-US IMI index returned 20.4%, with the emerging markets being a particularly strong area (23.7% for the MSCI Emerging Markets Index). A number of headwinds that weighted on international returns in the previous fiscal year were reversed, with political uncertainty lessening and many currencies gaining ground against the US Dollar. This trend was most pronounced in the second half of the fiscal year. In the emerging markets, improving growth and stabilizing prices in the energy and materials sectors further supported returns.

Returns from Private Equity were also strong during the fiscal year, posting a gain of 9.7% and outperforming the benchmark's 9.2%. While all segments of the portfolio contributed positively to returns, the strongest gains came from Buyout and Venture Capital / Growth Equity strategies, which together comprised two-thirds of the portfolio's market value at fiscal year-end. Economy-wide, the private equity pricing environment remains high, though purchase price multiples have declined slightly during the first half of calendar 2017. Debt utilization has increased, which bodes well for future returns but adds an element of risk if a downturn should occur. In terms of investment exits, the North Carolina portfolio is not experiencing the broader market's downward trend – the Pool's realizations remain robust, a result of the portfolio's maturity.

The Non-Core Real Estate asset class had an 11.2% return for the fiscal year, handily beating the 5.2% return of the benchmark. The Core Real Estate asset class also outperformed its benchmark, generating 9.0% versus the benchmark's 6.6%. Real estate returns were supported by steady fundamentals and healthy capital markets during the year. While the pace of appreciation has moderated following several years of robust growth, demand for high quality, well-located assets with stable cash flows continued to outpace supply, which was supportive of returns. In addition, well-executed business plans for the Pool's investments contributed to benchmark outperformance in both the Non-Core and Core Real Estate asset classes.

Given tightening credit spreads and improving fundamentals for lower-quality debt, the Opportunistic Fixed Income asset class performed well, returning 11.5% versus the benchmark return of 11.1%. In particular, the asset class' Distressed Credit managers generated some standout returns.

High-quality fixed income, on the other hand, was challenged by higher interest rates. The Investment Grade Fixed Income asset class returned -0.3% for the fiscal year, although it did outperform its benchmark at -0.6%. The majority of the asset class' negative returns were generated from its Government Bonds portfolio, while the asset class' Mortgages portfolio was

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just slightly negative for the year. Corporate Bonds helped to offset some of these losses, as they benefited from tighter credit spreads.

The STIF return for the fiscal year was 1.0%. The North Carolina Department of State Treasurer invests the STIF with the objectives of preservation of capital, liquidity, and competitive relative returns. The portfolio is managed with a laddering strategy out to one year that is designed to provide consistent liquidity for short-term cash needs, but allows the portfolio manager to take advantage of investing out the yield curve with a portion of the assets.

Stabilizing commodity prices during the year allowed the Inflation Sensitive asset class to recover. The asset class had a 12.1% return, which was far ahead of the benchmark's return of 2.6%. The strongest subcomponents of the asset class were Energy and Private Natural Resources, as these both benefitted from recoveries in their underlying commodities.

**BIF Portfolio Discussion**

BIF is a passively managed portfolio which is benchmarked to the Barclays US Aggregate Bond Index. As this benchmark is roughly two-thirds weighted to interest rate sensitive government and mortgage-backed securities, the fund struggled as rising interest rates put downward pressure on the prices of these securities. Government securities experienced the largest losses. Corporate bonds held in the portfolio helped to provide some offsetting gains to these losses as credit spreads tightened. Overall, from August 2016 when this fund was created, through fiscal year end, the fund returned -1.0%.

**EIF Portfolio Discussion**

EIF is a passively managed portfolio which is benchmarked to the Morgan Stanley Capital International All Country World Index. As such, the fund benefitted from strong equity markets globally, especially within the international markets. The fund returned 14.2% during fiscal year 2017.

**Request for Information**

This financial report is designed to provide our citizens, taxpayers, customers, investors, and creditors with a general overview of the North Carolina Department of State Treasurer's investment finances and to demonstrate the accountability of the Department and State Treasurer for the money they receive. If you have questions about this report or need additional financial information, contact the North Carolina Department of State Treasurer, 3200 Atlantic Avenue, Raleigh, NC 27604, United States. The Department's website is [www.nctreasurer.com](http://www.nctreasurer.com) and investment reports are available on that site at that address.

**NORTH CAROLINA DEPARTMENT OF STATE TREASURER  
INVESTMENT PROGRAMS  
STATEMENT OF FIDUCIARY NET POSITION  
AS OF JUNE 30, 2017  
(In Thousands)**

	<b>External Investment Pool</b>	<b>Bond Index Investment Pool</b>	<b>Equity Index Investment Account</b>
<b>Assets</b>			
Cash and cash equivalents	\$ 324,943	\$ -	\$ -
Securities lending collateral	724,516	-	-
Investments, at fair value	109,861,609	1,586,606	411,837
Receivables:			
Accrued interest and dividends	340,024	9,503	-
Investments sold, but not settled	69,754	10,216	-
Other receivables	3,693	-	-
Total receivables	<u>413,471</u>	<u>19,719</u>	<u>-</u>
Total assets	<u>\$ 111,324,539</u>	<u>\$ 1,606,325</u>	<u>\$ 411,837</u>
<b>Liabilities</b>			
Accounts payable and accrued liabilities	18,817	88	-
Investments purchased, but not settled	77,023	19,776	-
Obligations under securities lending	724,516	-	-
Total liabilities	<u>\$ 820,356</u>	<u>\$ 19,864</u>	<u>\$ -</u>
<b>Net Position</b>			
Net position held in trust	<u>\$ 110,504,183</u>	<u>\$ 1,586,461</u>	<u>\$ 411,837</u>

See accompanying Notes to Financial Statements

**NORTH CAROLINA DEPARTMENT OF STATE TREASURER  
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STATEMENT OF CHANGES IN FIDUCIARY NET POSITION  
FISCAL YEAR ENDED JUNE 30, 2017  
(In Thousands)**

	External Investment Pool	Bond Index Investment Pool	Equity Index Investment Account
<b>Additions:</b>			
Investment income:			
Interest and dividend income	\$ 1,790,296	\$ 40,257	\$ 3,823
Net appreciation (depreciation) in fair value of investments	3,788,528	(47,568)	(2,757)
Other investment income (loss)	4,435,960	(8,622)	65,424
Securities lending income	23,823	-	-
Total investment income	<u>\$ 10,038,607</u>	<u>\$ (15,933)</u>	<u>\$ 66,490</u>
<b>Deductions</b>			
Investment management expenses	499,368	323	723
Administrative and other expenses	86,733	-	-
Securities lending expense	7,709	-	-
Total deductions	<u>\$ 593,810</u>	<u>\$ 323</u>	<u>\$ 723</u>
Net increase in net position resulting from operations	9,444,797	(16,256)	65,767
<b>Distributions to participants</b>			
Distributions paid and payable	(9,444,797)	16,256	(65,767)
<b>Share transactions</b>			
Reinvestment of distributions	9,447,240	(16,256)	65,767
Net share purchases (redemptions)	(3,261,848)	1,602,717	346,070
Change in net position	6,185,392	1,586,461	411,837
Net position held in trust:			
Beginning of year	104,318,791	-	-
End of year	<u>\$ 110,504,183</u>	<u>\$ 1,586,461</u>	<u>\$ 411,837</u>

See accompanying Notes to Financial Statements

**NORTH CAROLINA DEPARTMENT OF STATE TREASURER  
INVESTMENT PROGRAMS  
NOTES TO FINANCIAL STATEMENTS  
JUNE 30, 2017**

**1. Financial Reporting Entity**

The North Carolina Department of State Treasurer Investment Programs "State Treasurer Investments" contain deposits from funds and component units of the State of North Carolina, except for certain investments of the Escheat Fund and the Bond Proceeds Investment Accounts. State Treasurer Investments include the External Investment Pool ("the Pool"), the Bond Index Investment Pool ("BIF"), and the Equity Index Investment Account ("EIF").

The primary participants of the Pool include Teachers' and State Employees' Retirement System, Consolidated Judicial Retirement System, Legislative Retirement System, Firefighters' and Rescue Squad Workers' Pension Fund, North Carolina National Guard Pension Fund, Local Governmental Employees' Retirement System, and Retiree Health Benefit Fund.

The Pool, a governmental set of investments of the Treasurer, consists of the following individual investment portfolios: Short-term Investment Fund ("STIF"), Long-term Investment Fund ("LTIF"), Fixed Income Portfolio, Equity Investment Portfolio, Real Estate Investment Portfolio, Alternative Investment Portfolio, Opportunistic Fixed Income Investment Portfolio, and Inflation Sensitive Investment Portfolio. The Pool operates under General Statutes 147-69.1 to 147-69.3. The statutes address credit and other risks to which the Treasurer adheres in the management of the Pool. The deposits are commingled; therefore, the North Carolina Department of State Treasurer (the "Treasurer") considers all investment portfolios listed above to be part of the Pool. The Pool is not a legally separate entity within the State of North Carolina. Also, the Pool is not registered with the Securities and Exchange Commission and is not subject to any formal oversight other than that of the legislative body of the State of North Carolina.

Participants in the BIF may include public hospitals, the Local Government Other Post Employment Benefit Trust, the Death Benefit Plan of N.C., the Disability Income Plan of N.C., the Register of Deeds' Supplemental Pension Fund, and other funds and component units of the State of North Carolina with investment authority under General Statute 147-69.2. See Note 7 for additional information.

The EIF primary participants are public hospitals and local government other postemployment benefit funds. See Note 8 for additional information.

The accompanying financial statements present only the net position of the State Treasurer Investments and do not purport to, and do not, present fairly the financial position of the State of North Carolina as of June 30, 2017 and the changes in its financial position for the year then ended in conformity with accounting principles generally accepted in the United States.

**2. Summary of Significant Accounting Policies**

**Basis of Presentation**

The accompanying financial statements were prepared in accordance with accounting principles generally accepted in the United States ("GAAP") for governments as applicable to governmental units. The Governmental Accounting Standards Board ("GASB") is the accepted standard-setting body for establishing governmental accounting and reporting principles.

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**Measurement Focus and Basis of Accounting**

The financial statements are reported using the economic resources measurement focus and the accrual basis of accounting. Under this method, additions are recorded when earned and deductions are recorded at the time liabilities are incurred, regardless of the timing of related cash flows.

