Financial Statements

South Carolina Retirement Systems

Year Ended June 30, 2016

Administered by the

South Carolina Public Employee Benefit Authority

Columbia, South Carolina

South Carolina
Office of the State Auditor

George L. Kennedy, III, CPA
State Auditor

October 12, 2016

The Honorable Nikki R. Haley, Governor
and
Members of the South Carolina Public Employee
Benefit Authority
State of South Carolina
Columbia, South Carolina

This report on the audit of the financial statements of the South Carolina Retirement Systems for the fiscal year ended June 30, 2016 was issued by CliftonLarsonAllen, LLP, Certified Public Accountants, under contract with the South Carolina Office of the State Auditor.

If you have any questions regarding this report, please let us know.

Respectfully submitted,

George L. Kennedy, III, CPA
State Auditor

GLKIII/trb

1401 Main Street, Suite 1200 **Columbia, S.C. 29201** **(803) 253-4160** **(803) 343-0723 FAX** **osa.sc.gov**

Table of Contents

Independent Auditors' Report 3

Management's Discussion and Analysis 6

Financial Statements

Statement of Fiduciary Net Position 16

Statement of Changes in Fiduciary Net Position 17

Notes to Financial Statements 18

Required Supplementary Information

Schedule of Changes in the Employers' Net Pension Liability 56

Schedule of Employers' Net Pension Liability 59

Schedule of Employers' Contributions 60

Schedule of Investment Returns 62

Notes to Required Supplementary Information

Summary of Actuarial Methods and Significant Assumptions 62

Other Supplementary Information

Schedule of Changes in Fiduciary Net Position by System 63

Schedule of Administrative Expenses 68

Schedule of Professional and Consultant Fees 69

Schedule of Investment Fees and Expenses 70

Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with Government Auditing Standards 71

CliftonLarsonAllen

CliftonLarsonAllen LLP
www.CLAconnect.com

INDEPENDENT AUDITORS' REPORT

The Honorable Nikki R. Haley, Governor
Mr. George L. Kennedy, CPA, State Auditor
and
Board of Directors
South Carolina Public Employee Benefit Authority
Columbia, South Carolina

Report on the Financial Statements

We have audited the accompanying financial statements of the South Carolina Retirement Systems (the Systems) as administered by the South Carolina Public Employee Benefit Authority, which comprise the statement of fiduciary net position as of June 30, 2016, and the related statement of changes in fiduciary net position for the year then ended, and the related notes to the 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 an opinion 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 entity'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 entity'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 opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Systems as of June 30, 2016, and the respective changes in its financial position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Report on Summarized Comparative Information

We have previously audited the Systems' 2015 financial statements, and we expressed an unmodified audit opinion on those audited financial statements in our report dated October 15, 2015. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2015 is consistent, in all material respects, with the audited financial statements from which it has been derived.

Emphasis of Matter

The financial statements include alternative investments valued at $9.0 billion (32% percent of total net position). As explained in Note 1, their fair values have been estimated by management in the absence of readily determinable fair values. Management's estimates are based on information provided by the fund managers or the general partners. Our opinion is not modified with respect to this matter.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and the schedules of changes in the employers' net pension liability, employers' net pension liability, employers' contributions and investment returns and related notes, 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 Systems' financial statements. The other supplementary information, as listed in the table of contents, is presented for purposes of additional analysis and is not a required part of the financial statements.

The other 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 other 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 12, 2016 on our consideration of the Systems' 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 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 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 Systems' internal control over financial reporting and compliance.

CliftonLarsonAllen LLP

Baltimore, Maryland
October 12, 2016

Management's Discussion and Analysis

This section presents management's discussion and analysis of the financial position and performance for the year ended June 30, 2016, for the South Carolina Retirement Systems' pension trust funds (Systems), and is offered as an introduction and analytical overview. This narrative is intended as a supplement and should be read in conjunction with the financial statements and other information presented in the *Comprehensive Annual Financial Report*.

The Systems' financial statements provide information about the activities of the five defined benefit pension plans administered, which are listed below, in addition to comparative summary information about the activities of the Systems as a whole:

- South Carolina Retirement System (SCRS) - A member contributory multiple-employer plan covering teachers, as well as state and municipal employees;
- Police Officers Retirement System (PORS) - A member contributory multiple-employer plan covering state and local law enforcement personnel and firefighters;
- The Retirement System for Members of the General Assembly (GARS) - A member contributory plan providing benefits to members of the South Carolina General Assembly, which is closed to persons first elected to the South Carolina General Assembly at or after the general election in November 2012;
- The Retirement System for Judges and Solicitors (JSRS) - A member contributory plan covering Judges, Solicitors, Public Defenders and Administrative Law Judges; and
- South Carolina National Guard Supplemental Retirement Plan (SCNG) - A non-contributory supplemental benefit plan for members of the South Carolina National Guard.

Overview of the Financial Statements

The Systems represents the collective retirement funds that are held in a group trust for the plans and are protected by the state's constitution. PEBA, which was created July 1, 2012, administers the various retirement systems and retirement programs managed by its Retirement Division. PEBA has an 11-member Board of Directors, appointed by the Governor and General Assembly leadership, which serves as co-trustee and co-fiduciary of the systems and the trust funds. By law, the State Fiscal Accountability Authority (SFAA), which consists of five elected officials, also reviews certain PEBA Board decisions regarding the funding of the Systems and serves as a co-trustee of the Systems in conducting that review. PEBA is considered a division of the primary government of the state of South Carolina and therefore, retirement trust fund financial information is also included in the comprehensive annual financial report of the state. Financial statements prepared on behalf of the Systems, include the following information, for the fiscal year ended June 30, 2016, with combined total comparative information for the fiscal year ended June 30, 2015:

- Statement of Fiduciary Net Position
- Statement of Changes in Fiduciary Net Position
- Notes to the Financial Statements
- Required Supplementary Information
- Other Supplementary Information

The Statement of Fiduciary Net Position presents the Systems' assets and liabilities and the resulting net position restricted for pensions. This statement reflects a year-end snapshot of the Systems' investments, at fair value, along with cash and short-term investments, receivables and other assets and liabilities.

The Statement of Changes in Fiduciary Net Position presents information showing how the Systems' net positions restricted for pensions changed during the year. This statement includes additions for contributions by members and employers and investment earnings (losses) and deductions for retirement benefit payments, refunded contributions, death benefit payments and administrative expenses.

Notes to the Financial Statements are an integral part of the basic financial statements and provide additional information that is necessary in order to gain a comprehensive understanding of data reported in the basic financial statements.

Required Supplementary Information presents schedules pertaining to the employers' net pension liability, changes in employers' net pension liability, employers' contributions, and the money-weighted rate of return on investments. These schedules are intended to provide additional information useful in evaluating the condition of the systems.

Other Supplementary Information includes Schedules of Changes in Fiduciary Net Position by System, as well as Schedules of Administrative Expenses, Professional and Consultant Fees and Investment Fees and Expenses.

Financial Highlights

- Total fiduciary net position for all five defined benefit plans of the Systems combined, decreased by $1.239 billion, which was over four percent from the prior fiscal year ended June 30, 2015. The net position of the plans is impacted by contributions paid into the plans, investment performance, and benefit payments out of the system. It is important to note that growth in fiduciary net position depends on both investment performance and contributions from employers and employees. The plans are in a net cash outflow position with benefit payments exceeding contributions; therefore, investment performance must first make up this gap before fiduciary net position can grow. The decrease in net position from $29.3 billion to $28.1 billion was primarily attributable to reduced investment performance and net cash outflows.
- For the fiscal year ended June 30, 2016, the net of fee investment performance return on a time-weighted basis reported by the custodial bank, BNY Mellon, was negative 0.39 percent. This net return reflects performance of the Systems, at the aggregate for the pooled investments of the consolidated pension trust funds, after the deduction for manager fees and/or expenses. This fiscal year's performance was below the prior year's return of 1.60 percent and is considered an actuarial loss since it was less than the 7.5 percent actuarial investment rate of return assumed for the plans. Actuarial valuations are prepared for each of the plans annually for funding purposes, at which time gains and losses from investment performance are recognized using smoothing methods that help mitigate sharply fluctuating market returns over a long-term period. The smoothing methodology offsets both deferred investment gains and losses against each other and is intended to produce an actuarial asset value that should be fairly consistent with market value during periods of ordinary investment returns. Smoothing investment performance avoids overreaction to inherently volatile conditions that would otherwise overweight the effects of a single year of performance that would potentially be reversed in subsequent years. Actuarial smoothing is intended to result in more stable contribution rates and a more level funded status, and is also a valuable methodology for governmental entities because it permits participating employers to plan their budgets over more than one fiscal year.
- The increase over the prior fiscal year in the amount of employee and employer contributions collected is largely attributable to increased contribution rates. State statute provides a schedule of minimum employee and employer contributions and further requires an increase in the employee and employer contribution rates in equal percentages, as necessary to maintain an amortization schedule of no more

than 30 years. State statute also has a provision that allows the Board to increase the employee and member contribution rates, up to one-half of one percent of pay in any one year. Effective July 1, 2015 the employee and employer contribution rates for SCRS increased by 0.16 percent of pay to 8.16 percent and 11.06 percent of pay, respectively, to maintain an amortization schedule that does not exceed 30 years. Similarly, the employee and employer contribution rates for PORS increased by 0.33 percent of pay, to 8.74 percent and 13.34 percent, respectively, on July 1, 2015. The Board and State Fiscal Accountability Authority (formerly referred to as the Budget and Control Board) also accepted the 2015 valuation results for all plans and, as provided by the state budget act, approved a 0.50 percent of pay increase in the employee and employer contribution rates for SCRS and PORS effective July 1, 2016. As a result, effective July 1, 2016, the employee and employer contribution rates for SCRS are 8.66 percent and 11.56 percent, respectively. Similarly, effective July 1, 2016, the employee and employer contribution rates for PORS are 9.24 percent and 14.24 percent, respectively.

- An increase in the number of new annuitants added to the payroll during the year coupled with the retiree benefit adjustment resulted in an overall increase of over 3 percent in the dollar amount of annuity benefits paid to annuitants compared to the prior year. The total number of retired members and beneficiaries receiving monthly retirement benefits from the Systems increased from approximately 157,000 to almost 161,000 annuitants during the year. Additionally, eligible SCRS and PORS annuitant payees received an annual benefit adjustment equal to the lesser of 1 percent or $500 on July 1, 2015.
- The Teacher and Employee Retention Incentive (TERI) program is a deferred retirement option program under SCRS that allows retired members to accumulate annuity benefits on a deferred basis for up to 60 months while continuing employment. Retirement reform legislation will close the TERI program to all participants effective June 30, 2018, so SCRS members who entered the TERI program after July 1, 2013, will not be eligible to participate in TERI for the full 60 months. Current TERI participants are required to pay the same pre-tax member contribution rate on compensation earned, in the same manner as active members. TERI participants do not earn additional service credit or interest on their TERI account but are eligible to receive benefit increases in the same manner as other annuitant payees. At the end of the member's TERI participation and upon termination from employment, funds are distributed from the member's accumulated TERI account. The number of members actively participating in TERI decreased from 9,327 at fiscal year-end 2015 to 8,922 at fiscal year-end 2016. While there was a decrease in the overall number of members participating in the program at year-end compared to the prior year, the liability for deferred retirement benefits increased 5 percent. The increase occurred because the average balance of accumulated TERI benefits, payable to members who had terminated employment and ended their participation in the program, was slightly higher than the prior year.
- The Systems' investment portfolio continues to participate in a securities lending program, managed by BNY Mellon (Securities Lending Program), whereby securities are loaned for the purpose of generating additional income. As the securities lending agent, BNY Mellon is responsible for making loans of securities on a collateralized basis from the Systems' investment portfolio to various third party broker-dealers and financial institutions. The gross securities lending revenue for the fiscal year was $946 thousand, a decrease from $1.98 million in the prior year. As reported by BNY Mellon, at June 30, 2016, the fair value of securities on loan was $146.18 million, the fair value of the invested cash collateral was $55.74 million, and the securities lending obligations were $102.95 million. The reported difference in the value of the invested cash collateral and the securities lending obligations in the securities lending program, is reflected within "Other Liabilities" on the Retirement Systems' Statement of Fiduciary Net Position, consistent with information reported on accounting statements provided by BNY Mellon as both the custodial bank and securities lending agent.

- The Retirement System Investment Commission (Commission as the governing body, RSIC as the agency), created by the General Assembly in 2005 as co-fiduciary for the Systems, has exclusive authority to invest and manage the retirement trust funds' assets. The Commission operates pursuant to statutory provisions and under governance policies that allow for a diverse asset allocation and which afford the RSIC and its Chief Investment Officer (CIO) discretion and flexibility to quickly react to changes in market conditions. The investment portfolio is structured to focus on ensuring the long-term stability of the plans, seeking superior returns at acceptable levels of risk.
- The Commission is responsible for establishing and managing a target asset allocation that manages risk, ensures liquidity, and affords flexibility to quickly react to changes in market conditions. The existing policy allocation, including target weights, ranges and benchmarks for each asset class, was reaffirmed and adopted by the Commission on November 20, 2014 for the fiscal year beginning July 1, 2015. However, the asset allocation was subsequently updated and changes went into effect the second half of the fiscal year. These amendments were made to the Statement of Investment Objectives and Policies (SIOP) in November 2015 and included increasing global public equity by 3 percent and decreasing cash and short duration to 2 percent of the portfolio, effective December 31, 2015. Variances from the target among asset classes are the result of over or underweights reflected in the Commission's asset allocation strategies as well as volatility experienced in the financial markets.
- The Office of the State Treasurer has a contract with the Bank of New York Mellon (BNYM) to serve as custodian of the funds of the Retirement Systems. Under a provision of the current contract for custody services and in an effort to maintain transparency, BNYM directly invoices the trust funds on a quarterly basis for both custody and other ancillary services utilized. PEBA and the RSIC jointly verify that invoices accurately reflect services rendered and are appropriate for the period before amounts are paid. The trust funds' securities lending revenue account is the initial source from which such costs are paid to the custodial agent.
- All investment manager fees, whether directly invoiced or deducted from the fund NAV, are classified and reported as investment expense in the Statement of Changes in Fiduciary Net Position. The RSIC provides the non-invoiced fee information to PEBA on an annual basis so that amounts can be reclassified and reported in the financial statements. There is no industry standard for reporting pension plan investment fees and expenses; therefore, in order to compare investment expenses as reported by the Systems with investment management costs reported by other public pension plans, an understanding of the actual fees and expenses included in any comparative report is necessary. The fiscal year 2016 invoiced and non-invoiced investment fees and expenses total is $246.9 million which is 29 percent less than the fiscal year 2015 total of $348.2 million largely due to lower performance fees (including carried interest allocations) as a result of generally lower market returns.
- PEBA, the governing body responsible for administration of the state's retirement plans and employee insurance programs, was created effective July 1, 2012. Administrative costs for retirement operations are funded from the retirement trust funds. Administrative expenses for fiscal year 2016 increased almost 5 percent from the prior year due primarily to increased costs for actuarial and audit services, information technology requirements, facilities management and slightly higher wages and benefits for employees.
- During the year PEBA finalized the comprehensive assessment of our operational information technology systems with consultant Linea Solutions Inc. Phase I, which was completed September 30, 2015, defined high level business edits and process mappings for core PEBA operations and technical architecture that supports those systems. Phase II, completed March 31, 2016, defined significant enhancement opportunities for a future system solution. Phase III, completed June 30, 2016, defined a

high level plan (Road Map) of all projects and initiatives that must take place to accomplish the successful transition to a future system solution. Associated project expenses paid to Linea during the fiscal year are included in Administrative expenses in the Statement of Changes in Fiduciary Net Position.