**Cash and Cash Equivalents**

The Pool reports all cash on hand and deposits in banks, including demand deposits, as cash and cash equivalents. Restricted cash represents the Pool's cash held by counterparties as collateral against the Pool's derivatives. Cash held by counterparties as collateral is not available to the Pool for general operating purposes, but may be applied against amounts due to derivative counterparties or returned to the Pool when the collateral requirements are exceeded or at the maturity of the derivatives. Cash equivalents are highly liquid investments with an original maturity of ninety days or less when purchased.

**Securities Lending**

Cash received as collateral on securities lending transactions is used to purchase investments. These investments are reported as securities lending collateral in the accompanying financial statements and are generally measured at fair value with the exception of repurchase agreements, which are reported at cost. A corresponding liability is also reported as obligations under securities lending in the accompanying financial statements of the Pool for the amount owed to the broker at the termination of the lending agreement. Income and expenses related to securities lending are reported at gross amount.

**Valuation of Investments and Derivatives**

Investments and derivatives are reported at fair value with significant exceptions noted below. Repurchase agreements and non-negotiable certificates of deposit in the STIF are reported at cost which approximates fair value.

In the Pool, fair values are determined daily for the LTIF and Equity Investment portfolios, and quarterly for the Real Estate Investment and Alternative Investment portfolios. The Opportunistic Fixed Income Investment portfolio is valued quarterly except for hedge fund investments which are valued monthly. The Inflation Sensitive Investment portfolio consists of limited partnerships which are valued quarterly and futures which are valued daily or monthly. In the LTIF portfolio, the fair value of fixed income securities is calculated by a third party pricing vendor based on future principal and interest payments discounted using market yields. For the Alternative Investment portfolio (private equity investment partnerships and hedge funds), the Real Estate Investment portfolio (limited partnerships and other investments), the Opportunistic Fixed Income Investment and Inflation Sensitive Investment portfolios (limited partnerships, hedge funds, and other non-publicly traded investments) the methodology for determining an estimated fair value is established by the general partner, which may utilize a third party pricing source or an independent real estate appraiser.

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**Valuation of Investments and Derivatives (Continued)**

Contracts with these partnerships, hedge funds, and other investments require an annual audit, except for certain older investments that are immaterial to the financial statements.

For the BIF and EIF, fair values are determined daily. In addition, the fair values for the fixed income securities in the BIF are calculated by a third party pricing vendor based on future principal and interest payments discounted using market yields.

The general partners' estimated fair values are based on the partnership's and fund's respective net asset values ("NAV"). The most significant input into the NAV of such an entity is the fair value of its holdings. These non-publicly traded assets are valued at current fair value, taking into consideration the financial performance of the issuer, cash flow analysis, recent sales prices, market comparable transactions, a new round of financing, a change in economic conditions, and other pertinent information. The fair values of certain investments may require significant management judgment or estimation. Fair value is determined using the best information available for a hypothetical transaction at the measurement date, not using forced sale or fire sale pricing. Participants' shares sold and redeemed are determined in the same manner as is used to report investments, and the Treasurer does not provide or obtain legally binding guarantees to support share values. Net investment income earned by the Pool and BIF is generally distributed on a pro rata basis.

Forward foreign currency contracts and futures contracts are included in the Statement of Net Position as "Investments, at fair value." Investments, at fair value, incorporate unrealized gains or losses on outstanding forward foreign currency contracts and futures contracts. Gains or losses, incurred when forward foreign currency contracts and futures contracts entered into by the Pool mature or are closed out, are included in "Net appreciation (depreciation) in fair value of investments" in the Statement of Changes in Fiduciary Net Position.

**Accounts Payable and Accrued Liabilities**

Accounts payable and accrued liabilities include amounts due for administrative and investment management expenses.

**Income Recognition**

Investment transactions are accounted for on a trade (investment) date basis. Net appreciation (depreciation) in the fair value of investments consists of both the realized and unrealized gains or losses which include those resulting from the sale of assets during the year as well as changes in the fair market value of the investments held at fiscal year end. Interest and dividend income is recorded on the accrual basis, with dividends accruing on the ex-dividend date.

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**Investment Management Expenses**

The Investment Management Division (“IMD”) of the Treasurer hires external investment managers to invest a significant portion of the investment assets. The State Treasurer typically pays investment management fees based on individually negotiated investment management agreements. The fees, usually paid quarterly, may be based on a sliding scale of the portfolio’s net asset value at quarter-end, calculated by multiplying each level of net position by a specified basis point charge, or may be performance-related, typically associated with exceeding a market benchmark and/or hurdle rate. Fees are paid from the appropriate manager’s portfolio and are recognized as an expense over the time period for which the fees are applicable. Certain investment management fees, usually in private equity portfolios, are paid at the beginning of the period. These charges are reported on the Statement of Changes in Net Position as part of the State Treasurer’s investment management expenses.

**Administrative and Other Expenses**

Certain administrative expenses of the Pool are paid by the Treasurer. These expenses consist of charges to the individual funds administered by IMD and include custodial fees, bank charges, the Treasurer’s allocated costs of administering the plan, partnership expenses and other costs of administering the investment portfolios. These charges are reported on the Statement of Changes in Net Position as part of the Pool’s administrative and other expenses.

**Use of Estimates**

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of income and expense during the reporting period. Actual results could differ from those estimates.

**3. External Investment Pool Deposits and Investments**

All deposits are cash and cash equivalents. As of June 30, 2017, the balance of the Pool’s deposits was \$324.9 million. Also at June 30, 2017, the amount of restricted cash held by the Pool was \$32.6 million.

Unless specifically exempt, every agency of the State and certain component units are required by General Statute 147-77 to deposit moneys received with the Treasurer or with a depository institution in the name of the Treasurer. Deposits to the Pool may be made in any bank, savings and loan association or trust company in the State as approved by the Treasurer. General Statute 147-79 requires depositories to collateralize all balances that are not FDIC insured. The depositories must maintain specified security types in a third party escrow account established by the Treasurer.

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**3. External Investment Pool Deposits and Investments (Continued)**

The Treasurer is directed by statute to establish, maintain, administer, manage and operate investment programs for the Pool's assets, pursuant to the applicable statutes. In doing so, the Treasurer has full powers as a fiduciary and, with IMD staff, manages the investment programs so assets may be readily converted into cash when needed.

In establishing the comprehensive management program, the Treasurer, utilizing a professional investment staff, has developed an investment strategy for each portfolio that recognizes the guidelines of the governing General Statutes. In addition to the Treasurer and IMD staff managing these programs, the Investment Advisory Committee ("IAC") provides opinions on policies and opinions on general strategy for the Pension Fund investments, including asset allocation, in consultation with IMD staff.

**Investment Portfolios**

The Pool invests in the following individual investment portfolios as of June 30, 2017:

<b>Statutory Asset Allocation</b>		
<i>(in Thousands)</i>		
Short Term Investment Fund	\$	22,462,086
Long Term Investment Fund		24,947,942
Equity Investment		35,204,951
Real Estate Investment		8,180,657
Alternative Investment		6,579,391
Opportunistic Fixed Income Investment		5,524,128
Inflation Sensitive Investment		6,486,143
Cash Pool		476,311
<b>Total Investments</b>	<b>\$</b>	<b>109,861,609</b>

STIF – This fixed-income investment portfolio is the primary cash management account and is managed in such a manner as to be readily convertible into cash. The primary participants of this portfolio are the General Fund and the Highway Funds. Other participants may include universities and various boards, commissions, community colleges, and school administrative units that make voluntary deposits with the Treasurer as well as the remaining portfolios listed below. The Teachers' and State Employees' Retirement System, Consolidated Judicial Retirement System, Legislative Retirement System, Firefighters' and Rescue Squad Workers' Pension Fund, North Carolina National Guard Pension Fund, Local Governmental Employees' Retirement System, and Retiree Health Benefit Fund (collectively the "North Carolina Retirement Systems") hold a cash allocation that is invested in STIF and provides liquidity for the Pool.

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**Investment Portfolios** (Continued)

LTIF – This portfolio holds fixed-income investments, including Government National Mortgage Association (“GNMA”) certificates, corporate bonds, US Treasuries, and US agency obligations. Since the deposits in this fund are typically not needed for day-to-day operations, the investment vehicles used generally have a longer term and higher yield than those held in the STIF. The sole participants of the portfolio are the North Carolina Retirement Systems.

Equity Investment – This portfolio primarily holds an equity-based trust. The North Carolina Retirement Systems are the sole participants in the portfolio.

Real Estate Investment – This portfolio holds investments in real estate-based trust funds, limited partnerships and other limited liability investment vehicles, group annuity contracts, and accounts managed under contractual relationships giving an external investment manager discretion. The North Carolina Retirement Systems are the sole participants in the portfolio.

Alternative Investment – This portfolio holds investments in limited partnerships and other limited liability investment vehicles, hedge funds, US Treasuries, and equities received in the form of distributions from its primary investments. The North Carolina Retirement Systems are the sole participants in the portfolio.

Opportunistic Fixed Income Investment – This portfolio holds investments in debt-related strategies made primarily through limited partnerships or other limited liability vehicles. The North Carolina Retirement Systems are the sole participants in the portfolio.

Inflation Sensitive Investment – This portfolio holds investments in assets that are acquired for the primary purpose of providing protection against risks associated with inflation made primarily through limited partnerships or other limited liability vehicles. The North Carolina Retirement Systems are the sole participants in the portfolio.

**Interest Rate Risk**

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of debt instruments. There is no formally adopted investment policy to manage interest rate risk. Fixed income assets of the STIF are invested in a laddered maturity approach that focuses on short maturity securities with ample liquidity. The STIF had a weighted average maturity of 1.6 years as of June 30, 2017. Most of the cash and cash equivalents of the major governmental and enterprise funds are invested in this portfolio.