- PEBA works closely with our consulting actuary and external audit firm to ensure employers are provided with the information needed to prepare their GAAP based financial statements in compliance with Governmental Accounting Standards Board (GASB) Statements No. 68 and 71. We have a dedicated GASB section on our public website where information has been posted for participating employers and auditors to access financial statement disclosure information related to their proportionate share of the net pension liability, deferred inflows and outflows of resources and pension expense.
- Gabriel Roeder Smith & Company (GRS) is on retainer as the Systems' consulting actuary for the defined benefit retirement plans. South Carolina state statute requires that the actuary complete a valuation of the Systems annually and conduct an experience study at least once in each five year period. The most recent valuation reports were issued as of July 1, 2015. GRS also completed an actuarial experience study on the Systems with the report issued as of July 1, 2015. As a result of the experience study, the actuary recommended adjustments to the actuarial assumptions, which included salary increase, payroll growth, mortality, retirement, terminations, refunds, disability, inflation, and asset valuation method. The experience study also recommended reducing the long-term investment rate of return assumption, which is a prescribed assumption that is set in state statute by the General Assembly, from 7.50 to 7.25 percent. With the exception of the rate of return, all recommended assumption and method changes were adopted by both the PEBA Board and SFAA, as co-fiduciaries. The General Assembly did not change the assumed annual rate of return during the 2016 legislative session so that assumption currently remains at 7.50 percent. The actuary stated that the 7.50 percent return assumption is within a reasonable range per applicable actuarial standards. If all assumptions had been adopted, the contribution rates for both employee and employer contributions would have otherwise been scheduled to increase by 1.19 percent for SCRS and 1.26 percent for PORS as necessary to offset the impact of a $1.639 billion increase in the Unfunded Actuarial Accrued Liability (UAAL) in SCRS and a $221 million increase in PORS.
- In addition to the deferred retirement options available in SCRS and JSRS, all of the plans (excluding SCNG) include certain provisions that allow retired members to return to covered employment while also receiving a monthly retirement benefit. For members who return to work for a covered employer after retirement, the employer must pay the corresponding employer contribution for that particular plan, and under SCRS, PORS and JSRS, retired members are also required to pay the same employee contribution as an active member in the same position. TERI participants receive the full monthly retirement benefit, with no limit on the amount of wages they may earn from employment. Collectively among the plans, the most recent actuarial valuation reported that approximately 26,000 retirees have returned to covered employment while receiving monthly retirement benefits, either directly or as a TERI participant, thereby making up approximately 10 percent of the total public workforce covered by the Systems. The historical return-to-work provisions, coupled with demographic changes of the membership, caused concern over the long-term stability of the plans; retirement reform legislation enacted in 2012 addressed retiree return-to-work provisions. Generally, SCRS and PORS members who retire after January 1, 2013, and who have not yet reached age 62 (SCRS) or age 57 (PORS) at retirement, and who have been retired at least 30 calendar days, may return to work for a participating employer, but their receipt of benefits is subject to an earnings limit of $10,000 on wages earned each calendar year from covered employment.

- Qualified Excess Benefit Arrangement (QEBA) trust funds are maintained for each of the plans administered by the Retirement Division of PEBA. A QEBA is intended to be a qualified governmental excess benefit arrangement within the meaning of Section 415(m)(3) of the Internal Revenue Code and provides the part of a participant's retirement benefit that would have been paid by the Systems had there been no limitations under Code Section 415(b). The QEBA plans are separate and apart from the funds comprising the retirement funds and are not commingled with assets of those funds. The QEBA is not prefunded; therefore, no assets or income are accumulated to pay future benefits. The amount of required contributions necessary to pay benefits under the plans is determined and deposited to the trust funds on an as-needed basis. Employer contributions to fund the excess benefits are not credited or commingled with contributions paid into and accumulated in the retirement funds.
- The GARS was closed to persons first elected to the South Carolina General Assembly at or after the general election in November 2012. Members so elected to the Senate or House of Representatives have the option to join SCRS, the State Optional Retirement Program (State ORP), which is a defined contribution plan, or opt out altogether. As a result of the plan closure, employee contributions to the GARS plan should decrease over time, while employer contributions may experience a general increase over time.

Condensed Financial Information

The Systems' financial stability and long-term ability to sufficiently fund retirement benefits payable to members in future years is viable because funds are accumulated and invested on a regular and systematic basis. The five defined benefit funds provide lifetime annuity benefits to vested eligible members who serve as employees of state, public school, higher education institution, local and municipal government, state legislative, judicial, and South Carolina National Guard employers.

The Systems' principal sources of revenue are employee contributions, employer contributions and investment earnings. Required annual contributions for the SCNG are funded through an annual state appropriation. Expenses of the Systems consist primarily of payments of monthly annuities to retired members or their beneficiaries, and refunds of member contributions and interest that are paid subsequent to termination of employment. The defined benefit plans include an incidental death benefit for both active and retired members and an accidental death plan for members of the PORS.

PEBA sponsors the State ORP, which is a defined contribution alternative plan that is administered by four different vendors. The State ORP is available to newly hired employees of state agencies, institutions of higher education and public school districts. Membership in either SCRS or State ORP is also available to individuals first elected to the General Assembly at or after the general election in November 2012. In addition, PEBA is responsible for an optional Deferred Compensation Program (401k and 457 plans) administered by a third party record keeper. Both State ORP and Deferred Compensation assets are outside the group trust fund of the Systems and are not invested or managed by the RSIC. Summary comparative financial statements of the SC Retirement Systems' pension trust funds are presented on the following page.

Fiduciary Net Position

As of June 30

(Amounts expressed in thousands)

Assets	2016	2015	Increase / (Decrease)	% Increase / (Decrease)
Cash & cash equivalents, receivables, and prepaid expenses	$ 4,979,349	$ 3,622,210	$ 1,357,139	37.47%
Investments, at fair value	24,790,218	27,093,961	(2,303,743)	-8.50%
Securities lending cash collateral invested	55,737	70,177	(14,440)	-20.58%
Capital Assets, net of accumulated depreciation	2,741	3,005	(264)	-8.79%
Total Assets	29,828,045	30,789,353	(961,308)	-3.12%
Liabilities				
Deferred retirement benefits	71,693	68,104	3,589	5.27%
Obligations under securities lending	55,737	70,177	(14,440)	-20.58%
Other accounts payable	1,633,962	1,345,382	288,580	21.45%
Total Liabilities	1,761,392	1,483,663	277,729	18.72%
Total Fiduciary Net Position Restricted for Pensions	$ 28,066,653	$ 29,305,690	$ (1,239,037)	-4.23%

Changes in Fiduciary Net Position

Years Ended June 30

(Amounts expressed in thousands)

Additions	2016	2015	Increase / (Decrease)	% Increase / (Decrease)
Employee contributions	$ 871,936	$ 826,483	$ 45,453	5.50%
Employer contributions	1,262,585	1,203,313	59,272	4.93%
State-appropriated contributions	4,591	4,591	-	0.00%
Net Investment income (loss)	(191,288)	435,886	(627,174)	-143.88%
Other income	1,830	1,883	(53)	-2.81%
Total Additions	1,949,654	2,472,156	(522,502)	-21.14%
Deductions				
Annuity benefits	3,036,279	2,943,355	92,924	3.16%
Refunds	112,954	112,557	397	0.35%
Death benefits	22,771	22,319	452	2.03%
Administrative & other expenses	16,687	15,946	741	4.65%
Total Deductions	3,188,691	3,094,177	94,514	3.05%
Increase (Decrease) in Fiduciary Net Position	(1,239,037)	(622,021)	(617,016)	99.20%
Beginning Fiduciary Net Position	29,305,690	29,927,711	(622,021)	-2.08%
Ending Fiduciary Net Position Restricted for Pensions	$ 28,066,653	$ 29,305,690	$ (1,239,037)	-4.23%

Analysis of the Plan's Financial Position and Results of Operations

On a combined basis, the defined benefit plans' fiduciary net position was valued at $28.1 billion at June 30, 2016, representing over a 4 percent decrease in net position from the previous fiscal year-end. Despite increased contributions, the decline in the fiduciary net position from the prior fiscal year was primarily attributable to negative cash flows in that benefit payments exceeded contributions received and investment performance was essentially flat.

During fiscal year 2016, the total dollar amount of contributions added to the plans increased in accordance with the increase in employer and employee contribution rates. Monthly retirement benefits paid to annuitants increased just over 3 percent compared with the previous fiscal year. As previously referenced, the increase in benefits was attributable to a benefit adjustment granted to eligible SCRS and PORS annuity recipients effective July 1, 2015, along with an increase in the number of new annuitants added to the payroll during the year.

Net of fee performance for the Plan on a time-weighted basis was slightly negative for the fiscal year, returning a negative 0.39 percent. Relative to the policy benchmark, which returned a positive 0.82 percent, the Plan underperformed by 121 basis points. Additionally, the Plan fell short of the actuarial assumed rate of return of 7.50 percent by 789 basis points.

For the second year in a row, Real Estate was the highest performing asset class and Commodities was the lowest performing asset class at 14.21 percent and negative 10.66 percent respectively. On a relative basis, Real Estate underperformed its benchmark by 21 basis points and Commodities outperformed its benchmark by 266 basis points. Emerging Market Debt strongly performed returning 7.74 percent and outperforming its benchmark by 177 basis points. Core Fixed Income returned 5.47 percent but fell short of its benchmark which returned 6.00 percent. Private Equity returned a positive 3.64 percent while beating its benchmark by 259 basis points. Short Duration and GTAA were the remaining asset classes with positive performance returning 1.90 percent and 0.74 percent respectively. Short Duration outperformed its benchmark by 31 basis points while GTAA fell short of its benchmark by 360 basis points.

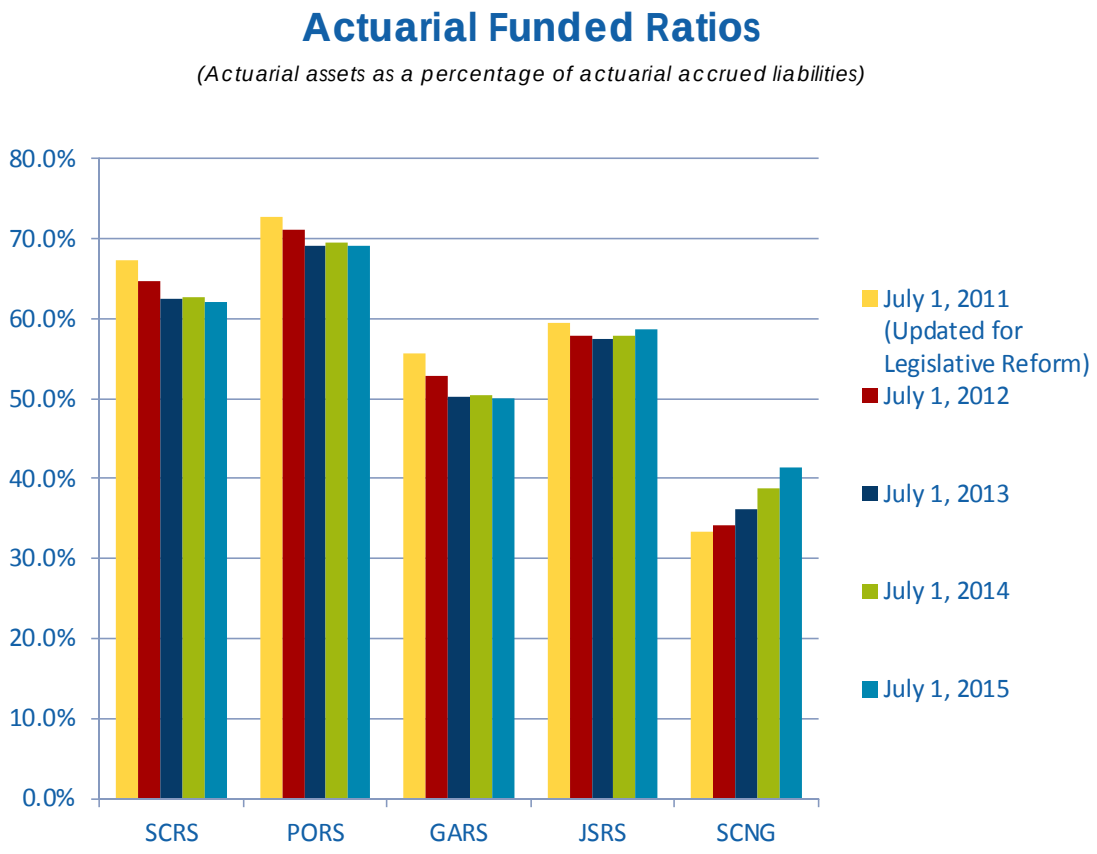
The Low Beta Hedge Fund asset class had a challenging year returning a negative 4.94 percent and underperforming its benchmark return of negative 2.39 percent. Public Global Equity, the largest allocation in the plan, returned a negative 4.85 percent and fell short of its benchmark by 112 basis points. This made Public Global Equities the biggest detractor to the Plan's relative performance, accounting for 46 of the 121 basis points of the Plan's underperformance to the policy benchmark. Mixed Credit and Private Debt asset classes also found the markets challenging returning negative 2.67 percent and negative 1.23 percent respectively. Mixed Credit underperformed its benchmark by 504 basis points while Private Debt fell short of its benchmark by 148 basis points.

Actuarial Valuations and Funding Progress

Actuarial valuations are performed annually by an external consulting actuary for each of the five defined benefit plans to ensure applicable contribution rates satisfy the funding parameters specified in Title 9 of the South Carolina Code of Laws. Under these provisions, SCRS and PORS contribution requirements must be sufficient to maintain an amortization period for the financing of the unfunded actuarial accrued liability (UAAL) over a period that does not exceed 30 years. Additionally, the Board is prohibited from decreasing the SCRS and PORS contribution rates until the funded ratio is at least 90 percent. Over time, and provided investment performance meets long-term assumptions and there are no future benefit enhancements, the funded ratio of each system is expected to increase and eventually attain 100 percent. The primary sources of revenue to fund benefits include investment income, member contributions and employer contributions.

For the most recently completed valuations, investment performance for purposes of developing the actuarially determined contribution rate is recognized using smoothing method that recognizes 20 percent of the difference between the market value of assets and the expected actuarial value of assets each year, based upon the assumed valuation rate of return. This asset valuation method mitigates the short term impact of market volatility and allows changes in market conditions to be recognized (smoothed) over a longer period of time. In contrast, the actuarial valuation performed for the purpose of providing accounting information under GASB Statement No. 67, plan fiduciary net position is determined on a market value basis. Since the percentage of plan fiduciary net position to the total pension liability in the actuarial valuation prepared for accounting purposes uses the market value of assets rather than the actuarial value of assets, there can be significant short-term volatility in that ratio.

For the actuarial valuations prepared for funding purposes, the funded ratio (the ratio of the actuarial assets to the actuarial accrued liability) is a standard of measure of a plan's funded status. It provides an indication as to whether sufficient assets are accumulated to pay benefits when due; the greater the level of funding, the larger the ratio of assets to liabilities. The funding progress of a retirement system should be reviewed over a multi-year period, such as five to ten years, to identify trends in the system's funded status. The most recent actuarial valuations prepared for funding purposes as of July 1, 2015, showed a slight decrease in funded status for SCRS, PORS and GARS while the funded ratios for JSRS and SCNG improved slightly. The changes in the levels of funding do not affect the availability of funds or resources for future use and actuarial projections indicate that unfunded liabilities should be amortized and funded within acceptable funding guidelines. The actuarial funded ratios of the five plans are presented in the following graph. Percentages for GASB 67 reporting purposes can be found in the Schedule of Employers' Net Pension Liability beginning on Page 59.



Requests for Information

This financial report is designed to provide a general overview of the Retirement Systems' finances for all interested parties. Questions concerning any of the information provided in this report or requests for additional financial information should be directed to the South Carolina PEBA, Attn: Retirement Systems Finance, 202 Arbor Lake Drive, Columbia, SC 29223. Inquiries may also be made at www.peba.sc.gov or by calling 888.260.9430.

South Carolina Retirement Systems
Statement of Fiduciary Net Position

June 30, 2016

With comparative totals for June 30, 2015

(Amounts expressed in thousands)

	SCRS	PORS	GARS	JSRS	SCNG	TOTAL	2015 TOTAL
ASSETS							
Cash and cash equivalents	$ 3,385,664	$ 548,798	$ 6,171	$ 21,386	$ 5,259	$ 3,967,278	$ 2,895,677
Receivables							
Due from other systems		302				302	173
Employee and employer contributions	208,735	23,854	57	646	16	233,308	221,870
Accrued investment income	33,142	5,335	39	192	30	38,738	48,805
Unsettled investment sales	595,317	95,801	694	3,439	524	695,775	449,980
Other investment receivables	34,535	5,558	40	200	30	40,363	2,634
Total receivables	871,729	130,850	830	4,477	600	1,008,486	723,462
Investments, at fair value							
Short-term securities	677,357	109,002	790	3,913	596	791,658	766,157
Fixed Income	5,003,122	805,119	5,834	28,906	4,404	5,847,385	7,986,079
Global Public Equity	6,161,285	991,494	7,185	35,597	5,424	7,200,985	7,140,883
Global Tactical Asset Allocation	1,680,189	270,382	1,959	9,707	1,479	1,963,716	2,224,783
Alternatives	7,688,980	1,237,335	8,966	44,424	6,769	8,986,474	8,976,059
Total investments	21,210,933	3,413,332	24,734	122,547	18,672	24,790,218	27,093,961
Securities lending cash collateral invested	47,690	7,674	56	275	42	55,737	70,177
Prepaid expenses	3,081	479	4	18	3	3,585	3,071
Capital assets, net of accumulated depreciation	2,461	261	7	12		2,741	3,005
Total assets	25,521,558	4,101,394	31,802	148,715	24,576	29,828,045	30,789,353
LIABILITIES							
Due to other systems	302					302	173
Accounts payable - unsettled investment purchases	1,231,849	198,233	1,436	7,117	1,085	1,439,720	1,198,393
Investment fees payable	8,076	1,300	9	47	7	9,439	8,470
Obligations under securities lending	47,690	7,674	56	275	42	55,737	70,177
Deferred retirement benefits	71,693					71,693	68,104
Due to Employee Insurance Program	63,358	1,900				65,258	60,656
Benefits payable	3,602	236			7	3,845	3,960
Other liabilities	98,626	16,015	113	559	85	115,398	73,730
Total liabilities	1,525,196	225,358	1,614	7,998	1,226	1,761,392	1,483,663
Net Position Restricted for Pensions	$ 23,996,362	$ 3,876,036	$ 30,188	$ 140,717	$ 23,350	$28,066,653	$29,305,690

The accompanying notes are an integral part of these financial statements.

South Carolina Retirement Systems
Statement of Changes in Fiduciary Net Position

Year Ended June 30, 2016

With comparative totals for the year ended June 30, 2015

(Amounts expressed in thousands)

	SCRS	PORS	GARS	JSRS	SCNG	TOTAL	2015 TOTAL
Additions							
Contributions							
Employee	$ 754,153	$ 115,188	$ 292	$ 2,303	$ -	$ 871,936	$ 826,483
Employer	1,072,659	175,223	4,501	10,202		1,262,585	1,203,313
State appropriated					4,591	4,591	4,591
Total contributions	1,826,812	290,411	4,793	12,505	4,591	2,139,112	2,034,387
Investment Income							
Net appreciation in fair value of investments	(279,345)	(42,672)	(422)	(1,577)	(220)	(324,236)	455,392
Interest and dividend income	337,913	54,003	420	2,000	295	394,631	339,562
Investment expense	(224,772)	(36,096)	(265)	(1,299)	(197)	(262,629)	(361,046)
Net income (loss) from investing activities	(166,204)	(24,765)	(267)	(876)	(122)	(192,234)	433,908
From securities lending activities:							
Securities lending income	161	26		1		188	167
Securities lending borrower rebates	649	103	1	4	1	758	1,811
Net income from securities lending activities	810	129	1	5	1	946	1,978
Total net investment income (loss)	(165,394)	(24,636)	(266)	(871)	(121)	(191,288)	435,886
Supplemental retirement benefits funded by the State	434	18				452	529
Transfers of contributions from other Systems	177	1,174		27		1,378	1,354
Total additions	1,662,029	266,967	4,527	11,661	4,470	1,949,654	2,472,156
Deductions							
Refunds of contributions to members	93,694	19,178	22	60		112,954	112,557
Transfers of contributions to other Systems	1,174	27	147	30		1,378	1,354
Regular retirement benefits	2,473,541	337,928	6,625	16,989	4,310	2,839,393	2,729,289
Deferred retirement benefits	194,844					194,844	211,982
Supplemental retirement benefits	434	18				452	529
Death Benefits	20,659	1,960	9	143		22,771	22,319
Accidental death benefits		1,590				1,590	1,555
Depreciation	271	37	1	1		310	258
Administrative expenses	12,878	2,018	17	74	12	14,999	14,334
Total deductions	2,797,495	362,756	6,821	17,297	4,322	3,188,691	3,094,177
Net increase (decrease) in Net Position	(1,135,466)	(95,789)	(2,294)	(5,636)	148	(1,239,037)	(622,021)
Net Position Restricted for Pensions							
Beginning of year	25,131,828	3,971,825	32,482	146,353	23,202	29,305,690	29,927,711
End of year	$23,996,362	$ 3,876,036	$ 30,188	$ 140,717	$ 23,350	$28,066,653	$29,305,690

The accompanying notes are an integral part of these financial statements.

South Carolina Retirement Systems

Notes to Financial Statements

I. Basis of Presentation and Summary of Significant Accounting Policies

Description of the Entity

The South Carolina Public Employee Benefit Authority (PEBA) was created by the S.C. General Assembly effective July 1, 2012. PEBA is a state agency responsible for the administration and management of the state's employee insurance programs and retirement systems.

The governing board of the authority is a board of directors consisting of 11 members. The membership composition is as follows:

- three non-representative members appointed by the Governor;
- two members appointed by the President Pro Tempore of the Senate, one a non-representative member and one a representative member who is either an active or retired member of the South Carolina Police Officers Retirement System (PORS);
- two members appointed by the Chairman of the Senate Finance Committee, one a non-representative member and one a representative member who is a retired member of the South Carolina Retirement System (SCRS);
- two members appointed by the Speaker of the House of Representatives, one a non-representative member and one a representative member who must be a state employee who is an active contributing member of SCRS;
- two members appointed by the Chairman of the House Ways and Means Committee, one a non-representative member and one a representative member who is an active contributing member of SCRS employed by a public school district.

Non-representative members of the PEBA board may not belong to the classes of employees and retirees from which representative members must be appointed. Individuals appointed to the PEBA board must possesses certain qualifications.

Members of the PEBA board serve for terms of two years and until their successors are appointed and qualify. Vacancies on the PEBA Board must be filled within 60 days in the manner of the original appointment for the unexpired portion of the term. Terms commence on July first of even numbered years.

The financial statements of the South Carolina Retirement Systems (Systems) presented herein contain the following funds:

Pension Trust Funds

- South Carolina Retirement System (SCRS)
- South Carolina Police Officers Retirement System (PORS)
- Retirement System for Members of the General Assembly of the State of South Carolina (GARS)
- Retirement System for Judges and Solicitors of the State of South Carolina (JSRS)
- South Carolina National Guard Supplemental Retirement Plan (SCNG)

Each pension trust fund operates on an autonomous basis; funds may not be utilized for any purpose other than for the benefit of each plan's participants.

The Systems are part of the state of South Carolina's primary government and are included in the *Comprehensive Annual Financial Report of the State of South Carolina*. In making this determination, factors of financial accountability, governance and fiduciary responsibility of the state were considered.

Plan Descriptions

The South Carolina Retirement System (SCRS), a cost–sharing multiple-employer defined benefit pension plan, was established effective July 1, 1945, pursuant to the provisions of Section 9-1-20 of the South Carolina Code of Laws for the purpose of providing retirement allowances and other benefits for public school districts and employees of the state and political subdivisions thereof.

The South Carolina Police Officers Retirement System (PORS), a cost–sharing multiple-employer defined benefit pension plan, was established effective July 1, 1962, pursuant to the provisions of Section 9-11-20 of the South Carolina Code of Laws for the purpose of providing retirement allowances and other benefits for police officers and firemen of the state and its political subdivisions.

The Retirement System for Members of the General Assembly of the State of South Carolina (GARS), a single-employer defined benefit pension plan, was created effective January 1, 1966, pursuant to the provisions of Section 9-9-20 of the South Carolina Code of Laws to provide retirement allowances and other benefits for members of the General Assembly. Retirement reform legislation closed the plan to individuals newly elected to the Senate or House of Representatives on or after the general election of 2012.

The Retirement System for Judges and Solicitors of the State of South Carolina (JSRS), a single-employer defined benefit pension plan, was created effective July 1, 1979, pursuant to the provisions of Section 9-8-20 of the South Carolina Code of Laws for the purpose of providing retirement allowances and other benefits for judges, solicitors, circuit public defenders of the state and administrative law court judges.

The South Carolina National Guard Supplemental Retirement Plan (SCNG), a single-employer defined benefit pension plan, was created effective July 1, 1975, and is governed by the provisions of Section 9-10-30 of the South Carolina Code of Laws for the purpose of providing supplemental retirement benefits to certain members who served in the South Carolina National Guard.

A summary of information related to participating employers and members follows (dollars amounts expressed in thousands). This information was reported in the most recent actuarial valuation reports dated July 1, 2015.

	State[1]	School	Other	Total
SCRS				
Number of Employers	31	119	579	729
Annual Covered Payroll for Active Members	$2,171,789	$3,235,918	$2,010,806	$7,418,513
Average Number of:				
Active Contributing Members	49,938	83,865	53,515	187,318
Retirees and beneficiaries currently receiving benefits				134,640
Terminated members entitled to but not yet receiving benefits[2]				164,509
Total SCRS Membership				486,467
PORS				
Number of Employers	18	2	268	288
Annual Covered Payroll for Active Members	$349,087	$203	$703,923	$1,053,213
Average Number of:				
Active Contributing Members	9,442	0	17,133	26,575
Retirees and beneficiaries currently receiving benefits				16,709
Terminated members entitled to but not yet receiving benefits[2]				14,149
Total PORS Membership				57,433
GARS				
Number of Employers	1			1
Annual Covered Payroll for Active Members	$2,338			$2,338
Average Number of:				
Active Members (170 positions)	104			104
Retirees and beneficiaries currently receiving benefits	362			362
Terminated members entitled to but not yet receiving benefits	36			36
Total GARS Membership	502			502
JSRS				
Number of Employers	1			1
Annual Covered Payroll for Active Members	$21,267			$21,267
Average Number of:				
Active Members (153 positions)	157			157
Retirees and beneficiaries currently receiving benefits	206			206
Terminated members entitled to but not yet receiving benefits	2			2
Total JSRS Membership	365			365
SCNG				
Number of Employers	1			1
Annual Covered Payroll for Active Members[3]	N/A			N/A
Average Number of:				
Active Members	12,165			12,165
Retirees and beneficiaries currently receiving benefits	4,647			4,647
Terminated members entitled to but not yet receiving benefits	2,052			2,052
Total SCNG Membership	18,864			18,864

[1] Although each of the 88 SCRS and 25 PORS state agencies report separately, the State is considered the primary government and therefore, all state agencies are included as a single employer. Quasi-State Agencies and Institutions of Higher Education are counted as separate employers and included within the "State" category.

[2] Employee Class not determinable from data.

[3] Annual covered payroll is not applicable for SCNG because it is a non-contributory plan.

Membership

Membership requirements are prescribed in Title 9 of the South Carolina Code of Laws. A brief summary of the requirements under each system is presented below.

SCRS

Generally, all employees of covered employers are required to participate in and contribute to the system as a condition of employment. This plan covers general employees and teachers and individuals newly elected to the South Carolina General Assembly beginning with the November 2012 general election. A member of the system with an effective date of membership prior to July 1, 2012, is a Class Two member. A member of the system with an effective date of membership on or after July 1, 2012, is a Class Three member.