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**Interest Rate Risk (Continued)**

The Pool maintained by the Treasurer had the following investments and maturities in the STIF as of June 30, 2017:

STIF	Investment Maturities (in Years)				
	Carry Amount	Less Than 1	1 to 5	6 to 10	More Than 10
	<i>(In Thousands)</i>				
<b>As of June 30, 2017</b>					
U.S. treasuries	\$ 8,338,575	\$ 7,642,804	\$ 695,771	\$ -	\$ -
U.S. agencies	12,657,912	449,997	12,207,915	-	-
Securities purchased with cash collateral under securities lending program:					
Repurchase agreements	577	577	-	-	-
Domestic corporate bonds	26,506	26,506	-	-	-
Repurchase agreements	1,455,000	1,455,000	-	-	-
Total short-term investment fund assets	<u>\$ 22,478,570</u>	<u>\$ 9,574,884</u>	<u>\$ 12,903,686</u>	<u>\$ -</u>	<u>\$ -</u>

The assets of the LTIF are primarily invested in securities with maturities longer than five years. The longer maturity range is more sensitive to interest rate changes; however, the longer duration structure of the portfolio provides a better match to the long duration characteristics of the retirement systems' liabilities. The Treasurer considers the maturity for interest rate risk purposes to be the length of time to the next reset date rather than the stated maturity. The LTIF had a weighted average maturity of 18.2 years as of June 30, 2017.

The LTIF holds investments in GNMA mortgage pass-through funds. Critical to the pricing of these securities are the specific features of the cash flows from the interest and principal payments of the underlying mortgages. Therefore, these valuations are sensitive to the potential of principal prepayments by mortgagees in periods of changing interest rates. Also, included within the LTIF are U.S. government agencies and corporate bonds which may carry call options in which the issuer has the option to prepay the principal at certain dates over the life of the security. As such, these types of securities are more sensitive to the decline in long-term interest rates than similar securities without call options. In addition to the corporate bonds with call options, there are corporate bonds with variable coupon rates that reset on specific dates. Critical to the cash flows and pricing of these securities are the changes in interest rates.

The Pool maintained by the Treasurer had the following investments and maturities in the LTIF as of June 30, 2017:

LTIF	Investment Maturities (in Years)				
	Carry Amount	Less Than 1	1 to 5	6 to 10	More Than 10
	<i>(In Thousands)</i>				
<b>As of June 30, 2017</b>					
U.S. treasuries	\$ 6,604,072	\$ -	\$ 107,067	\$ 3,376,108	\$ 3,120,897
U.S. agencies	747,277	-	-	-	747,277
Mortgage pass-through	8,985,830	-	1,743	13,189	8,970,898
Securities purchased with cash collateral under securities lending program:					
Repurchase agreements	175,336	175,336	-	-	-
Domestic corporate bonds	25,508	25,508	-	-	-
Domestic corporate bonds	8,610,762	88,282	603,584	4,029,215	3,889,681
Total long-term investment fund assets	<u>\$ 25,148,785</u>	<u>\$ 289,126</u>	<u>\$ 712,394</u>	<u>\$ 7,418,512</u>	<u>\$ 16,728,753</u>

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**Interest Rate Risk (Continued)**

The Other Investment Portfolios hold fixed income investments in U.S. treasuries and collective investment funds. The Pool maintained by the Treasurer had the following investments and maturities separated by Other Investment Portfolios as of June 30, 2017:

<b>Other Investment Portfolios</b>	<b>Investment Maturities (in Years)</b>				
	<b>Carry Amount</b>	<b>Less Than 1</b>	<b>1 to 5</b>	<b>6 to 10</b>	<b>More Than 10</b>
	<i>(In Thousands)</i>				
<b>As of June 30, 2017</b>					
U.S. treasuries	\$ 266,144	\$ 187,780	\$ 78,364	\$ -	\$ -
Asset backed securities	7,676	-	210	139	7,327
Commercial mortgage backed securities	13,755	316	-	-	13,439
Collateralized mortgage obligations	53,275	10,105	-	458	42,712
Collective investment funds	964,615	964,615	-	-	-
Domestic corporate bonds	187,534	67,473	21,050	64,131	34,880
Foreign government bonds	16,066	-	1,051	9,879	5,136
Securities purchased with cash collateral under securities lending program:					
Asset-backed securities	28,601	28,601	-	-	-
Repurchase agreements	467,455	467,455	-	-	-
<b>Total other investment portfolios assets</b>	<b>\$ 2,005,121</b>	<b>\$ 1,726,345</b>	<b>\$ 100,675</b>	<b>\$ 74,607</b>	<b>\$ 103,494</b>

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**Interest Rate Risk (Continued)**

The major investment classifications had the following attributes as of June 30, 2017:

**As at June 30, 2017**

<b>Investment Classification</b>	<b>Principal Amount</b>	<b>Range of Interest Rates</b>
	<i>(In Thousands)</i>	
<b>STIF</b>		
U.S. treasuries	\$ 8,350,000	0.50%-1.00%
U.S agencies	12,658,000	1.00%-2.29%
Securities purchased with cash collateral under securities lending program:		
Repurchase agreements	577	1.15%
Domestic corporate bonds	26,500	1.61%-1.62%
Repurchase agreements	1,455,000	0.70%-1.30%
<b>LTIF</b>		
U.S. treasuries	5,753,086	0.75%-8.00%
U.S agencies	530,786	4.65%-7.13%
Mortgage pass-throughs	8,606,485	3.00%-9.00%
Securities purchased with cash collateral under securities lending program:		
Repurchase agreements	175,336	1.06%-1.16%
Domestic corporate bonds	25,500	1.61%-1.62%
Domestic corporate bonds	7,886,988	0.00%-10.50%
<b>Other investment portfolios</b>		
U.S. treasuries	266,287	0.00%-2.13%
Asset-backed securities	9,579	3.00%-5.79%
Commerical mortgage-backed securities	85,546	0.01%-6.18%
Collateralized mortgage obligations	92,228	1.09%-6.39%
Collective investment funds	964,615	0.00%-1.22%
Domestic corporate bonds	198,742	0.00%-17.53%
Foreign government bonds	15,550	2.88%-10.00%
Securities purchased with cash collateral under securities lending program:		
Asset-backed securities	29,633	1.34%-1.91%
Repurchase agreements	467,455	1.06%-1.15%

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**Credit Risk**

Credit risk is the risk an issuer or other counterparty to an investment will not fulfil its obligations such as the chance that a bond issuer will fail to pay interest or principal in a timely manner, or that negative perceptions of the issuer's ability to make these payments will cause security prices to decline. These circumstances may arise due to a variety of factors such as financial weakness, bankruptcy, litigation and/or adverse political developments. Certain fixed income securities, including obligations of the U.S. government or those explicitly guaranteed by the U.S. government, are not considered to have credit risk.

General Statute 147-69.1 limits credit risk by restricting the STIF's corporate obligations, asset-backed securities, and commercial paper to securities that bear the highest rating of at least one nationally recognized rating service and do not bear a rating below the highest by any nationally recognized rating service.

The STIF had the following credit quality distribution for securities with credit exposure as of June 30, 2017:

STIF	Aaa/AAA	Aa/AA	A	Baa/BBB	Less than Investment Grade	Unrated
<i>(In Thousands)</i>						
<b>As of June 30, 2017</b>						
U.S. agencies	\$ -	\$ 12,657,912	\$ -	\$ -	\$ -	\$ -
Securities purchased with cash collateral under securities lending program:						
Repurchase agreements	-	577	-	-	-	-
Domestic corporate bonds	-	26,506	-	-	-	-
Repurchase agreements	-	1,455,000	-	-	-	-
Total short-term investment fund assets	<u>\$ -</u>	<u>\$ 14,139,995</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>

Excluded from this chart are securities exempt from credit risk such as US Treasuries and GNMA's.

General Statute 147-69.2 specifies the cash investment options for the LTIF and limits credit risk by restricting the LTIF's asset-backed securities and corporate obligations to securities that bear one of the four highest ratings of at least one nationally recognized rating service. In the LTIF, all holdings were rated BBB (or equivalent) or higher at the time of purchase by at least one of the nationally recognized rating agencies.

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**Credit Risk (Continued)**

The LTIF had the following credit quality distribution for securities with credit exposure as of June 30, 2017:

<b>LTIF</b>	<b>Aaa/AAA</b>	<b>Aa/AA</b>	<b>A</b>	<b>Baa/BBB</b>	<b>Less than Investment Grade</b>	<b>Unrated</b>
<i>(In Thousands)</i>						
<b>As of June 30, 2017</b>						
U.S. agencies	\$ -	\$ 747,277	\$ -	\$ -	\$ -	\$ -
Domestic corporate bonds	56,178	685,417	4,082,600	3,455,378	331,189	-
Securities purchased with cash collateral under securities lending program:						
Repurchase agreements	-	175,336	-	-	-	-
Domestic corporate bonds	-	25,508	-	-	-	-
<b>Total long-term investment fund assets</b>	<b>\$ 56,178</b>	<b>\$ 1,633,538</b>	<b>\$ 4,082,600</b>	<b>\$ 3,455,378</b>	<b>\$ 331,189</b>	<b>\$ -</b>

Excluded from this chart are securities exempt from credit risk such as US Treasuries and GNMA's.

The Other Investment Portfolios of the Pool had the following credit quality distribution for securities with credit exposure as of June 30, 2017:

<b>Other Investment Portfolios</b>	<b>Aaa/AAA</b>	<b>Aa/AA</b>	<b>A</b>	<b>Baa/BBB</b>	<b>Less than Investment Grade</b>	<b>Unrated</b>
<i>(In Thousands)</i>						
<b>As of June 30, 2017</b>						
Asset-backed securities	\$ -	\$ -	\$ 3,074	\$ -	\$ 4,253	\$ 349
Commercial mortgage-backed securities	6,047	3,466	-	-	3,921	321
Collateralized mortgage obligations	602	6,659	-	-	43,217	2,797
Collective investment funds	-	-	-	-	-	964,615
Domestic corporate bonds	7,350	19,960	7,614	43,280	69,334	39,996
Foreign government bonds	-	198	3,147	7,823	4,898	-
Securities purchased with cash collateral under securities lending program:						
Asset-backed securities	-	23,583	1,756	-	3,262	-
Repurchase agreements	-	467,455	-	-	-	-
<b>Total other investment portfolios assets</b>	<b>\$ 13,999</b>	<b>\$ 521,321</b>	<b>\$ 15,591</b>	<b>\$ 51,103</b>	<b>\$ 128,885</b>	<b>\$ 1,008,078</b>

Excluded from this chart are securities exempt from credit risk such as US Treasuries and GNMA's.

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**Custodial Credit Risk**

Custodial credit risk for deposits is the risk that, in the event of a bank failure, the Pool's deposits may not be recovered. As of June 30, 2017, the Pool's deposits were exposed to custodial credit risk for non-negotiable certificates of deposit in the amount of \$10.6 million. The non-negotiable certificates of deposit were uninsured and were collateralized with securities not in the name of the Treasurer and held by an agent.

For an investment, custodial credit risk is the risk that, in the event of the failure of the counterparty, the Treasurer will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. As of June 30, 2017, the investments purchased with cash collateral under the securities lending programs of \$724 million were not exposed to custodial credit risk since the securities were held by the counterparty in separate accounts in the name of the Treasurer. All other investments of the Pool were not exposed to custodial credit risk at year-end. There is no formally adopted investment policy to manage custodial credit risk policy for these investment types.

The Treasurer's deposit policy for custodial credit risk is limited to complying with the collateralization rules of the North Carolina Administrative Code (Chapter 20 NCAC 7). The collateral securities must be governmental in origin (e.g., U.S. Treasury, U.S. agency, or state and local government obligations) or the highest grade commercial paper and bankers' acceptances. The market value of the collateral must not be less than the value of the uninsured deposits. The depositories may elect to collateralize deposits separately (dedicated method) or include deposits of the North Carolina local government units in a collateral pool with the State and certain component units (pooling method).

**Concentration of Credit Risk**

Concentration of credit risk is the risk of loss attributed to the magnitude of a government's investment in a single issuer. Mutual funds, money market funds, and external pooled accounts are excluded from this disclosure requirement. Obligations explicitly guaranteed by the U.S. Government are not considered to have credit risk. However, more than 5% of the Pool's securities were invested in Federal Home Loan Mortgage Corporation. These investments totalled \$9.5 billion and comprised 8.6% of the Pool's total investments. These investments are held by the STIF and LTIF portfolios and are classified as U.S. Agencies. Effective June 30, 2017 there is no formal policy regarding concentration of credit risk.

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**Foreign Currency Risk**

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or a deposit. There is no formally adopted investment policy to limit foreign currency exposure.

The Pool had the following exposure to foreign currency risk as of June 30, 2017:

Currency	Carrying Value As of June 30, 2017					Total
	Investment Type					
	Equity Based Trust - International	Alternative Investment- Private Equity Investment Partnerships	Real-Estate Trust Funds	Opportunistic Fixed Income Investment Partnership		
	<i>(In Thousands)</i>					
Euro	\$ 3,434,108	\$ 358,568	\$ 71,774	\$ 48,517	\$ 3,912,967	
Japanese Yen	2,477,160	-	27,410	-	2,504,570	
British Pound Sterling	1,723,955	78,126	275,501	-	2,077,582	
Hong Kong Dollar	972,852	-	47,098	-	1,019,950	
Swiss Franc	889,677	-	2,332	-	892,009	
Australian Dollar	558,134	-	14,771	-	572,905	
Swedish Krona	447,749	-	3,268	-	451,017	
Danish Krone	261,179	-	-	-	261,179	
New Taiwan Dollar	232,654	-	62	-	232,716	
South Korean Won	218,009	-	-	-	218,009	
Indian Rupee	211,738	-	919	-	212,657	
Singapore Dollar	189,225	-	10,903	-	200,128	
Canadian Dollar	138,094	-	7,089	-	145,183	
South African Rand	65,337	-	7,787	-	73,124	
Brazil Cruzeiro Real	62,641	-	3,874	-	66,515	
Norwegian Krone	55,825	-	93	-	55,918	
Mexican Peso	41,578	-	3,988	-	45,566	
Thai Baht	26,633	-	4,693	-	31,326	
Turkish Lira	27,067	-	773	-	27,840	
New Zealand Dollar	23,175	-	223	-	23,398	
Malaysian Ringgit	20,372	-	2,623	-	22,995	
Indonesian Rupiah	20,561	-	1,769	-	22,330	
Phillipines Peso	14,594	-	5,717	-	20,311	
Other Currencies	38,165	-	1,963	-	40,128	
Total investments subject to foreign currency risk	\$ 12,150,482	\$ 436,694	\$ 494,630	\$ 48,517	\$ 13,130,323	

The Pool recognized an aggregate foreign currency transaction loss of \$425 million for the fiscal year ended June 30, 2017 as part of the Pool's net depreciation in fair value of investments. Transaction gains or losses result from a change in exchange rates between the U.S. dollar and the currency in which a foreign currency transaction is denominated.

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**4. External Investment Pool Fair Value Measurement**

The Pool categorizes fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy levels are summarized in the three broad levels listed below:

Level 1 – Unadjusted quoted prices for identical instruments in active markets.

Level 2 – Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs and significant value drivers are observable.

Level 3 – Valuations derived from valuation techniques in which significant value drivers are unobservable.

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**4. External Investment Pool Fair Value Measurement (Continued)**

The Pool had the following recurring fair value measurements as of June 30, 2017:

**Investments and Derivative Instruments at Fair Value**

	As of 6/30/2017	Fair Value Measurements Using		
		Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
<i>(In Thousands)</i>				
<b>Investments measured at fair value</b>				
<b>STIF</b>				
U.S. Treasuries	\$ 8,338,575	\$ -	\$ 8,338,575	\$ -
U.S. Agencies	12,657,912	-	12,657,912	-
Securities purchased with cash collateral under securities lending program:				
Domestic corporate bonds	26,506	-	26,506	-
Subtotal	<u>\$ 21,022,993</u>	<u>\$ -</u>	<u>\$ 21,022,993</u>	<u>\$ -</u>
<b>LTIF</b>				
U.S. Treasuries	6,604,072	100,632	6,503,440	-
U.S. agencies	747,277	-	747,277	-
Mortgage pass-throughs	8,985,830	-	8,985,830	-
Securities purchased with cash collateral under fixed income securities lending program:				
Domestic corporate bonds	25,508	-	25,508	-
Domestic corporate bonds	8,610,762	-	8,610,762	-
Foreign government bonds	-	-	-	-
Subtotal	<u>\$ 24,973,449</u>	<u>\$ 100,632</u>	<u>\$ 24,872,817</u>	<u>\$ -</u>
<b>Other investment portfolios</b>				
U.S. treasuries-inflation	266,144	-	266,144	-
Asset-backed securities	7,676	-	7,676	-
Collateralized mortgage obligations	53,275	-	53,275	-
Commercial mortgage-backed securities	13,755	-	13,755	-
Securities purchased with cash collateral under equity securities lending program:				
Asset-backed securities	28,601	-	28,601	-
Equity securities - domestic	14,375,249	14,375,249	-	-
Equity securities - foreign	13,536,942	13,536,916	-	26
Equity securities - preferred domestic	38,600	1,614	-	36,986
Equity securities - preferred foreign	63,731	63,731	-	-
Domestic corporate bonds	187,534	-	156,560	30,974
Foreign government bonds	16,066	-	16,066	-
Subtotal	<u>\$ 28,587,573</u>	<u>\$ 27,977,510</u>	<u>\$ 542,077</u>	<u>\$ 67,986</u>
<b>Investment derivative instruments</b>				
Futures contracts	3,782	3,782	-	-
Futures contracts (liability)	(5,862)	(5,862)	-	-
Total investment derivative instruments	<u>\$ (2,080)</u>	<u>\$ (2,080)</u>	<u>\$ -</u>	<u>\$ -</u>
Total investments by fair value level	<u>\$ 74,581,935</u>	<u>\$ 28,076,062</u>	<u>\$ 46,437,887</u>	<u>\$ 67,986</u>

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**4. External Investment Pool Fair Value Measurement (Continued)**

**Investments measured at the Net Asset Value (NAV)**

		Unfunded commitments	Redemption frequency (if currently eligible)	Redemption notice period (days)
			<i>(In Thousands)</i>	
Commingled real estate funds <sup>(1)</sup>	\$ 860,913	\$ -	Daily, quarterly	1 - 60
Core real estate funds <sup>(2)</sup>	3,333,325	868,549	Quarterly, illiquid	90-illiquid
Equity rebalancing <sup>(3)</sup>	1,443,498	-	Daily	1 - 5
Hedge funds			Illiquid	N/A
Global public equity - hedged <sup>(4)</sup>	3,059,635	-	Daily, monthly, quarterly, illiquid	3 - 180
Inflation sensitive - publicly traded natural resources <sup>(5)</sup>	474,429	25,000	Daily, monthly	5 - 35
Inflation sensitive - real assets and other diversifiers <sup>(6)</sup>	227,352	-	Quarterly	60
Multi-strategy funds <sup>(7)</sup>	149,945	2	Weekly, quarterly, illiquid	5 - illiquid
Opportunistic fixed income - distressed credit <sup>(8)</sup>	94,384	-	Illiquid	15 - 90
Opportunistic fixed income - hedged fixed income <sup>(9)</sup>	2,701,122	32,715	Monthly, quarterly, annually	15 - 90
Inflation protected bonds <sup>(10)</sup>	309,377	-	Monthly	30
Long-only public equity <sup>(11)</sup>	385,864	410,333	Illiquid	Illiquid
Non-core real estate funds <sup>(12)</sup>	3,667,310	2,218,334	Illiquid	Illiquid
Private credit <sup>(13)</sup>	2,728,621	1,380,436	Daily, annually, illiquid	60 - illiquid
Private equity funds <sup>(14)</sup>	4,803,649	3,068,169	Illiquid	Illiquid
Private infrastructure funds <sup>(15)</sup>	625,264	35,477	Illiquid	Illiquid
Private multi-strategy funds <sup>(16)</sup>	161,034	212,103	Illiquid	Illiquid
Private natural resources funds <sup>(17)</sup>	2,561,369	831,860	Illiquid	Illiquid
Private real asset funds <sup>(18)</sup>	1,728,046	664,921	Illiquid	Illiquid
Collective investment funds <sup>(19)</sup>	964,615	-	Daily	1
Commingled international equity <sup>(20)</sup>	3,614,936	-	Daily	1
Total investments at the NAV	<u>\$ 33,894,688</u>			
<b>Subtotal</b>	<u>\$ 108,476,623</u>			
Certificates of deposit (non-negotiable)	10,600			
Repurchase agreements	2,098,902			
Investments at cost	<u>\$ 2,109,502</u>			
<b>Total Investments and Securities Lending Collateral</b>	<u>\$ 110,586,125</u>			