State ORP

As an alternative to membership in SCRS, newly hired state, public school and higher education employees and individuals newly elected to the S.C. General Assembly beginning with the November 2012 general election have the option to participate in the State Optional Retirement Program (State ORP), which is a defined contribution plan. State ORP participants direct the investment of their funds into a plan administered by one of four investment providers. The Retirement Systems assumes no liability for State ORP benefits. Rather, the benefits are the liability of the investment providers. For this reason, State ORP programs are not considered part of the Systems for financial statement purposes.

Contributions to the State ORP are at the same rates as SCRS. A direct remittance is required from the employers to the investment providers for the employee contribution (8.16 percent) and a portion of the employer contribution (5 percent). A direct remittance is also required to the SCRS for a portion of the employer contribution (5.91 percent) and a death benefit contribution (.15 percent), which is retained by the SCRS. The activity for the State ORP is as follows:

State ORP Activity

Year Ended June 30, 2016

(Dollar amounts expressed in thousands)

Active Contributing Participants	27,432
Annual Covered Payroll	$1,332,767
Employer Contributions Retained by SCRS	$78,767
Death Benefit Contributions Retained by SCRS	$1,999
Employee Contributions to Investment Providers	$108,754
Employer Contributions to Investment Providers	$66,638

PORS

To be eligible for PORS membership, an employee must be required by the terms of his employment, by election or appointment, to preserve public order, protect life and property and detect crimes in the state; to prevent and control property destruction by fire; be a coroner in a full-time permanent position; or be a peace officer employed by the Department of Corrections, the Department of Juvenile Justice or the Department of Mental Health. Probate judges and coroners may elect membership in PORS. Magistrates are required to participate in PORS for service as a magistrate. PORS members, other than magistrates and probate judges, must also earn at least $2,000 per year and devote at least 1,600 hours per year to this work, unless exempted by statute. A member of the system with an effective date of membership prior to July 1, 2012, is a Class Two member. A member of the system with an effective date of membership on or after July 1, 2012, is a Class Three member.

GARS

Members of the Senate and the House of Representatives who were first elected to office prior to November 2012 are required to participate in and contribute to the system upon taking office as a member of the S.C. General Assembly; however, the GARS plan is closed to individuals newly elected to the Senate or the House of

Representatives on or after the general election of 2012.

JSRS
All solicitors, circuit public defenders, judges of a Circuit, Family or Administrative Law Court and justices of the Court of Appeals and Supreme Court are required to participate in and contribute to the system upon taking office.

SCNG
Membership consists of individuals who serve in the South Carolina National Guard.

Pension Benefits

Benefit terms are prescribed in Title 9 of the South Carolina Code of Laws. PEBA does not have the authority to establish or amend benefit terms without a change in the code of laws. Key elements of the benefit calculation include the benefit multiplier, years of service and average final compensation/current annual salary. A brief summary of benefit terms for each system is presented below.

SCRS
A Class II member who has separated from service with at least five years of earned service is eligible for a monthly pension at age 65 or with 28 years credited service regardless of age. A member may elect early retirement with reduced pension benefits payable at age 55 with 25 years of service credit. A Class III member who has separated from service with at least eight years of earned service is eligible for a monthly pension subject to the Rule of 90 requirement that the total of the member's age and the member's creditable service equals at least 90 years. Both Class II and Class III members are eligible to receive a reduced deferred annuity at age 60 if they satisfy the five- or eight-year earned service requirement, respectively. An incidental death benefit is also available to beneficiaries of active and retired members of employers who participate in the death benefit program.

The annual retirement allowance of eligible retirees or their surviving annuitants is increased by the lesser of one percent or five hundred dollars every July 1. Only those annuitants in receipt of a benefit on July 1 of the preceding year are eligible to receive the increase. Members who retire under the early retirement provisions at age 55 with 25 years of service are not eligible for the benefit adjustment until the second July 1 after reaching age 60 or the second July 1 after the date they would have had 28 years of service credit had they not retired.

PORS
A Class II member who has separated from service with at least five years of earned service is eligible for a monthly pension at age 55 or with 25 years of service regardless of age. A Class III member who has separated from service with at least eight or more years of earned service is eligible for a monthly pension at age 55 or with 27 years of service regardless of age. Both Class II and Class III members are eligible to receive a deferred annuity at age 55 with five or eight years earned service, respectively. An incidental death benefit is also available to beneficiaries of active and retired members of employers who participate in the death benefit program. Accidental death benefits are also provided upon the death of an active member working for a covered employer whose death was a natural and proximate result of an injury incurred while in the performance of duty.

The retirement allowance of eligible retirees or their surviving annuitants is increased by the lesser of one percent or five hundred dollars every July 1. Only those annuitants in receipt of a benefit on July 1 of the preceding year are eligible to receive the increase.

GARS
A member is eligible for a monthly pension at age 60 or with 30 years credited service. A member who has attained age 70 or has 30 years of service is eligible to retire and draw an annuity while continuing to serve in the General Assembly. A member is eligible to receive a deferred annuity with eight years of service. An incidental death benefit is also provided to members. Retirees receive increases in benefits based upon increases in the current salary of their respective active

positions. GARS is closed to new members and persons newly elected to the General Assembly must elect membership in SCRS or State ORP or may elect non-membership.

JSRS

A pension benefit is payable at age 70 with 15 years' service, age 65 with 20 years' service, 25 years' service regardless of age for a judge or 24 years of service for a solicitor or a circuit public defender regardless of age. A judge is vested in the system after attaining 10 years of earned service in the position of judge, and a solicitor or a circuit public defender is vested in the system after attaining eight years of earned service. A member who has reached maximum eligibility is eligible to retire and draw an annuity while continuing to serve. An incidental death benefit is also provided to members. Retirees receive increases in benefits based upon increases in the current salary of their respective active positions.

SCNG

A monthly pension is payable at age 60 provided the member was honorably discharged from active duty with at least 20 years of total creditable military service. Of the 20 years total creditable military service, at least 15 must have been served in the South Carolina National Guard. Additionally, the final 10 years of military service must have been served in the South Carolina National Guard. No cost-of-living increases are provided to SCNG retirees.

Summary of Significant Accounting Policies

Fund Structure

The Systems' accounts are maintained in accordance with the principles of fund accounting. This is the procedure whereby resources for various purposes are classified for accounting and reporting purposes into funds that are in accordance with specified activities or objectives. Separate pension trust funds (fiduciary fund type) are used to account for the activities of the five public employee retirement systems administered by PEBA.

Adoption of New Accounting Standard

Governmental Accounting Standards Board (GASB) Statement No. 72, *Fair Value Measurement and Application* is effective for financial statements for periods beginning after June 15, 2015 and has been implemented in the financial statements prepared by PEBA's Retirement Division for the fiscal year ended June 30, 2016. This statement addresses accounting and financial reporting issues related to fair value measurements. It requires measurement of certain assets and liabilities at fair value using a consistent and detailed definition of fair value and accepted valuation techniques. It also enhances disclosures about fair value measurements, the level of fair value hierarchy, and valuation techniques. Additional disclosures are also required for investments in certain entities that calculate net asset value per share (or its equivalent).

Basis of Accounting

All funds are accounted for using the accrual basis of accounting. Revenues are recognized when earned and expenses are recognized when incurred. Benefit and refund expenses are recognized when due and payable in accordance with the terms of the plan.

Administrative Expenses

Administrative expenses are the responsibility of PEBA and all accounting and corresponding disclosures relating to administrative expenses of the pension trust funds are included in the financial statements of the Systems.

Administrative expenses for the Retirement Division of PEBA are funded by investment earnings and are allocated to each of the pension trust funds based on its respective portion of total assets in order to pay for actual expenses incurred during the year. Administrative expenses of the Systems include the Retirement Division's portion of PEBA employee salaries and associated employee benefits, disability reviews, fiduciary liability insurance and other professional service fees.

Cash and Cash Equivalents

The Systems classify cash on deposit in financial institutions and cash on deposit in the state's internal cash management pool as cash and cash equivalents. The Systems also classify certain short-term highly liquid securities as cash equivalents if the date of maturity is three months or less from the date of acquisition. Forward contracts, foreign currencies and cash held in the strategic partnership accounts are also classified as cash and cash equivalents.

Contributions

Employee, employer, and state-appropriated contributions are recognized in the period in which they are due, pursuant to formal commitments as well as statutory requirements. Substantially all contributions receivable are collected within 30 days of year-end.

Investments

The Retirement System Investment Commission (Commission as the governing body, RSIC as the agency), created by the General Assembly in 2005 as co-fiduciary for the Retirement Systems, has exclusive authority for investing and managing all assets held in trust for the South Carolina Retirement Systems. Funds of the Systems are invested subject to the terms, conditions, limitations, and restrictions imposed by Section 16, Article X of the South Carolina Constitution and Section 9-1-1310 (B) and Title 9 Chapter 16 of the South Carolina Code of Laws. The funds and assets of the various state retirement systems are not funds of the State, but are instead held in trust as provided in Section 9-16-20.

The RSIC is structured as a separate state agency reporting to a body of appointed Commissioners. The Commission is a seven-member board that includes the State Treasurer, the Executive Director of PEBA, and a retired member of the Systems. The Commission employs a Chief Executive Officer (CEO) who serves as the agency head of the RSIC, reporting directly to the Commission, with functions and duties assigned by the Commission. The CEO is the central source of authority and accountability for administrative decisions. In addition, the Commission employs a Chief Investment Officer (CIO) who reports to the CEO for day to day oversight and strategic planning objectives and who serves as the central source of authority and accountability for all investment decisions delegated to him or her by the Commission and state law. The Commission also engages an external investment consultant, who is accountable to the Commission to work collaboratively with RSIC staff to fulfill the duties of investing the Systems' portfolio.

As with PEBA, administrative costs of the RSIC are paid from the Systems, and its budget is funded entirely from the trust fund. Costs include Commissioner, investment and administrative staff compensation, as well as other contractual services and other operating expenses. The allocation of those administrative costs is based upon a proration of such costs in proportion to the assets that each system bears to the total assets of all of the systems for the most recently completed fiscal year.

The Commission has adopted a Statement of Investment Objectives and Policies (SIOP) in order to establish investment and performance objectives, policies and guidelines, roles, responsibilities and delegation of authority for the investment and management of assets of the Systems. The SIOP is reviewed by the Commission at least annually to determine its continued applicability. The SIOP provides the framework pursuant to which the CIO and staff develop the Annual Investment Plan (AIP), which provides a formal plan for investing the Systems' assets to achieve the Commission's investment objectives and mission. As required by Section 9-16-320, the AIP must be submitted to the Commission no later than April 1 of each year, and the Commission must meet no later than May 1 of each year to adopt the proposed AIP for the following fiscal year. The Commission may amend the SIOP and AIP during the fiscal year as it deems appropriate.

The Commission manages Systems' assets with a long-term horizon and seeks to earn an appropriate risk-adjusted return in consideration of the specific goals, needs and circumstances of the Systems and in the exclusive interest of members of the Systems. Among the decisions the Commission can make, asset allocation has the most significant impact on the portfolio's return, risk profile and cost and is reviewed annually as part of the development of the AIP. Based on the Commission's determination of the appropriate risk tolerance for the Portfolio and its long-term return expectations, it has authorized the following Policy Asset Allocation, including target allocations and ranges for each asset class that were adopted by the Commission for the fiscal year beginning July 1, 2015 and reflects amendments made to the SIOP in November 2015 to increase global public equity by 3% and decrease cash and short duration to 2% of the portfolio, effective 12/31/15.

Asset Class	Policy Allocation	Minimum	Maximum
Global Equity	**43.0%**	**30.0%**	**48.0%**
Global Public Equity[1,2]	34.0%	25.0%	40.0%
Private Equity[2]	9.0%	6.0%	12.0%
Real Assets	**8.0%**	**4.0%**	**15.0%**
Commodities[1]	3.0%	0.0%	5.0%
Real Estate	5.0%	3.0%	10.0%
Infrastructure	0.0%	0.0%	5.0%
Other Real Assets	0.0%	0.0%	5.0%
Opportunistic	**20.0%**	**15.0%**	**25.0%**
GTAA / Risk Parity[1]	10.0%	5.0%	20.0%
Hedge Funds (low beta)[1]	10.0%	5.0%	20.0%
Diversified Credit	**17.0%**	**10.0%**	**25.0%**
Mixed Credit [1,2]	5.0%	2.0%	10.0%
Emerging Markets Debt[1]	5.0%	2.0%	10.0%
Private Debt[1,2]	7.0%	3.0%	10.0%
Other Credit	0.0%	0.0%	5.0%
Conservative Fixed Income	**12.0%**	**10.0%**	**25.0%**
Core Fixed Income	10.0%	5.0%	20.0%
Global Fixed Income	0.0%	0.0%	10.0%
Cash and Short-Duration (Net)	2.0%	0.0%	10.0%

[1]Asset classes in which hedge funds can be used, up to a maximum of 20 percent across the entire portfolio.

[2]The target weights to Private Equity and Private Debt will be equal to their actual weights as of prior month end. Private Equity and Public Equity will combine for 43 percent of the entire portfolio. Private Debt and Mixed Credit will combine for 12 percent of the entire portfolio.

At June 30, 2016, the Systems held no investments (other than those issued or explicitly guaranteed by the U.S. government) in any one organization that represent 5 percent or more of the plans' fiduciary net position.

For the year ended June 30, 2016, the annual money weighted rate of return on plan investments was (.47) percent. The money weighted rate of return expresses investment performance, net of investment expenses, adjusted for the changing amounts actually invested.

As a fiduciary acting on behalf of the Systems, the Commission enters into individual agreements with various investment managers to invest plan assets. As of June 30, 2016, legal agreements were in place with 129 investment managers.

The Office of the State Treasurer has a contract with BNY Mellon to serve as custodian of the funds of the Retirement Systems. Assets also include investments not custodied at BNY Mellon, such as funds held in partnerships, commingled accounts or private market asset classes. Additionally, as an accommodation under the global custody agreement between the South Carolina State Treasurer and BNY Mellon, the custodial bank provides consolidated recordkeeping services which are reflected on account statements for securities not held in the custodian's vault or for which the custodian or its nominee is not the registered owner (non-custody securities).

For financial statement purposes, investments of the pension trust funds are reported at fair value in the Statement of Fiduciary Net Position. Short term securities categorized as cash or cash equivalents are reported at fair value. The Systems hold domestic and global equity securities which are traded on organized exchanges. Equity securities which are held by the custodian are valued by the custodian using the last reported price on a trade-date basis. The Systems hold domestic and global fixed income securities. The custodian values those fixed income assets which are held in custody based upon prices received from external pricing sources

and in accordance with the custodian's pricing policy. Commingled funds, which may contain equity and/or fixed income securities are priced based upon the manager's pricing policy and a Net Asset Value (NAV) is provided to the custodian. Private market investments typically utilize a limited partnership structure and private equity funds normally invest in companies that are not publicly traded on a stock exchange. The fair values of alternative investments including private equity, private debt, hedge funds, real estate and commodities, for which daily market values are not readily ascertainable, are valued in good faith based on the most recent financial information available for the underlying companies and reported by the investment managers at the measurement date, adjusted for subsequent cash flow activities through June 30, 2016. The issue of valuation of investments is a joint responsibility of PEBA and RSIC. Staff from both offices serve on a joint valuation committee which oversees and reviews the valuations provided by the custodian and/or the external investment managers. The estimated fair value of these investments is intended to approximate, but at times may differ, from values that would have been used had a liquid public market existed.