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- (1) *Commingled Real Estate Funds* Four funds. Each are valued at the net asset value of units held at the end of the period based upon the fair value of the underlying investments.
- (2) *Core Real Estate Funds* Nineteen funds. These investments are valued using net assets valued as of the previous quarter end, plus current quarter cash flows. These investments include a mix of predominately U.S. domiciled equity and debt investments in core commercial real estate. These funds are not eligible for redemption. Distributions are received as underlying investments within the funds are liquidated, which on average can occur over the span of 5-10 years.
- (3) *Equity rebalancing* One fund. This investment is valued at NAV per share. This investment is an options-based equity rebalancing program used as a tool to maintain asset exposures within plan policy portfolio tolerances.
- (4) *Hedge funds – Global Public Equity-Hedged* Five funds. These investments are valued at the NAV per share, and may include various equity-based hedge fund strategies. Currently, the strategies represented in this category include one which aims to target a specific beta relative to the MSCI ACWI Total Return Index, and one which seeks to profit by purchasing securities trading at a discount to their intrinsic value. \*Two funds have lockups of 2 and 3 years. These lockups will expire in September 2018 and July 2019, respectively, after which time quarterly liquidity will be available with up to a 45 – 180 day notice.
- (5) *Hedge funds – Inflation Sensitive-Publicly Traded Natural Resources* Three funds. These investments are valued at NAV per share. These strategies invest in commodity and natural resource public equity and public debt using long-only or hedged implementations.
- (6) *Hedge Funds - Inflation Sensitive-Real Assets and Other Diversifiers* One fund. This investment is valued at NAV per share. These investments may include infrastructure, real assets (e.g. ships, airplanes, rail cars, mines, real estate, etc.), royalties, and combinations of any of this and other investments whose primary purpose is providing protection against risks associated with inflation. Currently, the strategy represented in this category is one which invests in a combination of equity and debt instruments of companies which derive at a minimum 50% of their revenues from energy infrastructure and natural resources.
- (7) *Hedge Funds - Multi-Strategy Funds* Four funds. These investments are valued at NAV per share. These investments have the flexibility to invest across markets, asset classes, commodities, and currencies, including hedging. Strategies may include opportunistic, event-driven, relative value, global macro, rebalancing, tail hedging and overlays.
- (8) *Hedge Funds - Opportunistic Fixed Income-Distressed Credit* One fund. This investment is valued at NAV per share. These investments may include strategies that trade distressed debt, but occasionally actively participate in restructuring and seek control post-reorganization of target issuers. These strategies may have equity exposure.
- (9) *Hedge Funds - Opportunistic Fixed Income - Hedged Fixed Income* Eight funds. These investments are valued at NAV per share. These investments include hedged implementations of market neutral strategies, relative value strategies, and multi-strategy (i.e., predominantly fixed income) utilizing non-investment grade instruments.

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- <sup>(10)</sup> *Inflation Protected Bonds* One fund. This investment is valued at NAV per share. These strategies may invest in Treasury Inflation Protected Securities, non U.S. inflation linked bonds, or floating rate debt. Currently, the strategy represented in this category is one which invests primarily in publicly traded securities, but also has the ability to invest up to 15% in private investments.
- <sup>(11)</sup> *Long-only Public Equity* One fund. This investment is valued at NAV per share. These investments may include publicly traded U.S. equity, non-U.S. equity, and global equity securities held in long-only vehicles. Currently, the strategy represented in this category is one with a North American focus, which takes an activist role in investing. As such, its portfolio will tend to be concentrated in its positioning. **\*\*The strategy was entered in December 2015, from which time the funds were subject to an initial 5-year lockup. Funds may be withdrawn as of the last day of each calendar year following the expiration of this initial lockup period, provided that 90 days written notice is given.**
- <sup>(12)</sup> *Non-Core Real Estate Funds* 88 funds. These investments are valued using net assets valued as of the previous quarter end, plus current quarter cash flows. These investments include a mix of global equity and debt investments in commercial and residential real estate, and each strategy falls into one of three major categories: Value (with a target allocation of 50%), Opportunistic (with a target allocation of 50%) and Special Situations (with a target allocation of 0%). These funds are not eligible for redemption. Distributions are received as underlying investments within the funds are liquidated, which on average can occur over the span of 5-10 years.
- <sup>(13)</sup> *Private Credit Funds* 27 funds. These investments are valued using net assets valued as of the previous quarter end, plus current quarter cash flows. These investments include a mix of non-investment grade or unrated obligations, debt securities and asset-backed securities, including but not limited to bank loans, high yield, mortgage-backed securities, convertibles, whole loans, mezzanine debt, credit default swaps, collateralized debt obligations and sovereign debt. These funds are not eligible for redemption. Distributions are received as underlying investments within the funds are liquidated, which on average can occur over the span of 5-10 years.
- <sup>(14)</sup> *Private Equity Funds* 118 funds. These investments are valued using net assets valued as of the previous quarter end, plus current quarter cash flows. These investments include a mix of buyout, venture capital, growth equity, and private special situations vehicles. All investments fall into one of three major categories: Growth (with a target allocation of 20%), Buyout (with a target allocation of 50%) and Special Situations (with a target allocation of 30%). These funds are not eligible for redemption. Distributions are received as underlying investments within the funds are liquidated, which on average can occur over the span of 5-10 years.
- <sup>(15)</sup> *Private Infrastructure Funds* Four funds. These investments are valued using net assets valued as of the previous quarter end, plus current quarter cash flows. These strategies invest in various infrastructure-related markets including but not limited to utilities, transportation, energy and communication. These funds are not eligible for redemption. Distributions are received as underlying investments within the funds are liquidated, which on average can occur over the span of 5-10 years.

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- <sup>(16)</sup> *Private Multi-Strategy Funds* Two funds. These investments are valued using net assets valued as of the previous quarter end, plus current quarter cash flows. These investments have the flexibility to invest across markets, asset classes, commodities, and currencies, including hedging. Strategies may include opportunistic, event-driven, relative value, global macro, rebalancing, tail hedging and overlays. Currently the strategy represented in this category is considered opportunistic, and will tactically invest across a broad range of investible assets. These funds are not eligible for redemption. Distributions are received as underlying investments within the funds are liquidated, which on average can occur over the span of 5-10 years.
- <sup>(17)</sup> *Private Natural Resources Funds* 30 funds. These investments are valued using net assets valued as of the previous quarter end, plus current quarter cash flows. These strategies make non-public equity or debt investments in timberland, energy, agriculture, and other natural resources implementations. These funds are not eligible for redemption. Distributions are received as underlying investments within the funds are liquidated, which on average can occur over the span of 5-10 years.
- <sup>(18)</sup> *Private Real Asset Funds* Nine funds. These investments are valued using net assets valued as of the previous quarter end, plus current quarter cash flows. These investments represent a mix of strategies including ships, airplanes, rail cars, mines, real estate and other markets whose primary purpose is providing protection against risks associated with inflation. These funds are not eligible for redemption. Distributions are received as underlying investments within the funds are liquidated, which on average can occur over the span of 5-10 years.
- <sup>(19)</sup> *Collective Investment Funds* Two funds. These funds are invested in the BNY Mellon EB Temporary Investment Fund and the BlackRock T-Fund. These funds primarily invest in instruments issued by the US Government and Federal agencies, short-term corporate obligations, commercial paper, and certificates of deposit. The average weighted maturity of these funds does not exceed 60 days.
- <sup>(20)</sup> *Commingled International Equity Funds* Six funds. Each are valued at the net asset value of units held at the end of the period based upon the fair value of the underlying investments.

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**Valuation Methodologies and Inputs**

On-the-run U.S. Treasuries, bonds, and equity securities classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets for those securities. Futures contracts are marked to market and settled on a daily basis in an actively traded market.

Level 2 U.S. Treasuries are evaluated by using data from several live feeds which include active market makers and inter-dealer brokers. Sources are reviewed on the basis of their historical accuracy for individual issues and maturity ranges.

Level 2 U.S. Agencies, which are primarily mortgage pass-through securities, use a dealer derived to-be-announced (TBA) security as a benchmark, plus a dollar (or pay up) adjustment which is based on market data for the underlying collateral. When the underlying TBA is not applicable or observable, a discounted cash flow is calculated using a spread to the treasury curve based on applicable market data and internally generated long-term speed.

Level 2 bonds are priced using both spread-based and priced-based evaluations. For spread-based evaluations, an option adjusted spread model is developed incorporating credit risk and based on the new issue market, secondary trading, and dealer quotes. For priced-based evaluations, evaluators use recently executed transactions of similar securities and dealer quotes to arrive at appropriate pricing. These methods also are used to value Canadian government bonds, which make up foreign government bonds classified as Level 2.

Level 2 certificates of deposit, commercial paper, bank notes, and asset-backed securities are priced using a model which considers days to final maturity to generate a yield based on the relevant curve for the security. Adjustments to the yield can be made as market conditions warrant. Days are counted from settlement to final maturity using the relevant settlement convention for each market. A bid evaluation is calculated from these inputs.

Level 2 collateralized mortgage obligations and commercial mortgage-backed securities are evaluated using predicted cash flows, adjusted by an applicable spread/yield/price adjustment incorporating benchmark yields, collateral performance, and prevailing market conditions.

Level 3 bonds and commercial paper are priced using broker quotes. Level 3 equity securities are priced using manager pricing.

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**5. External Investment Pool Securities Lending**

Based on General Statute 147-69.3(e), the Treasurer lends securities from its Pool to broker-dealers and other entities (borrowers) for collateral that will be returned for the same securities in the future. The Treasurer's custodian manages the securities lending program for the internally managed fixed income portfolios and for the equity based trust. During the year, the securities lending program lent U.S. government and agency securities, corporate bonds, equity securities and notes for collateral. The program is permitted to receive cash, U.S. government and agency securities as collateral for the securities lent.

The collateral is initially pledged at 102% of the market value of the domestic securities lent in both the fixed income portfolios and the equity based trust and 105% of the market value of foreign securities lent in the equity based trust program. Additional collateral is required if its value falls to less than 100% of the market value of the securities lent. There are no restrictions on the amount of loans that can be made. Substantially all security loans can be terminated on demand by either the Treasurer or the borrower. The Treasurer cannot pledge or sell the collateral securities received unless the borrower defaults.

The cash collateral received is invested by the lending provider and held in a separate account in the name of the Treasurer. The policies for investments purchased with cash collateral under the securities lending program are set forth in the contract with the lending provider. The weighted average maturities of the cash collateral investments are more than the weighted average maturities of the securities loans.

As of June 30, 2017, the Treasurer had no credit risk exposure to borrowers because the amounts the Treasurer owed the borrowers exceeded the amounts the borrowers owed the Treasurer. The lending provider is contractually obligated to indemnify the Treasurer for certain conditions, the most important is default on the part of the borrowers.

As of September 15, 2016, securities purchased with cash collateral under the current securities lending guidelines are limited to repurchase agreements and shares in money market funds registered under the Investment Company Act of 1940 and that comply with Rule 2a-7. The securities pledged as collateral for repurchase agreements are limited to securities issued or guaranteed by the U.S. government or its agencies. All counterparties for repurchase agreements must have a short-term debt rating of at least A2, P2, or F2 by at least one of the nationally recognized statistical rating organisations.

Under prior securities lending contractual guidelines, additional flexibility was given with regards to acceptable assets purchased with cash collateral. As of June 30, 2017, a total of \$80.6 million remained in securities approved under prior guidelines, consisting of floating rate notes and asset backed securities. These securities will remain in the account until maturity or until sold. The weighted average maturity of investments, including the securities purchased under prior guidelines, was five days.

As of June 30, 2017, the fair value of loaned securities was \$5.3 billion; the fair value of the associated collateral was \$5.4 billion of which \$724 million was cash.

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**6. External Investment Pool Derivatives**

Derivative instruments are securities that derive value from another asset and are in the form of a contract between two or more parties. Common derivatives are futures contracts, forward contracts, options and swaps.

The Pool maintained by the Treasurer has investments in equity and commodity futures, foreign currency forward and spot currency contracts. All of these derivative instruments are designated as investment derivatives; they are used to implement portfolio strategies, capture valuation opportunities, and to exploit market inefficiencies. The primary risks managed by using these derivative instruments include foreign exchange rate and market price risks.

Futures contracts are standardized, exchange-traded contracts to purchase or sell a specific financial instrument at a predetermined price. Gains and losses on futures contracts are settled daily based on underlying principal value and do not involve an actual transfer of the specific instrument. The exchange assumes the risk that the counterparty will not pay and generally requires margin payments to minimize such risk. Futures are generally used to achieve the desired market exposure of a security or index or to rebalance the total portfolio.

Forward currency contracts are agreements to exchange the currency of one country for the currency of another country at an agreed-upon price and settlement date. These forward commitments are not standardized and carry credit risk due to the possible non-performance of one of the counterparties. The maximum potential loss is the aggregate face value in U.S. dollars at the time the contract was opened; however, the likelihood of such a loss is remote. In addition to forward currency contracts, the Pool also utilizes spot currency contracts. Spot currency contracts are used primarily for trade settlement and currency repatriation.

As of June 30, 2017, the counterparties' credit ratings for forward currency contracts that are subject to credit risk had a rating of no less than BBB by one of the nationally recognized ratings agencies.

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**6. External Investment Pool Derivatives (Continued)**

The following table is a summary of derivative instrument activity during the fiscal year and balances at year-end, classified by type with notional amount for the year ending June 30, 2017:

<b>Investment Derivatives</b>	<b>Classification</b>	<b>Increase (Decrease) in in Fair Value</b>		<b>Fair Value</b>		<b>Notional (In U.S. \$)</b>
		<b>Amount (In U.S. \$)</b>	<b>Amount (In U.S. \$)</b>	<b>Classification</b>	<b>Amount (In U.S. \$)</b>	
<i>(In Thousands)</i>						
US dollar equity futures	Investment Income	\$ (747)	Investment	\$ (747)	\$	230,643
Foreign equity futures a)	Investment Income	(608)	Investment	(608)		33,083
Commodity futures b)	Investment Income	(725)	Investment	(725)		204,737
Forward currency contracts	Investment Income	(1,201)	Investment	(1,201)		144,270
Spot currency contracts	Investment Income	(4)	Investment	(4)		26,630

a) 8.3 million Japanese Yen; 12.5 million Euro; 9 million Great British Pound; 3.2 million Australian Dollar.

b) 368,000 barrels of brent crude oil; 106,500 barrels crude oil; 2,162,500 pounds copper;

20,100 troy ounces gold; 1,490,000 bushels wheat; 12,320,000 pounds live cattle.

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**6. External Investment Pool Derivatives (Continued)**

Schedule of all foreign derivatives outstanding at June 30, 2017 are presented below by currency:

Fair value of foreign currency contracts, Assets (Liabilities)

As of June 30, 2017

Currency	Forwards Currency Contracts	Spot Currency Contracts	Foreign Equity Futures	Total
	(In Thousands)			
Australian Dollar	\$ (20)	\$ (2)	\$ (40)	\$ (62)
Brazilian Real	8	(1)	-	7
British Pound Sterling	8	(2)	(234)	(228)
Canadian Dollar	66	-	-	66
Chinese Yuan	(10)	-	-	(10)
Egyptian Pound	1	-	-	1
Euro	(146)	5	(402)	(543)
Hong Kong Dollar	(18)	-	-	(18)
Indian Rupee	1	-	-	1
Indonesian Rupiah	(37)	-	-	(37)
Israeli Shekel	11	-	-	11
Japanese Yen	86	4	68	158
Malaysian Ringgit	14	-	-	14
Mexican Peso	18	(3)	-	15
New Zealand Dollar	(1,372)	(1)	-	(1,373)
Norwegian Krone	2	-	-	2
Philippine Peso	1	-	-	1
Polish Zloty	(3)	-	-	(3)
Singapore Dollar	66	-	-	66
South African Rand	2	(4)	-	(2)
Swedish Krona	14	-	-	14
Swiss Franc	80	-	-	80
Thai Baht	1	-	-	1
Turkish Lira	26	-	-	26
<b>Total</b>	<b>\$ (1,201)</b>	<b>\$ (4)</b>	<b>\$ (608)</b>	<b>\$ (1,813)</b>

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**7. Bond Index Investment Pool**

During fiscal year 2017, North Carolina Department of State Treasurer established an external government sponsored bond index investment pool (“BIF”) in which the Treasurer is authorized to invest funds for governmental entities which are outside the Retirement Systems. The BIF invests in high quality debt securities eligible under General Statute 147-69.2(b) (1)-(6). The BIF consists of a separate account managed by a fund manager selected by the Department of State Treasurer.

Participants in the BIF may include public hospitals, the Local Government Other Post Employment Benefit Trust, the Death Benefit Plan of N.C., the Disability Income Plan of N.C., the Register of Deeds’ Supplemental Pension Fund, and other funds and component units of the State of North Carolina with investment authority under General Statute 147-69.2.

The deposits are commingled; and therefore, the State Treasurer considers all funds to be part of a single pool. The BIF contains deposits from funds and component units of the State of North Carolina reporting entity as well as deposits from certain legally separate organizations outside the State of North Carolina reporting entity. The BIF is not registered with the Securities and Exchange Commission and is not subject to any formal oversight other than that of the legislative body of the State of North Carolina.

Net investment income earned by the BIF is distributed on a pro rata basis to all participants on a monthly basis net of fees.

**Interest Rate Risk**

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of debt instruments. There is no formally adopted investment policy to manage interest rate risk. The BIF had a weighted average maturity of 7.99 years as of June 30, 2017.

The BIF maintained by the Treasurer had the following investments and maturities as of June 30, 2017:

<b>Bond Index</b>	<b>Investment Maturities (in Years)</b>				
	<b>Carry Amount</b>	<b>Less Than 1</b>	<b>1 to 5</b>	<b>6 to 10</b>	<b>More Than 10</b>
	<i>(In Thousands)</i>				
<b>As of June 30, 2017</b>					
U.S. treasuries	\$ 594,894	\$ -	\$ 329,810	\$ 171,431	\$ 93,653
U.S. agencies	23,052	-	10,955	8,543	3,554
Commercial mortgage-backed securities	23,048	-	-	-	23,048
Asset-backed securities	7,070	-	1,602	5,468	-
Mortgage pass-through	445,800	-	917	17,693	427,190
Collective investment funds	12,350	12,350	-	-	-
Municipal bonds	10,063	-	184	30	9,849
Domestic corporate bonds	406,256	-	157,150	117,282	131,824
Foreign government bonds	64,073	-	49,304	7,548	7,221
Total investment fund assets	<b>\$ 1,586,606</b>	<b>\$ 12,350</b>	<b>\$ 549,922</b>	<b>\$ 327,995</b>	<b>\$ 696,339</b>

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The major investment classifications had the following attributes as of June 30, 2017:

<b>Investment Classification</b>	<b>Principal Amount</b>	<b>Range of Interest Rates</b>
<i>(In Thousands)</i>		
<b>Bond Index</b>		
U.S. Treasuries	\$ 573,651	0.75%-6.88%
U.S agencies	22,000	1.13%-6.25%
Commercial mortgage-backed securities	22,442	1.68%-3.76%
Asset-backed securities	7,100	1.59%-1.92%
Mortgage pass-throughs	431,525	2.50%-5.50%
Collective investment funds	12,350	0.99%
Municipal bonds	7,880	3.00%-7.55%
Domestic corporate bonds	389,085	1.10%-9.25%
Foreign government bonds	63,305	0.88%-8.13%

**Credit Risk**

Credit risk is the risk an issuer or other counterparty to an investment will not fulfil its obligations such as the chance that a bond issuer will fail to pay interest or principal in a timely manner, or that negative perceptions of the issuer's ability to make these payments will cause security prices to decline. These circumstances may arise due to a variety of factors such as financial weakness, bankruptcy, litigation and/or adverse political developments. Certain fixed income securities, including obligations of the U.S. government or those explicitly guaranteed by the U.S. government, are not considered to have credit risk.