Investments are combined in a commingled investment pool, with each system owning a percentage of the pool and receiving proportionate investment income in accordance with their respective ownership percentage. Investment income includes realized and unrealized appreciation (depreciation) in the fair value of investments, interest income earned, dividend income earned, less investment expense, plus income from securities lending activities, less deductions for securities lending expenses.

Certain investments from the 2015 Statement of Fiduciary Net Position have been re-categorized to better align and conform with RSIC's asset allocation.

While some investment managers submit invoices for their investment management fees, a significant number of investment managers provide account valuations on a net of fee basis. For greater transparency, the RSIC makes a good faith attempt to account for netted fee amounts that are not necessarily readily separable. Through a concerted effort with Conifer Financial Services, administrator for the RSIC, the collection, aggregation, and reasonability testing enables RSIC to provide the Retirement Division of PEBA with a collection of investment fees and expenses that would not otherwise be disclosed. The RSIC provides the netted fee information to PEBA on an annual basis so that amounts can be reclassified and reported in the financial statements on the Investment expense line of the Statement of Changes in Fiduciary Net Position. The non-invoiced investment expenses include amounts for investment management fees, performance fees (including carried interest allocations), and other investment expenses such as organizational expenses in limited partnership structures. The total netted fee amounts reported also reflect the impact of any offsets which have the effect of reducing this total. There is no industry standard for reporting pension plan investment fees and expenses, therefore, in order to compare investment expense as reported by the Systems with investment management costs reported by other public pension plans, an understanding of the actual fees and expenses included in any comparative reports is necessary. Additionally, investment plan composition directly influences the fee structure of a plan and adjustments for differences in plan asset allocation are necessary before conclusions can be reached from such comparisons.

Capital Assets

Capital Assets are valued at historical cost or at estimated historical cost if actual historical cost data is not available. The costs of normal maintenance and repairs that do not significantly add to the value of an asset or materially extend the asset's useful life are not capitalized. An individual asset is capitalized and reported if it has an estimated useful life of at least two years and a historical cost as follows: more than $5 thousand for machinery and equipment; more than $100

thousand for buildings. All land and non-depreciable land improvements are capitalized and reported, regardless of cost. Depreciation is recorded using the straight line method over the useful life of 40 years for the building and a useful life of 2 to 25 years for equipment. Land is not depreciated.

II. Contributions and Reserves

Contributions to each of the Plans are prescribed in Title 9 of the South Carolina Code of Laws. The board may increase the percentage rate in SCRS and PORS employer and employee contributions on the basis of the actuarial valuations, but any such increase may not result in a differential between the employee and employer contribution rate that exceeds 2.9 percent of earnable compensation for SCRS and 5 percent for PORS. An increase in the contribution rates adopted by the board may not provide for an increase of more than one-half of one percent in any one year. If the scheduled employee and employer contributions provided in statute or the rates last adopted by the board are insufficient to maintain a thirty year amortization schedule of the unfunded liabilities of the plans, the board shall increase the contribution rates in equal percentage amounts for the employer and employee as necessary to maintain the thirty-year amortization period; this increase is not limited to one-half of one percent per year.

After June 30, 2016, if the most recent annual actuarial valuation of the Systems for funding purposes shows a ratio of the actuarial value of system assets to the actuarial accrued liability of the system (the funded ratio) that is equal to or greater than ninety percent, then the board, effective on the following July first, may decrease the then current contribution rates upon making a finding that the decrease will not result in a funded ratio of less than ninety percent. Any decrease in contribution rates must maintain the 2.9 and 5 percent differentials between the SCRS and PORS employer and employee contribution rates respectively. If contribution rates are decreased pursuant to this provision, and the most recent annual actuarial valuation of the system shows a funded ratio of less than ninety percent, then effective on the following July first, and annually thereafter as necessary, the board shall increase the then current contribution rates until a subsequent annual actuarial valuation of the system shows a funded ratio that is equal to or greater than 90 percent.

Following are the employee and employer contribution rates applicable for fiscal year 2016:

System	Employee Rate	Employer Rate
SCRS	8.16%	11.06%[1]
PORS	8.74%	13.74%[2]
GARS	11%	$4,501,000[3]
JSRS	10%	47.97%[1]
SCNG	Non-contributory	$4,590,798

[1] Includes incidental death benefit contribution rate of 0.15%
[2] Includes incidental death benefit and accidental death benefit contribution rate of 0.20% each
[3] Includes incidental death benefit contributions as determined by the Systems' actuary

Employer contributions for the GARS and SCNG are determined by the Systems' actuary on an annual basis. SCNG employer contributions are provided annually by state appropriations.

In accordance with South Carolina State Statute, an additional employer contribution surcharge of 5.33 percent of covered payroll was added to the contribution rate applicable to state and local governments, and public school entities covered by the state's retiree health and dental insurance benefits. This assessment is for the purpose of providing retiree health and dental insurance coverage and is not a part of the actuarially established contribution rates for retirement funding purposes. Functioning as a collecting agent, SCRS and PORS collected (amounts expressed in thousands) $411,918 and $21,268 respectively in retiree insurance surcharges ($70,761 of which was applicable to the State ORP) and remitted these

funds to the South Carolina Retiree Health Insurance Trust Fund.

The Fiduciary Net Position of each plan is required to be reserved in the following accounts:

The **Employer Fund** is credited with all employer retirement contributions and investment earnings of the Employee and Employer Funds. Upon retirement, all member account balances and contributions are transferred to the Employer Fund as all annuities and administrative expenses of the Systems are paid from this fund. Annual state appropriations to the SCNG are also credited to the Employer Fund to provide funding for the payment of annuities and administrative expenses.

The **Employee Fund** is credited with all contributions made by active members of the Systems. Interest is credited to each active member's individual account at an annual rate of 4 percent by transferring funds from the Employer Fund to the Employee Fund. At termination of employment prior to retirement, employee contributions and accumulated interest may be refunded from this fund to the member. At retirement, employee contributions and interest are transferred from the Employee Fund to the Employer Fund for subsequent payment of benefits.

The **Death Benefit Fund**, an incidental death program within SCRS and PORS, is the fund to which participating employers contribute for the purpose of providing a death benefit to active and retired members of the Systems. Employer contributions and investment earnings are credited to this fund. Death benefit payments and administrative expenses are paid from this fund. The assets in the Death Benefits Fund are not held separately in a dedicated trust for the sole purpose of paying death benefits to beneficiaries of deceased members. These benefits are considered allowable within the defined benefit plans and are held within the pension trust funds.

The **Accidental Death Fund** (PORS only) is the fund to which participating employers contribute for the purpose of providing annuity benefits to beneficiaries of members of PORS killed in the actual performance of their duties. This fund and its benefits are independent of any other retirement benefit available to the beneficiary. Employer contributions and investment earnings are credited to this fund. Monthly survivor annuities and administrative expenses are paid from this fund.

The **Qualified Excess Benefit Arrangement (QEBA) Fund** is the fund from which annuity benefits are paid when a benefit recipient exceeds IRC Section 415(b) limits on the amount an individual may receive annually from a qualified defined benefit pension plan. Employer contributions are credited to this fund on an as-needed basis in an amount equivalent to the amount of funds necessary to pay benefits out of the QEBA fund due to IRC Section 415(b) limitations. Accordingly, the QEBA fund currently has no reserve balance.

Balances in the respective reserves at June 30, 2016, were as follows (amounts expressed in thousands):

	SCRS	PORS	GARS	JSRS	SCNG	Total
Employee Fund	$ 7,447,442	$ 968,722	$ 7,334	$ 25,082	$ -	$ 8,448,580
Employer Fund	16,430,986	2,818,531	22,854	115,635	23,350	19,411,356
Death Benefit Fund	117,934	37,980				155,914
Accidental Death Fund		50,803				50,803
QEBA Fund						-
Totals	$ 23,996,362	$ 3,876,036	$ 30,188	$ 140,717	$ 23,350	$ 28,066,653

III. Deposits and Investments

Deposit and Investment Risk Disclosures

The tables presented on Pages 35-38 include disclosures of credit and interest rate risk in accordance with Governmental Accounting Standards Board Statement 40 and are designed to inform financial statement users about investment risks which could affect the Systems' ability to meet its obligations. These tables classify investments by risk type, while the financial statements disclose investments by asset class. The table amounts were provided by the custodian bank and agree to the Statement of Fiduciary Net Position.

Custodial Credit Risk

Deposits

Custodial credit risk for deposits is the risk that in the event of a bank failure, the Systems' deposits may not be recovered. As prescribed by South Carolina state statute, the State Treasurer is the custodian of all deposits and is responsible for securing all deposits held by banks. These deposits are secured by deposit insurance, surety bonds, collateral securities, or letters of credit to protect the state against loss in the event of insolvency or liquidation of the institution or for any other cause. Deposits are insured by the Federal Deposit Insurance Corporation (FDIC) up to $250,000 or collateralized with securities held by the state or its agent in the South Carolina State Treasurer's name as custodian.

The Systems' deposits at June 30, 2016, were as follows (amounts expressed in thousands):

	Carrying Amount
SCRS	$19,629
PORS	2,804
GARS	60
JSRS	70
SCNG	51
Total	$22,614

Actual bank balances at June 30, 2016, totaled $34,428 (amount expressed in thousands).

Investments

Custodial credit risk for investments is the risk that, in the event of a failure of the counterparty, the Systems will not be able to recover the value of the investments or collateral securities that are in the possession of an outside party. Investing for the Systems is governed by Section 16, Article X of the South Carolina Constitution and Section 9-1-1310(B) and Title 9 Section 16 of the South Carolina Code of Laws. Funds held in trust for the Retirement Systems may be invested and reinvested in a variety of instruments including, but not limited to, fixed income instruments of the United States, foreign fixed income obligations, swaps, forward contracts, futures and options, domestic and international equity securities, private equity, real estate, and fund of funds.

The table on the following page presents the fair value of investments as of June 30, 2016.

Statement of Invested Assets

June 30, 2016

(Amounts expressed in thousands)

Investment Type	Fair Value
Short Term Investments	
Short Term Investment Funds (U.S. Regulated)	$ 1,728,531
Repurchase Agreements	285,065
Certificates of Deposit	44,004
Commercial Paper	741,379
U. S. Treasury Bills	254,985
Discount Notes	526,187
Corporate Bonds	43,454
Strategic Partnership Short Duration	481,561
Options - Cash	(420)
Futures - Cash	(2,018)
Total Short Term Investments	$ 4,102,728
Equity Allocation	
Global Public Equity[2]	
Common Stocks	$ 6,465,091
Real Estate Investment Trusts	631,537
Preferred	37,690
Convertible Preferred	1,492
Futures - Equity	15,537
Swaps - Equity	32,124
Options - Equity	17,514
Total Global Public Equity	$ 7,200,985
Global Tactical Asset Allocation	
Commingled Funds Balanced	$ 1,963,716
	$ 1,963,716
Alternatives	
Hedge Funds	$ 3,132,975
Private Debt	1,709,401
Private Equity Limited Partnerships	2,644,469
Real Estate	1,499,968
Swaps - Commodities	(339)
Total Alternative Investments	$ 8,986,474

Investment Type	Fair Value
Fixed Income Allocation	
U.S. Government	
U.S. Government Treasuries[1]	$ 423,833
U.S. Government Agencies	594,259
Mortgage Backed	
Government National Mortgage Association	86,341
Federal National Mortgage Association	30,740
Federal Home Loan Mortgage Association	2,414
Federal Home Loan Mortgage Association (Multiclass)	8,534
Collateralized Mortgage Obligations	9,015
Municipals	32,044
Corporate	
Corporate Bonds	2,416,412
Mixed Credit	233,515
Asset Backed Securities	249,757
Private Placements	537,216
Yankee Bonds	2,203
Global Emerging Debt	1,234,934
Options - Fixed Income	56
Futures - Fixed Income	24,264
Swaps - Fixed Income	(38,152)
Total Fixed Income	$ 5,847,385

Total Invested Assets	**$28,101,288**
Invested Securities Lending Collateral	$ 55,737

Reconciliation of Statement of Invested Assets (listed above) to the *Statement of Fiduciary Net Position*

Total Invested Assets	$ 28,101,288
Short Term Investments classified as Cash & Cash Equivalents on *Statement of Fiduciary Net Position*	
Short Term Investment Funds (U.S. Regulated)	(1,728,531)
Repurchase Agreements	(285,065)
Certificates of Deposit	(15,003)
Commercial Paper	(652,607)
U. S. Treasury Bills	(94,862)
Discount Notes	(494,247)
Corporate Bonds	(43,193)
Options - Cash	420
Futures - Cash	2,018
Total Investments on *Statement of Fiduciary Net Position*	$ 24,790,218

[1] U.S. Government Treasuries includes Notes, Bonds, and Treasury Inflation Protected Securities (TIPS).

[2] RSIC's Public Equity benchmark as of 6/30/2016 is the MSCI All Country World Index. The benchmark is comprised of 53.6% MSCI US, 35.9% MSCI EAFE + CAD, and 10.5% MSCI EM. As of June 30, 2016, RSIC had a NAV of $4,046,281,036.60 in Global Equity managers that invest to the MSCI World. The MSCI World is comprised of 59.8% MSCI US and 40.2% MSCI EAFE + CAD.

Fair Value Measurements

The Systems categorize fair value measurements within the fair value hierarchy established by GASB Statement No. 72, *Fair Value Measurement and Application*. The valuation technique uses a three level hierarchy of inputs to measure the fair value of the asset and gives the highest priority to unadjusted quoted prices in active markets (level 1 measurements) and the lowest priority to unobservable inputs (level 3 measurements). These classifications are summarized as follows:

Level 1 Inputs: Quoted prices (unadjusted) for identical assets or liabilities in active markets that a reporting entity can access at the measurement date.

Level 2 Inputs: Inputs other than quoted prices included within Level 1 that are observable for an asset or liability, either directly or indirectly.

Level 3 Inputs: Unobservable inputs for an asset or liability.

In the event that inputs used to measure the fair value of an asset or liability fall into different levels in the fair value hierarchy, the overall level of the fair value hierarchy in its entirety is determined based on the lowest level input that is significant to the entire valuation. These levels are not necessarily an indication of risk but are based upon the pricing transparency of the investment. In determining the appropriate levels, the Systems performed a detailed analysis of the assets and liabilities that are subject to GASB Statement No. 72.