General Statute 147-69.2 specifies the cash investment options for the BIF and limits credit risk by restricting the BIF's asset-backed securities and corporate obligations to securities that bear one of the four highest ratings of at least one nationally recognized rating service. In the BIF, all holdings were rated BBB (or equivalent) or higher at the time of purchase by at least one of the nationally recognized rating agencies.

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The BIF had the following credit quality distribution for securities with credit exposure as of June 30, 2017:

<b>Bond Index</b>	<b>Aaa/AAA</b>	<b>Aa/AA</b>	<b>A</b>	<b>Baa/BBB</b>	<b>Less than Investment Grade</b>	<b>Unrated</b>
<i>(In Thousands)</i>						
<b>As of June 30, 2017</b>						
U.S. agencies	\$ -	\$ 23,052	\$ -	\$ -	\$ -	\$ -
Commercial mortgage-backed securities	23,048	-	-	-	-	-
Asset-backed securities	7,070	-	-	-	-	-
Mortgage pass-throughs	-	334,587	-	-	-	-
Collective investment funds	-	-	-	-	-	12,350
Municipal bonds	592	5,923	2,611	937	-	-
Domestic corporate bonds	2,011	25,609	147,075	219,818	11,743	-
Foreign government bonds	40,253	3,993	6,025	13,802	-	-
Total investment fund assets	<u>\$ 72,974</u>	<u>\$ 393,164</u>	<u>\$ 155,711</u>	<u>\$ 234,557</u>	<u>\$ 11,743</u>	<u>\$ 12,350</u>

Excluded from this chart are securities exempt from credit risk such as US Treasuries and GNMA's.

### **Custodial Credit Risk**

Custodial credit risk is the risk that, in the event of the failure of the counterparty, the Treasurer will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. As of June 30, 2017, the investments of the BIF were not exposed to custodial credit risk since the securities were held in separate accounts in the name of the Treasurer. There is no formally adopted investment policy to manage custodial credit risk policy for these investment types.

### **Concentration of Credit Risk**

Concentration of credit risk is the risk of loss attributed to the magnitude of a government's investment in a single issuer. Mutual funds, money market funds, and external pooled accounts are excluded from this disclosure requirement. Obligations explicitly guaranteed by the U.S. Government are not considered to have credit risk. However, more than 5% of the BIF's securities were invested in Federal Home Loan Mortgage Corporation (FHLMC) and Federal National Mortgage Association (FNMA). FHLMC investments totalled \$110.5 million and comprised 7% of BIF's total investments; FNMA investments totalled \$243.7 million and comprised 15.4% of BIF's total investments. These investments are classified as U.S. Agencies. Effective June 30, 2017, there is no formal policy regarding concentration of credit risk.

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**Fair Value Measurement**

The BIF categorizes fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The BIF had the following recurring fair value measurements as of June 30, 2017:

**Investments and Derivative Instruments at Fair Value**

	As of 6/30/2017	Fair Value Measurements Using		
		Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
<i>(In Thousands)</i>				
<b>Investments measured at fair value</b>				
<b>Bond Index Fund</b>				
U.S. Treasuries	\$ 594,894	\$ 9,819	\$ 585,075	\$ -
U.S. Agencies	23,052	-	23,052	-
Asset-backed securities	7,070	-	7,070	-
Commercial mortgage-backed securities	23,048	-	23,048	-
Mortgage pass-throughs	445,800	-	445,800	-
Municipal bonds	10,063	-	10,063	-
Domestic corporate bonds	406,256	-	406,256	-
Foreign government bonds	64,073	-	64,073	-
Total investments by fair value level	<u>\$ 1,574,256</u>	<u>\$ 9,819</u>	<u>\$ 1,564,437</u>	<u>\$ -</u>
<b>Investments measured at the Net Asset Value (NAV)</b>				
		Unfunded commitments	Redemption frequency	Redemption notice (days)
Collective investment fund <sup>(1)</sup>	12,350	-	Daily	1
<b>Total investments at fair value</b>	<u>\$ 1,586,606</u>			

<sup>(1)</sup> One fund. This fund invests in a diversified portfolio of U.S. government securities, U.S. government agency securities, and repurchase agreements. It is operated on an amortized cost basis, and transacts at \$1.00 per unit.

**Valuation Methodologies and Inputs**

On-the-run U.S. Treasuries classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets for those securities.

Level 2 U.S. Treasuries are evaluated by using data from several live feeds which include active market makers and inter-dealer brokers. Sources are reviewed on the basis of their historical accuracy for individual issues and maturity ranges.

Level 2 U.S. Mortgage pass-through securities use a dealer derived to-be-announced (TBA) security as a benchmark, plus a dollar (or pay up) adjustment which is based on market data for the underlying collateral. When the underlying TBA is not applicable or observable, a discounted cash flow is calculated using a spread to the treasury curve based on applicable market data and internally generated long-term spread.

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Level 2 domestic corporate bonds are priced using both spread-based and priced-based evaluations. For spread-based evaluations, an option adjusted spread model is developed incorporating credit risk and based on the new issue market, secondary trading, and dealer quotes. For price-based evaluations, evaluators use recently executed transactions of similar securities and dealer quotes to arrive at appropriate pricing. These methods are also used to value Canadian government bonds. For non-US/Canadian foreign government bonds, the majority of issues are evaluated using discounted cash flow models, incorporating option-adjusted features as appropriate.

### **8. Equity Index Investment Account**

The State Treasurer has contracted with an external party (Trustee) to create the equity index investment account (EIF). Participation in this equity index investment account consists of public hospital trusts, and local government other post-employment benefit trust (OPEB) funds. These trusts are part of a commingled equity index investment trust (Trust). The Trustee manages the assets in the Trust primarily in equity and equity-based securities in accordance with the General Statutes. The Trustee maintains custody of the underlying securities in the name of the Trust, services the securities, and maintains all related accounting records.

Pursuant to General Statute 159-30.1, the State Treasurer manages the OPEB trusts' assets. These trusts are established for local governments, public authorities, any entity eligible to participate in the State's Local Governmental Employees' Retirement System, and local school administrative units. Eligible participants make voluntary contributions to the trusts for the purpose of depositing and investing all or part of the contribution from their other post-employment benefit plans. As of June 30, 2017, there were twenty participants of which sixteen participate in the EIF. Each participant is responsible for making its own investment decision with respect to the allocation of assets between investment options.

The State Treasurer also manages the public hospitals' assets. As of June 30, 2017, there were four participants consisting of the Margaret R. Pardee Hospital Trust, New Hanover Regional Medical Center Trust, Columbus Regional Healthcare Trust and Watauga Medical Center Trust. One public hospital is also a participant in the BIF.

### **Custodial Credit Risk**

Custodial credit risk is the risk that, in the event of the failure of the counterparty, the Treasurer will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. As of June 30, 2017, the investments of the EIF were not exposed to custodial credit risk. There is no formally adopted investment policy to manage custodial credit risk policy for these investment types.

### **Fair Value Measurement**

EIF investments, a commingled global equity index fund, are valued at the net asset value of units held at the end of the period based upon the fair value of the underlying investments. As of June 30, 2017, the EIF had a recurring fair value measurement of \$411.8 million. The redemption frequency of the EIF is daily, with a two-day redemption notice.

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**9. Commitments and Contingencies**

The Treasurer has entered into contracts with external fund managers of the Real Estate Investment, Alternative Investment, Inflation Sensitive Investment, and Opportunistic Fixed Income Investment portfolios, where the Treasurer agrees to commit capital to these investments. The portfolios are part of the Treasurer's Pool as described in Note 3.

The Treasurer is a defendant in legal proceedings and claims arising out of the ordinary course of business. The Treasurer believes it has adequate legal defences and that the ultimate outcome of these actions will not have a material adverse effect on the State Treasurer Investment Program's' financial position.

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**Introduction**

The financial statements include investments managed by the Treasurer. The tradition of conservative fiscal management has served North Carolina's public workers and taxpayers well throughout the years. The Teachers' and State Employees' Retirement System, Consolidated Judicial Retirement System, Legislative Retirement System, Firefighters' and Rescue Squad Workers' Pension Fund, North Carolina National Guard Pension Fund, Local Governmental Employees' Retirement System, and Retiree Health Benefit Fund (collectively "NCRS") continue that tradition with a significant allocation in fixed income assets (bonds) combined with reasonable exposure to more volatile growth-oriented assets and a diversified portfolio. The result of this strategy is a fund that obtains lower returns than the typical large public fund peer in strong equity markets, but is a top performer in turbulent economic and financial market environments.

NCRS comprised 85% of the total net position of the Pool. Following is a discussion of the Investment Policy Statement, risk and returns relative to the benchmarks, management and incentive fees paid and peer cost comparison relative to NCRS.

*Investment Policy Statement*

In July 2013, the General Assembly passed Senate Bill 558. Under this bill, the Investment Management Division was granted greater authority and flexibility with respect to investments by increasing the percentage limitations on various individual alternative investment asset classes as well as in the aggregate. During the year ended June 30, 2014, the Investment Management Division continued to diversify the NCRS investments and conducted an asset liability study to develop a new investment policy statement ("IPS") that would utilize some of the additional investment flexibility created by Senate Bill 558. A new investment policy statement was finalized and became effective July 1, 2014. During fiscal year 2016, the Investment Management Division updated the asset liability study utilizing revised capital market assumptions. Based on the results of the updated study, it was determined that no changes to the target asset allocation were needed at that time. The table below maps the investment policy statement's classifications to the statutory classifications which are used to prepare the financial statements as of June 30, 2017. The numbers only reflect net position of the NCRS funds in the statutory asset classes excluding securities lending. The Investment Portfolios chart in Note 3 for these portfolios reflects gross investments for all of the State Treasurer Pool.

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		Statutory Classification								Total	
		Public Equity <sup>1</sup>	Long Term <sup>2</sup>	Pension Cash <sup>2</sup>	Fixed Income <sup>2,8</sup>	Alternatives <sup>3</sup>	Real Estate <sup>4</sup>	Inflation Sensitive <sup>5</sup>	Opportunistic Fixed Income <sup>6</sup>		Public Equity Limited Liability <sup>7</sup>
IPS Classification	<b>Public Equity</b>	\$31,886,229,559								\$3,445,504,234	\$35,331,733,793
	<b>Private Equity</b>					\$4,825,352,506					4,825,352,506
	<b>Non-Core Real Estate</b>						\$3,669,848,133				3,669,848,133
	<b>Opportunistic Fixed Income</b>								\$5,524,127,502		5,524,127,502
	<b>IG Fixed Income and Cash</b>		\$25,265,886,202		\$2,982,236,363						28,248,122,565
	<b>Pension Cash</b>			\$3,682,775,214							3,682,775,214
	<b>Inflation Sensitive</b>							\$6,504,019,570			6,504,019,570
	<b>Core Real Estate</b>						4,516,172,216				4,516,172,216
	<b>Multi-Strategy</b>					1,754,477,713					1,754,477,713
	<b>Total</b>	<b>\$31,886,229,559</b>	<b>\$25,265,886,202</b>	<b>\$3,682,775,214</b>	<b>\$2,982,236,363</b>	<b>\$6,579,830,219</b>	<b>\$8,186,020,349</b>	<b>\$6,504,019,570</b>	<b>\$5,524,127,502</b>	<b>\$3,445,504,234</b>	<b>\$94,056,629,212</b>

<sup>1</sup> NCGS 147-69.2(b)(8)(a),(c)

<sup>2</sup> NCGS 147-69.1(c) and NCGS § 147-69.2(b)(1)-(6b)

<sup>3</sup> NCGS 147-69.2(b)(9)

<sup>4</sup> NCGS 147-69.2(b)(7)

<sup>5</sup> NCGS 147-69.2(b)(9a)

<sup>6</sup> NCGS 147-69.2(b)(6c)

<sup>7</sup> NCGS 147-69.2(b)(8)(b)

<sup>8</sup> Consists solely of investments in STIF

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*Investment Returns*

The following supplementary information includes a discussion of the retirement system's risk and returns compared to benchmarks, total management and incentive fees paid, and comparisons to peer cost benchmarks.

As of June 30, 2017 the North Carolina Retirement System ("NCRS") had the following investment returns over applicable 1, 3, 5 and 10 year periods:

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**Investment Returns as of June 30, 2017 (% , Net of Fees)**

<b>Asset Classification</b>	<b>1 Year</b>	<b>3 Year</b>	<b>5 Year</b>	<b>10 Year</b>
<b>Growth</b>	16.77	5.55	10.99	4.38
<b>Benchmark</b>	15.61	4.63	9.69	3.64
Public Equity	18.99	4.97	11.39	4.51
Benchmark	18.07	4.62	10.56	3.80
Private Equity	9.73	7.85	9.43	6.45
Benchmark	9.25	6.60	9.71	7.67
Non-Core Real Estate	11.21	14.34	13.70	3.03
Benchmark	5.23	6.82	8.92	0.17
Opportunistic Fixed Income	11.51	1.98	7.06	6.81
Benchmark	11.07	1.33	3.05	0.19
<b>Rates &amp; Liquidity</b>	(0.37)	2.85	2.72	5.91
<b>Benchmark</b>	(0.60)	3.12	2.70	5.65
IG Fixed Income and Cash	(0.29)	2.97	2.82	5.96
Benchmark	(0.64)	3.22	2.76	5.68
Pension Cash	0.97	0.77	-	-
Benchmark	0.55	0.24	0.16	-
<b>Inflation Sensitive &amp; Diversifiers</b>	10.68	2.84	4.19	0.81
<b>Benchmark</b>	4.42	2.45	4.11	(0.17)
Inflation Sensitive	12.13	(0.94)	0.47	(1.38)
Benchmark	2.62	(3.43)	(0.88)	0.95
Core Real Estate	8.97	8.16	9.68	4.46
Benchmark	6.57	9.80	10.56	4.68
<b>Multi-Strategy</b>	13.20	4.22	9.31	5.17
<b>Benchmark</b>	12.39	2.90	8.45	4.45
<b>Total Pension Plan</b>	10.77	4.52	7.70	5.14
<b>Implementation Benchmark</b>	9.41	4.00	6.78	4.55
<b>Long-Term Policy Benchmark</b>	8.36	3.24	6.31	4.41

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The Growth benchmark used is a blend of the Public Equity, Private Equity, Non-Core Real Estate and Opportunistic Fixed Income benchmarks at their policy weights. The Public Equity benchmark is a dynamically weighted combination of the MSCI ACWI IMI Net (“Long-Only”) and a beta adjusted MSCI ACWI IMI Net (“Hedged Equity”). Private Equity’s 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% US Non-Core Real Estate (“Opportunistic and Value-Added”) and 20% Non-US Non-Core Real Estate (“Opportunistic and Value-Added”). Opportunistic Fixed Income’s 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 overall Rates & Liquidity benchmark is a blend of the IG Fixed Income & Cash and Pension Cash benchmarks at their policy weights. The benchmark used for IG Fixed Income & Cash is comprised of 10% iMoneyNet First Tier Institutional Money Market Funds Net Index and 90% custom BOAML Core Investment Grade Index. The Custom BOAML 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 Pension Cash benchmark used is the iMoneyNet First Tier Institutional Money Market Net Index.

The Inflation Sensitive & Diversifiers benchmark used is a blend of the Inflation Sensitive and Core Real Estate benchmarks at their policy weights. The Inflation Sensitive benchmark is a dynamically weighted combination of the Bank of America Merrill Lynch 1-3 Years US Inflation - Linked Treasury Index (“TIPS”), the Bloomberg Commodities Index (“Commodities”), and a combination of 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% FTSEEPRA 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 Benchmarks used for the total plan are the Implementation and Long-Term Policy Benchmarks. The Implementation Benchmark is a blend of the asset class benchmarks at policy weights. It is currently as follows: 58% Growth, 29% Rates and Liquidity, 11% Inflation Sensitive & Diversifiers, and 2% Multi-Strategy. Lastly, the Long-Term Policy Benchmark is comprised of 57% MSCI ACWI IMI Net, 33% BOAML 5+ Years US Treasury Index, 6% Bloomberg Commodity Index, and 4% BOAML 1-3 Years US Inflation-Linked Treasury Index.

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**Peer Comparison of Returns and Risks**

The below chart outlines the one-, three-, five- and 10-year average returns and exposure to risk within the different percentiles of public funds in comparison to the performance and exposure to risk of the North Carolina Retirement System.

<b>National Peer Data on Gross of Fees Returns and Exposure to Risk as of June 30, 2017 (%)</b>				
	<b>1 Year</b>	<b>3 Year</b>	<b>5 Year</b>	<b>10 Year</b>
<b>Returns</b>				
25 <sup>th</sup> Percentile	12.89	6.10	9.12	5.46
Median	12.17	5.34	8.65	5.21
75 <sup>th</sup> Percentile	10.58	4.62	7.59	4.46
<b>NC Pension Fund</b>	11.42	5.16	8.32	5.65
<b>Risk*</b>				
25 <sup>th</sup> Percentile	3.46	5.80	5.53	9.82
Median	2.82	5.34	5.17	9.31
75 <sup>th</sup> Percentile	2.67	4.79	4.54	8.58
<b>NC Pension Fund</b>	2.86	4.87	4.75	8.14

Source: BNY Mellon Total Funds - Public Funds \$20+ Billion (Gross of Fees)

\* Volatility of Returns (Standard Deviation)

**Cost**

The IMD utilizes external managers for a portion of the Retirement Systems. Over time, the department, with advice and counsel of the Investment Advisory Committee, has used a lower risk and lower cost approach to investing the Retirement Systems when compared to peers. While costs have risen somewhat over time as more diverse external investment strategies were pursued, the all-in cost of investing the North Carolina Retirement Systems remains modest and IMD continues to seek out cost-efficiencies in their operations.

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**Management and Incentive Fees for the External Investment Pool**

The management and incentive fees incurred to external investment managers, by asset class, were as follows for the year ended June 30, 2017.

Total Investment Management Fees Incurred as of June 30, 2017

Asset Classification	Management Fees	Incentive Fees	Total Fees	Portfolio Market Value (1)	Ratio of Fees to Market Value
Global Equity	\$ 84,193,763	\$ 6,185,620	\$ 90,379,383	\$ 35,331,733,793	0.26%
Private Equity	65,935,717	55,257,094	121,192,811	4,825,352,506	2.51%
Real Estate	84,036,734	51,304,818	135,341,552	8,186,020,349	1.65%
Hedged Strategies	4,222,698	-	4,222,698	1,754,477,713	0.24%
Fixed Income	-	-	-	2,982,236,363	0.00%
Opportunistic Fixed Income	53,547,631	35,904,274	89,451,905	5,524,127,502	1.62%
Inflation Sensitive	54,237,935	4,542,092	58,780,027	6,504,019,570	0.90%
Internally Managed	-	-	-	28,948,661,415	0.00%
<b>Total</b>	<b>\$ 346,174,478</b>	<b>\$ 153,193,898</b>	<b>\$ 499,368,376</b>	<b>\$ 94,056,629,211</b>	<b>0.53%</b>

(1) NCRS assets only

In addition to the fees shown in this table, internal administrative expenses of the Pool and trade transaction costs (for the internally managed fixed income portfolio) are paid by the Treasurer. These charges are reported on the Statement of Changes in Fiduciary Net Position.

**Peer Cost Comparison**

For the years ended December 31, 2016 and 2015, the Treasurer's cost of investment can be compared to the median peer amount utilizing the following table.

**Cost of Investment Compared to Peers as of December 31**

Total (bps)

	2016	2015
Median Peer	59.0	54.7
North Carolina Retirement Systems	50.5	47.4
Percentile	38%	38%

Source: CEM [Cost Effectiveness Measurement]. CEM benchmarking methodology excludes certain fees that are reported by the Pool, but not reported by most peers. See text below.

For the calendar years ended 2016 and 2015, the peer group consisted of 14 U.S. public pension funds managing \$44 billion to \$170 billion, and 14 U.S. public pension funds managing \$42 billion to \$158 billion, respectively. The median peer managed \$71 billion versus North Carolina's \$88 billion and \$89 billion for the years ended December 31, 2016 and 2015, respectively. The CEM benchmarking methodology excludes carry/performance fees for private investments because some peers do not provide such data. All such fees and expenses have been deducted from all reported investment returns. The CEM methodology differs from that used by the Department in preparing the data in the section titled "Management and Incentive Fees."