Fair value of certain investments that do not have a readily determinable fair value is established using net asset value (or its equivalent) as a practical expedient. These investments are not categorized according to the fair value hierarchy.

Investments classified according to the fair value hierarchy are valued according to pricing policy established by the Plan's custodian bank. Pricing is based primarily on prices from several third-party vendors or other specified alternative sources which are considered to be reliable. Where available, the custodian bank uses more than one vendor for securities of each asset type, class or issue. The price received from a primary source is used in valuation unless a tolerance check, or price challenge, results in the use of a price from a secondary vendor. The Systems may override prices provided by the custodian bank if it is deemed necessary or appropriate.

The Systems have the following recurring fair value measurements as of June 30, 2016 (amounts in thousands):

Investments by Fair Value Level	At 6/30/2016	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)
Short Term Investments				
Short Term Investment Funds (U. S. Regulated)	$ 1,728,531	$ 1,728,531	$ -	$ -
Repurchase Agreements	285,065			285,065
Certificates of Deposit	44,004		44,004	
Commercial Paper	741,379		741,379	
Discount Notes	526,187		526,187	
U. S. Treasury Bills	254,985	254,985		
Corporate Bonds	43,454		43,454	
Total Short Term Investments	$ 3,623,605	$ 1,983,516	$ 1,355,024	$ 285,065
Equity Allocation				
Global Public Equity				
Common Stocks	$ 3,119,528	$ 3,119,528	$ -	$ -
Real Estate Investment Trusts	631,537	631,537		
Preferred	37,690	2,042	35,648	
Convertible Preferred	1,492		1,492	
Total Equity	$ 3,790,247	$ 3,753,107	$ 37,140	$ -
Fixed Income Allocation				
U. S. Government				
U.S. Government Treasuries	423,833	423,833		
U.S. Government Agencies	594,259		594,259	
Mortgage Backed				
Government National Mortgage Association	86,341		86,341	
Federal National Mortgage Association	30,740		30,740	
Federal Home Loan Mortgage Association	2,414		2,414	
Federal Home Loan Mortgage Association (Multiclass)	8,534		8,534	
Collateralized Mortgage Obligations	9,015		9,015	
Municipals	32,044		32,044	
Corporate				
Corporate Bonds	2,416,412		1,922,945	493,467
Asset Backed Securities	249,757		249,757	
Private Placements	537,216		537,216	
Yankee Bonds	2,203		2,203	
Global Emerging Debt	165,964	165,964		
Total Fixed Income	$ 4,558,732	$ 589,797	$ 3,475,468	$ 493,467
Total Investments by Fair Value Level	$ 11,972,584	$ 6,326,420	$ 4,867,632	$ 778,532
Investments measured at the net asset value (NAV)				
Strategic Partnership Short Duration	$ 481,561			
Global Equity	3,345,563			
Global Tactical Asset Allocation	1,963,716			
Mixed Credit	233,515			
Global Emerging Debt	1,068,970			
Hedge Funds	3,132,975			
Private Equity	2,644,469			
Private Debt	1,709,401			
Real Estate	1,499,968			
Total investments measured at the NAV	$ 16,080,138			
Total investments measured at fair value	$ 28,052,722			
Investment derivative instruments				
Short Term Investments				
Options - Cash	$ (420)	$ -	$ (420)	
Futures - Cash	(2,018)	(2,018)		
Equity Investments				
Options - Equity	17,514		17,514	
Futures - Equity	15,537	15,537		
Swaps - Equity	32,124		32,124	
Fixed Income Investments				
Options - Fixed Income	56	(40)	96	
Futures - Fixed Income	24,264	24,264		
Swaps - Fixed Income	(38,152)		(38,152)	
Alternative Investments				
Swaps - Commodities	(339)		(339)	
Total investment derivative instruments	$ 48,566	$ 37,743	$ 10,823	$ -
Total Invested Assets	$ 28,101,288			

Investments Measured at the Net Asset Value (NAV):

	Fair Value	Unfunded Commitments*	Redemption Frequency (if Currently Eligible)	Redemption Notice Period
Strategic Partnership Short Duration	$ 481,561		Monthly	5 - 10 days
Global Equity	3,345,563		Daily/Monthly	5 - 30 days
Global Tactical Asset Allocation	1,963,716		Monthly/Quarterly	5 - 14 days
Mixed Credit	233,515		Monthly	5 - 30 days
International Emerging Debt	1,068,970		Daily/Monthly	10-15 days
Hedge Funds	3,132,975		Monthly/Quarterly	2 -90 days
Private Equity	2,644,469	$ 839,692	Illiquid	Illiquid
Private Debt	1,709,401	1,479,311	Illiquid	Illiquid
Real Estate	1,499,968	1,078,343	Illiquid	Illiquid
Total investments measured at the NAV	$ 16,080,138			

**For purposes of this table, amounts are reported in thousands in US Dollars. The Private Equity Category includes €86,255,430 and AUD $86,100,000 that have been converted to USD.*

Strategic Partnership Short Duration Funds. This investment type contains two investments in funds that invest primarily in short duration debt instruments which generally have a one to three year maturity. The fair values of the investments have been determined using the percent ownership of the NAV of the fund. Redemptions are generally allowed monthly, provided adequate notice.

Global Equity Funds. This investment type includes nine funds that invest primarily in global developed and emerging equity public markets instruments. The fair values of the investments in this type have been determined using NAV per share of the investments or percent ownership of the NAV of the fund. Redemptions are generally allowed monthly, provided adequate notice.

Global Tactical Asset Allocation Funds. This investment type includes four funds that may be invested in liquid securities and instruments, including but not limited to equities, fixed income securities, bank loans, commodities, futures, swaps, forwards, options and currencies. The fair values of the investments in this type have been determined using NAV per share of the investments or percent ownership of the NAV of the fund. Redemptions are allowed monthly, provided adequate notice, except for one fund that may require a longer redemption timeframe and may be subject to gates and/or lock-ups.

Mixed Credit Funds. This investment type includes three funds that generally invest in high yield, bank loan and structured credit instruments. The fair values of the investments in this type have been determined using NAV per share of the investments or percent ownership of the NAV of the fund. Redemptions are generally allowed monthly, provided adequate notice.

International Emerging Debt Funds. This investment type includes four funds that generally invest in debt securities issued in any currency and may hold foreign currency. The fair values of the investments in this type have been determined using NAV per share of the investments or percent ownership of the NAV of the fund. Redemptions are generally allowed monthly, provided adequate notice, and one fund charges a redemption fee.

Hedge Funds. This investment type includes 16 funds that generally invest in hedge fund strategies that seek alpha in equity or credit markets, or seek to minimize embedded market beta. There are 10 of these funds, or approximately 73 percent of the value of this investment type, invested through strategic partnership investments which may consist of underlying investments in more than one hedge fund. The fair values of the investments in this type have been determined using NAV per share of the investments or percent ownership of

the NAV of the fund. Redemptions are generally allowed monthly, provided adequate notice; however, it is common that funds have authority to require longer redemption timeframes and/or make the redemption subject to gates in order to mitigate any detrimental impact to the fund.

Private Equity Funds. This investment type includes 40 funds that consist of investments in limited partnerships or co-investments and four funds that are strategic partnership investments. Strategic partnerships may consist of underlying investments in more than one limited partnership or co-investment fund. The private equity investments span the venture capital, growth equity, fund of funds, secondaries, energy and buyout strategies. Private equity is considered an illiquid investment strategy as funds generally have a life span of seven to 10 years. The nature of investments in this type is that distributions are received through the liquidation of the underlying assets of the fund. The fair values of the investments in this type have been determined using percent ownership of the NAV of the fund. Due to the nature of the valuation of the underlying fund investments, it is probable that the investments of this type will be sold at an amount different from the percent ownership of the NAV of the fund.

Private Debt Funds. This investment type includes 20 funds that consist of investments in limited partnerships and 5 funds that are strategic partnership investments. Strategic partnerships may consist of underlying investments in more than one limited partnership or co-investment fund. The private debt investments span the direct lending, distressed, energy, mezzanine, mortgages, opportunistic and other strategies. Private Debt is considered an illiquid investment strategy as funds generally have a life span of seven to 10 years. The nature of investments in this type is that distributions are received through the liquidation of the underlying assets of the fund. The fair values of the investments in this type have been determined using percent ownership of the NAV of the fund. Due to the nature of the valuation of the underlying fund investments, it is probable that the investments of this type will be sold at an amount different from the percent ownership of the NAV of the fund.

Real Estate Funds. This investment type includes 22 funds that consist of investments in limited partnerships or co-investments and four funds that are strategic partnership investments. Strategic partnerships may consist of underlying investments in more than one limited partnership or co-investment fund. The real estate investments span the core, diversified, real estate debt, timber, value add and opportunistic strategies. Real Estate is considered an illiquid investment strategy as funds generally have a life span of seven to 10 years. The nature of investments in this type is that distributions are received through the liquidation of the underlying assets of the fund. The fair values of the investments in this type have been determined using percent ownership of the NAV of the fund. Due to the nature of the valuation of the underlying fund investments, it is probable that the investments of this type will be sold at an amount different from the percent ownership of the NAV of the fund.

Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. While the RSIC has no formal interest rate risk policy, interest rate risk is observed within the portfolio using effective duration (option adjusted duration), which is a measure of the price sensitivity of a bond or a portfolio of bonds to interest rate movements given a 100 basis point change in interest rates. Effective duration takes into account that expected cash flows will fluctuate as interest rates change and provides a measure of risk that changes proportionately with market rates. Investment guidelines may specify the degree of interest rate risk taken versus the benchmark within each fixed income portfolio. Disclosures for interest rate risk at June 30, 2016, are noted below (amounts expressed in thousands).

Investment Type	Fair Value Total	Fair Value Duration Not Available	Fair Value Duration Available	Effective Duration (option adjusted duration)
Short Term Investments				
Short Term Investment Funds (U.S. Regulated)	$ 1,728,531	$ -	$ 1,728,531	0.08
Repurchase Agreements	285,065		285,065	0.08
Invested Securities Lending Collateral	55,737	55,737		
Certificates of Deposit	44,004		44,004	0.39
Commercial Paper	741,379	24,996	716,383	0.11
U. S. Treasury Bills	254,985		254,985	0.22
Discount Notes	526,187		526,187	0.04
Corporate Bonds	43,454	261	43,193	0.11
Strategic Partnership Short Duration	481,561		481,561	1.16
Options - Cash	(420)	(306)	(114)	(2.20)
Futures - Cash	(2,018)		(2,018)	45.18
Total Short Term Investments	4,158,465	80,688	4,077,777	
Equity Allocation				
Preferred	37,690	2,042	35,648	5.52
Convertible Preferred	1,492	1,492		
Total Equity Investments	39,182	3,534	35,648	
Fixed Income Allocation				
U. S. Government				
U.S. Government Treasuries	423,833		423,833	10.62
U. S. Government Agencies	594,259	71,765	522,494	0.92
Mortgage Backed				
Government National Mortgage Association	86,341		86,341	1.23
Federal National Mortgage Association	30,740		30,740	1.85
Federal Home Loan Mortgage Corporation	2,414	2,055	359	0.90
Federal Home Loan Mortgage Association (FHLMC Multiclass)	8,534		8,534	2.77
Collateralized Mortgage Obligations	9,015	449	8,566	4.37
Municipals	32,044	1,531	30,513	9.95
Corporate				
Corporate Bonds	2,416,412	535,254	1,881,158	3.61
Mixed Credit	233,515	12,579	220,936	4.68
Asset Backed Securities	249,757	39,698	210,059	(0.03)
Private Placements	537,216	128,152	409,064	2.45
Yankee Bonds	2,203		2,203	10.06
Global Emerging Debt	1,234,934	165,964	1,068,970	13.42
Options - Fixed Income	56		56	65.24
Futures - Fixed Income	24,264		24,264	444.06
Swaps - Fixed Income	(38,152)	(834)	(37,318)	12.88
Total Fixed Income	$ 5,847,385	$ 956,613	$ 4,890,772	
Total Invested Assets	**$ 10,045,032**	**$ 1,040,835**	**$ 9,004,197**	
Total Portfolio Effective Duration (option adjusted duration)				**3.58**

Credit Risk

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations to the holders of its securities. Each individual portfolio within fixed income is managed in accordance with investment guidelines that are specific as to permissible credit quality ranges, exposure levels within individual quality tiers and average credit quality. Within high yield portfolios, a quality rating of lower than C is not permissible in any of the fixed income guidelines except in those circumstances of downgrades subsequent to purchase, in which case the investment manager is responsible for communicating the downgrade to the Commission's consultant and staff. The Systems' fixed income investments at June 30, 2016, were rated by Moody's and are presented below (amounts expressed in thousands).

Credit Risk

June 30, 2016

(Amounts expressed in thousands)

Investment Type and Fair Value	AAA	AA	A	BAA	BA
Short Term Investments					
Short Term Investment Funds (U. S. Regulated)	$ 1,728,531	$ -	$ -	$ -	$ -
Repurchase Agreements					
Invested Securities Lending Collateral					
Commercial Paper		352,872		351,529	
Certificates of Deposit		24,002			
Discount Notes	426,190				
Corporate Bonds		5,181	13,053	24,959	
Strategic Partnership Short Duration					
Options - Cash					
Futures - Cash					
Equity Investments					
Preferred				7,396	8,250
Convertible Preferred				1,492	
Fixed Income Allocation[2]					
Mortgage Backed:					
Federal National Mortgage Association	30,740				
Federal Home Loan Mortgage Association	2,414				
Federal Home Loan Mortgage Association (Multiclass)	8,534				
Collateralized Mortgage Association	9,015				
Municipals		16,338	10,763		
Corporate:					
Corporate Bonds	73,256	139,660	377,952	373,009	458,888
Mixed Credit					
Asset Backed Securities	20,030	26,702	36,810	71,118	20,474
Private Placements	43,942	27,938	106,207	62,527	57,609
Yankee Bonds				1,673	530
Global Emerging Debt					83,246
Options - Fixed Income					
Futures - Fixed Income					
Swaps - Fixed Income					
Totals	**$ 2,342,652**	**$ 592,693**	**$ 544,785**	**$ 893,703**	**$ 628,997**

Chart continued on Page 37

[1]*The column labeled Not Rated by S&P or Moody's represents securities that were either not rated or had a withdrawn rating.*

[2]*U.S. Treasury Bills, Notes and Bonds, Agencies and Government National Mortgage Association securities with a fair value of $1.36 billion are not included because they are not subject to credit risk.*

Chart continued from Page 36

Credit Risk

				Not Rated			
B	CAA	CA	Int'l and EMD Commingled Funds or held in Strategic Partnerships	Rated by S&P; not by Moody's	Not rated by S&P or Moody's[1]	TOTAL
$ -	$ -	$ -	$ -	$ -	$ -	$ 1,728,531
					285,065	285,065
					55,737	55,737
					36,978	741,379
					20,002	44,004
					99,997	526,187
					261	43,454
			481,561			481,561
					(420)	(420)
					(2,018)	(2,018)
1,465				13,726	6,853	37,690
						1,492
						30,740
						2,414
						8,534
						9,015
				4,943		32,044
354,131	53,857	882		197,025	387,752	2,416,412
			233,515			233,515
				36,738	37,885	249,757
35,600	16,312			134,586	52,495	537,216
						2,203
			1,151,688			1,234,934
					56	56
					24,264	24,264
					(38,152)	(38,152)
$ 391,196	**$ 70,169**	**$ 882**	**$ 1,866,764**	**$ 387,018**	**$ 966,755**	**$ 8,685,614**

Concentration of Credit Risk – Investments

Concentration of credit risk is the risk of loss attributed to the magnitude of investment in a single issuer. The Systems' policy for reducing this risk is to comply with the Statement of Investment Objectives and Policies as amended and adopted by the Commission which states that "except that no limitations on issues and issuers shall apply to obligations of the U.S. Government and Federal Agencies, the domestic fixed income portfolio shall contain no more than 6 percent exposure to any single issuer." As of June 30, 2016, there is no single issuer exposure within the portfolio that comprises 5 percent or more of the overall portfolio. Therefore, there is no concentration of credit risk.

Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely impact the fair value of an investment. The Systems participates in foreign markets to diversify assets, reduce risk and enhance returns. Currency forwards are used to manage currency fluctuations and are permitted by investment policy. Policy, however, forbids speculating in forwards and other derivatives.

The table below presents the Systems' exposure to foreign currency risk in U.S. dollars at June 30, 2016, (amounts expressed in thousands):

Currency	Cash & Cash Equivalents	Forward Contracts	Futures Contracts	Private Equity	Private Debt	Preferred Securities	Fixed Income	Equity	Total
Australian Dollar	$ (127)	$ 98,964	$ 706	$ 7,595	$ -	$ -	$ -	$ 59,919	$ 167,057
Brazil Real		(11,345)					11,836		491
Canadian Dollar	4,576	119,854	1,219				(1,109)	100,385	224,925
Danish Krone	133	110						14,129	14,372
Euro Currency	(18,260)	322,302	3,451	165,823	1,519	2,043	186,812	239,792	903,482
Hong Kong Dollar	(705)	49,327	2,573					31,717	82,912
Israeli Shekel								4,300	4,300
Japanese Yen	1,363	258,674	(16,480)					172,251	415,808
Malaysian Ringgit		(1,159)							(1,159)
Mexican New Peso	1,513	(1,059)					(374)	2,832	2,912
New Taiwan Dollar		(2,378)							(2,378)
New Zealand Dollar	12							2,648	2,660
Norwegian Krone	48	(128)						5,659	5,579
Philippines Peso	1								1
Pound Sterling	(1,277)	255,072	18,539				4,574	168,204	445,112
Russian Ruble (New)		(699)							(699)
Singapore Dollar	524	(11,682)						5,575	(5,583)
South Korean Won		(14,060)							(14,060)
Swedish Krona	(1,801)	41,881	948					19,815	60,843
Swiss Franc	62	(495)						73,838	73,405
Totals	$ (13,938)	$ 1,103,179	$ 10,956	$ 173,418	$ 1,519	$ 2,043	$ 201,739	$ 901,064	$ 2,379,980

Derivatives

Derivatives are financial instruments for which the value is derived from underlying assets or data. All of the Systems' derivatives are considered investments. Excluding futures, derivatives generally take the form of contracts in which two parties agree to make payments at a later date based on the value of specific assets or indices. Through certain collective trust funds, the Systems may invest in various derivative financial instruments such as futures and options thereon; forward foreign currency contracts, options, interest rate, currency, equity, index, credit default, total return swaps, interest-only strips, and CMOs to enhance the performance and reduce volatility. To comply with the requirements of multiple exchanges, cash and securities in the amount of $139.7 and $281.9 million, respectively, were held

in trust by the clearing brokers on June 30, 2016. The Systems' derivatives, consisting of futures, options, forward contracts and swaps are presented in the tables on Pages 40-45. Investments in limited partnerships and commingled funds may include derivatives that are not shown in the derivative totals.

Derivatives directly managed by the Investment Commission are used primarily to facilitate changes to the asset allocation of the total plan and for their low cost of implementation. The Commission uses derivatives for several reasons:

- Asset Allocation: In many cases, synthetic exposures (using derivatives) are placeholders until managers are hired and funded. In time, the Commission may substitute traditional managers for much of the synthetic exposure currently in the portfolio. Efficient Market Theory dictates that in some asset classes, synthetics are the best way to achieve exposure.
- Risk Management: Derivatives allow investors the ability to swiftly and efficiently increase or decrease exposures in order to manage portfolio risk.
- Cost: A synthetic (derivative) solution is often the least expensive way to gain exposure to an asset class or to manage portfolio risk. Derivatives are more beneficial in each of the three major measures of cost: commission costs, market impact of trading and opportunity costs.

Futures

Futures are contractual obligations that require the buyer (seller) to buy (sell) assets at a predetermined date at a predetermined price. These contracts are standardized and trade on an organized exchange with gains and losses settled daily thereby significantly reducing credit and default risk. Gains and losses are included in the net appreciation/ (depreciation) in the fair value of investments total of the Statement of Changes in Fiduciary Net Position.

The tables below present classification information on the Systems' derivatives at June 30, 2016, (amounts expressed in thousands):

	Changes in Fair Value	
	Classification	Gain/(Loss)
Futures Contracts	Net appreciation/(depreciation)	$ 74,008
Forward Contracts	Net appreciation/(depreciation)	(33,663)
Swaps	Net appreciation/(depreciation)	177
Options	Net appreciation/(depreciation)	33,231

	Fair Value			
	Forward Contracts	Futures	Options	Swaps
Cash and Cash Equivalents	$ (25,320)	$ (2,018)	$ (420)	$ -
Fixed Income		24,264	56	(38,152)
Equity		15,537	17,514	32,124
Alternatives				(339)
Totals	$ (25,320)	$ 37,783	$ 17,150	$ (6,367)

At June 30, 2016, the Systems had the following exposure via futures contracts (dollar amounts expressed in thousands):

Futures Contracts	Expiration	Long/Short	Quantity	Notional Value[1]
90 Day Eurodollar Future (CME)	March 2017	Short	(10)	$ (2,483)
90 Day Eurodollar Future (CME)	March 2018	Short	(206)	(51,054)
90 Day Eurodollar Future (CME)	June 2017	Short	(176)	(43,679)
90 Day Eurodollar Future (CME)	September 2017	Short	(71)	(17,613)
90 Day Eurodollar Future (CME)	September 2018	Short	(183)	(45,311)
90 Day Eurodollar Future (CME)	December 2017	Short	(147)	(36,447)
90 Day Eurodollar Future (CME)	December 2018	Short	(659)	(163,069)
Total Cash & Cash Equivalents				(359,656)
S&P 500 Emini Ind Future (CME)	September 2016	Long	4,613	482,105
SPI 200 Index Future (SFE)	September 2016	Long	1,123	108,202
DAX Index Future (EUX)	September 2016	Long	544	146,081
IBEX 35 Index Future (MFM)	July 2016	Long	575	51,917
CAC40 Euro Index Future (EOP)	July 2016	Long	3,400	159,928
S&P / MIB Index Future (MIL)	September 2016	Long	376	33,816
Amsterdam Index Future (EOE)	July 2016	Long	546	52,809
FTSE 100 Index Future (ICE)	September 2016	Long	3,277	281,350
Hang Seng Index Future (HKG)	July 2016	Long	432	58,321
TOPIX Index Future (OSE)	September 2016	Long	2,932	355,961
S&P / TSE 60 Index Futures (MSE)	September 2016	Long	1,131	141,830
OMXS30 Index Future (OMX)	July 2016	Long	2,645	41,161
DJ Euro Stoxx Ind 50 Future (EUX)	September 2016	Long	4,934	156,495
Total Equity				2,069,976
US Long Bond Future (CBT)	September 2016	Long	1,905	328,315
US 10 Year Treasury Notes (CBT)	September 2016	Long	2,921	388,447
US 5 Year Treasury Notes (CBT)	September 2016	Long	2,262	276,335
US 2 Year Treasury Notes (CBT)	September 2016	Long	1,125	246,744
US Long Bond Future (CBT)	September 2016	Long	288	49,635
US 10 Year Treasury Notes (CBT)	September 2016	Long	342	45,481
US 5 Year Treasury Notes (CBT)	September 2016	Long	1,364	166,632
EURO-BUND Future (EUX)	September 2016	Long	6	1,114
Canada 10 Year Bond Future (MSE)	September 2016	Long	116	13,223
EURO BTP Future (EUX)	September 2016	Long	192	30,419
US 10 Year Ultra Future (CBT)	September 2016	Short	(27)	(3,933)
US 10 Year Treasury Notes Future (CBT)	September 2016	Short	(89)	(11,836)
US 5 Year Treasury Notes Future (CBT)	September 2016	Short	(36)	(4,398)
US 2 Year Treasury Notes Future (CBT)	September 2016	Long	153	33,557
US Ultra Bond Future (CBT)	September 2016	Long	2	373
Total Fixed Income				1,560,108
Total				$ 3,270,428

[1] Notional value is the nominal or face amount that is used to calculate payments made on derivative instruments (futures, forwards, swaps and options). This amount generally does not change hands and is thus referred to as notional. The notional amount represents the economic equivalent to an investment in the physical securities represented by the derivative contract.

Forwards

Forwards are contractual obligations that require the delivery of assets at a fixed price on a predetermined date. These contracts are "over-the-counter" (OTC) instruments, meaning they are not traded on an organized exchange. Currency forwards gains and losses are included in the net appreciation/(depreciation) in the fair value of investments total of the Statement of Changes in Fiduciary Net Position.

At June 30, 2016, the Systems had the following forward exposures, listed by counterparty (amounts expressed in thousands):

Broker	Notional Value	Fair Value	Counterparty Exposure
Australia & New Zealand Banking Group Ltd	$ 1,913	$ (21)	0.07%
Bank of America	295,808	(5,251)	10.64%
Bank of Montreal	363,278	1,617	13.07%
Barclays London	18,281	(262)	0.66%
BNP Paribas	339,727	(7,060)	12.22%
Bank of New York Mellon	544,088	2,090	19.57%
Citibank NA	251,211	(1,892)	9.04%
Commonwealth Bank of Australia	167,054	(216)	6.01%
Credit Suisse International London	2,872	8	0.10%
Deutsche Bank London	1,860	2	0.07%
Goldman Sachs	52,040	102	1.87%
HSBC Securities	206,984	(3,815)	7.44%
JP Morgan Chase Bank	66,584	(1,692)	2.39%
Merrill Lynch International	5,556	2	0.20%
Morgan Stanley Capital Services	6,193	(203)	0.22%
National Australia Bank Ltd	113,867	(4,048)	4.10%
Societe Generale	3,982	31	0.14%
Standard Chartered Bank	6,871	274	0.25%
State Street Corp	150,458	(484)	5.41%
UBS AG	140,633	(4,277)	5.06%
Westpac Banking Corp	40,925	(225)	1.47%
Totals	$ 2,780,185	$ (25,320)	100.00%

Swaps

The Systems has entered into various swap agreements to manage plan exposure. Swaps are OTC agreements to exchange a series of cash flows according to specified terms. The underlying asset can be an interest rate, an exchange rate, a commodity price or any other index.

Total return swaps are primarily used to efficiently achieve a target asset allocation. Exposures to an asset class are typically gained by paying a reference rate such as LIBOR, plus or minus a spread, in exchange for the risk and returns of a desired market index. Similarly, exposures can be reduced by receiving a reference rate in exchange for the economic risks and returns of an index.

Counterparty risk, or default risk, is the risk that a party will not honor its contractual obligations. The Systems seeks to actively manage its counterparty risk by thorough analysis and evaluation of all potential counterparties by investment staff and the independent overlay manager. Risk is further minimized through diversification among counterparties with high credit ratings and collateralizing unrealized gains and losses. The Systems currently does not participate in a master netting agreement. Unrealized gains and losses are not netted across instrument types and are included in the net appreciation/(depreciation) in the fair value of investments total of the Statement of Changes in Fiduciary Net Position. The table below reflects the counterparty credit ratings at June 30, 2016, for currency forwards, and swap agreements, and options (amounts in thousands):

Quality rating	Forwards	Swaps	Options	Total
Aa2	$ (10,016)	$ 12,189	$ (175)	$ 1,998
Aa3	(2,386)	3,550	(45)	1,119
A1	(12,487)	3,514	22,424	13,451
A2	(231)	10,513	(5)	10,277
A3		(11)		(11)
Baa1		(65)		(65)
Baa2	2	(810)	(39)	(847)
NR	(202)	(1,065)	(5,010)	(6,277)
Total subject to credit risk	$ (25,320)	$ 27,815	$ 17,150	$ 19,645
Centrally cleared:				
Chicago Mercantile Exchange Inc.		(23,219)		(23,219)
LCH.Clearnet Ltd		(10,963)		(10,963)
Total not subject to credit risk		$ (34,182)		$ (34,182)
Totals	$ (25,320)	$ (6,367)	$ 17,150	$ (14,537)

At June 30, 2016, the Systems held swaps as shown in the tables below (amounts expressed in thousands):

Counterparty	Total Return Swaps	SCRS Pays	SCRS Receives	Maturity Date	Current Notional	Gain/Loss Since Trade
BNP Paribas	Russell 2000 Total Return (Short)	Russell 2000 Index Total Return	LIBOR 3M Spread -78bps	4/5/2017	$ (98,279)	$ (3,279)
Goldman Sachs	BCOM F3 Preroll w/Gemini Micro	1M US Dollar + 45bps	ABGS1006 INDEX	8/30/2016	117,083	17,083
Goldman Sachs	BCOM F3 Preroll w/Gemini Micro	1M US Dollar + 45bps	ABGS1006 INDEX	9/1/2016	87,246	12,246
JP Morgan	JPM Palmetto Equinox Proxy TR	3M T-Bill + 46.9bps	JMABEQXT INDEX	5/31/2017	116,912	(8,088)
JP Morgan	JPM Enhanced Beta + SSP Proxy	3M T-Bill + 46.9bps	JMABEBSP INDEX	8/31/2016	228,187	13,625
JP Morgan	JPM Palmetto Equinox Proxy TR	3M T-Bill + 46.9bps	JMABEQXT INDEX	9/30/2016	102,221	2,221
Societe Generale	SocGen Congestion Commodities	1M US Dollar + 19bps	SGCOP26E	3/31/2017	234,243	27,083
					$ 787,613	$ 60,891

Counterparty	Fixed Income Swaps	SCRS Pays	SCRS Receives	Maturity Date	Current Notional	Fair Value
Bank of America NA	Credit Default Swaps	Variable Rate	Fixed Rate	various	$ 12,700	$ 180
Barclays Bank PLC	Credit Default Swaps	Fixed Rate	Variable Rate	6/20/17	1,100	(7)
Citibank NA	Credit Default Swaps	Variable Rate	Fixed Rate	6/20/21	9,288	(159)
Credit Suisse AG	Credit Default Swaps	Variable Rate	Fixed Rate	various	12,200	(1,027)
Deutsche Bank AG/London	Credit Default Swaps	Variable Rate	Fixed Rate	10/17/57	21,700	(810)
Goldman Sachs Bank USA	Interest Rate Swaps	Variable Rate	Fixed Rate	11/16/25	900	(72)
Goldman Sachs International	Credit Default Swaps	Variable Rate	Fixed Rate	various	14,200	(845)
JPMorgan Chase Bank NA	Credit Default Swaps	Variable Rate	Fixed Rate	various	16,644	(89)
Merrill Lynch & Company Inc.	Interest Rate Swaps	Fixed Rate	Variable Rate	various	950	(65)
Merrill Lynch International/UK	Credit Default Swaps	Variable Rate	Fixed Rate	various	12,100	(635)
Morgan Stanley Capital Services LLC	Credit Default Swaps	Variable Rate	Fixed Rate	various	8,460	(431)
Royal Bank of Scotland PLC	Credit Default Swaps	Variable Rate	Fixed Rate	various	1,700	(11)
					$ 111,942	$ (3,971)
Chicago Mercantile Exchange Inc.	Interest Rate Swaps	Fixed / Variable Rate	Fixed / Variable Rate	various	$ 381,299	$ (23,219)
LCH.Clearnet Ltd	Interest Rate Swaps	Fixed / Variable Rate	Fixed / Variable Rate	various	149,800	(10,963)
					$ 531,099	$ (34,182)

[1]Fair Value is the amount reasonably expected to be received if the underlying positions were liquidated on the following business day.

Options

Options are exchange traded agreements between two parties for a future transaction on an underlying asset at a reference or strike price. The buyer of an option has the right, but not the obligation, to transact. The seller of an option has the obligation to transact if forced by the buyer. The price of an option is derived by taking the difference in the underlying asset and the strike price plus a premium for the remaining time until expiration. At June 30, 2016, the Systems had the following option positions (amounts expressed in thousands):

Option Contracts	Underlying Security	Expiration	Quantity	Fair Value
Put Aug 16 1153.000 ED 081016	KRW/USD SPOT OPTION 2016	August	(7,300,000)	$ (108)
Put Aug 16 1132.000 ED 081616	KRW/USD SPOT OPTION 2016	August	(2,300,000)	(18)
Put Jul 16 1150.000 ED 072716	KRW/USD SPOT OPTION 2016	July	(3,300,000)	(35)
Put Jul 16 1150.000 ED 071516	KRW/USD SPOT OPTION 2016	July	(2,200,000)	(17)
Put Jul 16 1150.000 ED 070716	KRW/USD SPOT OPTION 2016	July	(4,700,000)	(21)
Put Jul 16 1133.000 ED 071116	KRW/USD SPOT OPTION 2016	July	(3,100,000)	(5)
Call Aug 16 1222.000 ED 081016	KRW/USD SPOT OPTION 2016	August	(7,300,000)	(16)
Call Aug 16 1205.000 ED 081616	KRW/USD SPOT OPTION 2016	August	(2,300,000)	(10)
Call Jul 16 1217.000 ED 072716	KRW/USD SPOT OPTION 2016	July	(3,300,000)	(4)
Call Dec 16 087.000 ED 120816	RUB/USD SPOT OPTION 2016	December	(2,300,000)	(13)
Put Aug 16 018.300 ED 080916	MXN/USD SPOT OPTION 2016	August	(2,200,000)	(31)
Put Jul 16 018.370 ED 072716	MXN/USD SPOT OPTION 2016	July	(1,100,000)	(15)
Put Jul 16 017.950 ED 070116	MXN/USD SPOT OPTION 2016	July	(2,800,000)	-
Put Jul 16 017.650 ED 070716	MXN/USD SPOT OPTION 2016	July	(2,700,000)	(1)
Call Aug 16 019.800 ED 080916	MXN/USD SPOT OPTION 2016	August	(2,200,000)	(8)
Call Jul 16 019.650 ED 072716	MXN/USD SPOT OPTION 2016	July	(1,100,000)	(3)
Call Aug 16 105.000 ED 080816	JPY/USD SPOT OPTION 2016	August	(3,300,000)	(24)
Call Jul 16 001.378 ED 072716	USD/GBP SPOT OPTION 2016	July	(3,200,000)	(27)
Call Aug 16 001.1275 ED 080816	USD/EUR SPOT OPTION 2016	August	(5,900,000)	(45)
Call Jul 16 000.752 ED 071516	USD/AUD SPOT OPTION 2016	July	(4,300,000)	(16)
Call Jul 16 000.751 ED 071316	USD/AUD SPOT OPTION 2016	July	(800,000)	(3)
Total Cash & Cash Equivalents				(420)
Put Aug 16 132.000 ED 07/22/16	US 10 YR TREAS NTS FUT SEP 16	August	(151)	(40)
Pug Jul 16 001.150 ED 07/05/16	IRS P USD 1Y 3.125 BPS R 1.15%	July	77,500,000	-
Call Dec 16 000.770 ED 122116	IRS P USD 5Y R .41 BPS .77%	December	(16,600,000)	(69)
Call Dec 16 001.000 ED 122116	IRS R 1% P US0006M 12/22/21	December	8,300,000	67
Call Dec 16 076.500 ED 121316	IRS P USD 5Y 42.625 R 0.765%	December	(19,200,000)	(74)
Call Dec 16 001.000 ED 121316	IRS P USD 5Y R .843125 BPS	December	9,600,000	75
Put Aug 18 002.940 ED 08/20/18	IRS P USD 30Y 97BPS R 2.94%	August	1,600,000	46
Put Aug 18 002.800 ED 08/20/18	IRS P USD 5Y 22BPS R 2.8%	August	(6,900,000)	(25)
Put Aug 18 002.905 ED 082018	IRS P USD 30Y 98BPS R 2.905%	August	4,900,000	149
Put Aug 18 002.800 ED 082018	IRS P USD 5Y 22BPS R 2.8%	August	(21,600,000)	(79)
Put Jul 16 001.250 ED 07/05/16	IRS P USD 1Y 3BPS R 1.25%	July	212,400,000	-
Put Jul 16 001.250 ED 07/05/16	IRS P USD 1Y 38BPS R 1.25%	July	134,000,000	-
Call Jan 18 001.100 ED 013018	IRS P USD2Y 100BPS R 1.100%	January	(11,200,000)	(88)
Call Jan 18 001.600 ED 013018	IRS P USD 2Y 100BPS R1.600%	January	(11,200,000)	(161)
Call Jan 18 002.100 ED 1/30/18	IRS P USD 2Y 14BPS R 2.1%	January	11,200,000	255
Total Fixed Income				56
Put Jan 17 1676.220 ED 1/31/17	S & P 500 INDEX (SPX) OTC	January	(161,077)	(3,718)
Call Jan 17 1963.040 ED 013117	S & P 500 INDEX (SPX) OTC	January	(322,154)	(60,230)
Call Jan 17 1862.460 ED 013117	S & P 500 INDEX (SPX) OTC	January	322,154	86,456
Put Jul 16 2020.000 ED 072216	S & P 500 INDEX (SPX)	July	(380)	(327)
Put Jul 16 2065.000 ED 071516	S & P 500 INDEX (SPX)	July	(1,150)	(1,334)
Put Jul 16 2020.000 ED 070116	S & P 500 INDEX (SPX)	July	(380)	(6)
Put Jul 16 2020.000 ED 070816	S & P 500 INDEX (SPX)	July	(380)	(78)
Put Aug 16 2025.000 ED 083116	S & P 500 INDEX (SPX)	August	(1,140)	(3,249)
Total Equity				17,514
Total				$ 17,150

Alternative Investments

The Alternative Investment category includes the following asset classes: private equity, hedge funds, private debt, real estate and commodities.

Private equity, private debt and real estate investments are typically structured as limited partnerships. In this structure, the Systems is one of several limited partners, while the investment manager serves as the general partner. Investing in such limited partnerships legally obligates the Systems to invest the committed amount until the investment is fully funded or the contractual investment period has expired. Hedge fund and commodities investments are typically on subscription basis with a single, initial investment with no further commitment.

The Systems established several strategic partnerships to gain access to deal flow, to receive favorable economics and to efficiently take advantage of market opportunities. Investments within the strategic partnership accounts may include allocations to any asset class including those considered alternative investments. Assets of Strategic Partnerships are reported within their respective asset class totals.

The Commission's intent is to access superior risk-adjusted returns through investing in alternative investment asset classes. Due to their low correlation to traditional asset classes, alternative investments diversify the portfolio and help reduce the risk associated with volatility of returns.

Commitments

The Commission, on behalf of the Systems, has entered into contractual agreements with numerous alternative investment managers and is committed for future funding of private equity, private debt and real estate investments. At June 30, 2016, the Systems' commitments, including commitments within Strategic Partnerships, are shown in the following table (amounts expressed in thousands):

	Total Commitment	Amount Funded to Date	Remaining Unfunded Commitment
Limited Partnerships USD			
Private Equity	$ 4,226,328	$ 3,546,567	$ 679,761
Private Debt	4,484,552	3,005,241	1,479,311
Real Estate	3,071,378	1,994,662	1,076,716
Real Assets	30,000	28,373	1,627
Totals	$ 11,812,258	$ 8,574,843	$ 3,237,415
Limited Partnerships Euros			
Private Equity	€ 275,750	€ 189,495	€ 86,255
Private Debt	75,917	75,917	
Totals	€ 351,667	€ 265,412	€ 86,255
Limited Partnerships AUD			
Private Equity	$ 100,000	$ 13,900	$ 86,100
Totals	$ 100,000	$ 13,900	$ 86,100

Securities Lending

The Systems' investment portfolio currently participates in a securities lending program, managed by BNY Mellon ("Securities Lending Program"), whereby securities are loaned for the purpose of generating additional income. BNY Mellon is responsible for making loans of securities on a collateralized basis from the Systems' investment portfolio to various third party broker-dealers and financial institutions. The market value of the required cash collateral must initially meet or exceed 102.0 percent of the market value of the securities loaned, providing a margin against a decline in the market value of collateral. If the collateral value falls below 100.0 percent, the borrower must post additional collateral. In conjunction with generating revenue, the collateral pool seeks to maintain a net asset value (NAV) of $1.00, which is determined by dividing the market value of the assets by the cost of those assets.

There are no restrictions on the amount of securities that may be loaned and conservative investment guidelines continue to be maintained within the Securities Lending Program. The re-investment of the cash collateral is restricted to short duration, very low risk securities and is monitored by RSIC on an ongoing basis. The types of securities available for loan during the year ended June 30, 2016 included U.S. Government securities, U.S. Government agencies, corporate bonds and equities. The contractual agreement between the State Treasurer as custodian and BNY Mellon provides indemnification in the event the borrower fails to return the securities lent or fails to pay the Systems income distribution by the securities' issuers while the securities are on loan. Cash and U.S. Government securities are received as collateral for these loans. Collateral securities cannot be pledged or sold without a borrower default. Cash collateral received is invested, and accordingly, investments made with cash collateral are reported as an asset. A corresponding liability is recorded as the Systems must return the cash collateral to the borrower upon the expiration of the loan.

At June 30, 2016, the fair value of securities on loan was $146.18 million. The fair value of the invested cash collateral was $55.74 million, securities lending obligations were $102.95 million with the difference reported within "Other Liabilities" on the Statement of Fiduciary Net Position. The gross securities lending revenue for the fiscal year was $946 thousand, a decrease from $1.98 million in the prior year. Since November 2008, gains and losses from the Securities Lending Program have been excluded from the Total Plan performance calculations.

With regard to counterparty credit risk, the Systems' cash collateral invested is held by the counterparty and is uninsured. All securities loaned can be terminated on demand by either the Systems or the borrower. At year end the average number of days the loans were outstanding was one day. The average weighted maturity of investments made with cash collateral was one day. At June 30, 2016, there had been no losses resulting from borrower defaults and the Systems had no credit risk exposure to borrowers because the amounts the Systems owed the borrowers exceeded the amounts the borrowers owed the Systems.

The following table presents the fair value (amounts expressed in thousands) of the underlying securities and the total collateral received for securities on loan at June 30, 2016:

	SCRS	PORS	GARS	JSRS	SCNG	06/30/16 TOTALS	06/30/15 TOTALS
Securities lent for cash collateral							
U.S. Government securities	$ -	$ -	$ -	$ -	$ -	$ -	$ 14,751
Corporate bonds	22,082	3,554	26	127	19	25,808	61,245
Common stock	64,486	10,377	75	373	57	75,368	38,570
Total	$ 86,568	$ 13,931	$ 101	$ 500	$ 76	$ 101,176	$ 114,566
Securities lent for non-cash collateral							
Corporate bonds						$ -	$ 26,410
Common stock	38,506	6,196	45	222	34	45,003	38,637
Total	$ 38,506	$ 6,196	$ 45	$ 222	$ 34	$ 45,003	$ 65,047
Cash collateral invested as follows							
Repurchase agreements	$ 47,690	$ 7,674	$ 56	$ 275	$ 42	$ 55,737	$ 70,177
Total	$ 47,690	$ 7,674	$ 56	$ 275	$ 42	$ 55,737	$ 70,177
Securities received as collateral							
U.S. Government securities	$ 38,748	$ 6,236	$ 45	$ 224	$ 34	$ 45,287	$ 66,639
Total	$ 38,748	$ 6,236	$ 45	$ 224	$ 34	$ 45,287	$ 66,639

IV. Transfers between Systems

Transfers between systems are statutorily authorized internal transfers of contributions and service credit from one retirement system to another retirement system that result from members voluntarily initiating the transfer when certain conditions are met.

Transfers made within the Systems administered by PEBA during the fiscal year ended June 30, 2016, were as follows (amounts expressed in thousands):

Transfers from:	Transfers to:					
	SCRS	PORS	GARS	JSRS	SCNG	Total
SCRS	$ -	$1,174	$ -	$ -	$ -	$1,174
PORS				27		27
GARS	147					147
JSRS	30					30
SCNG						-
Total	$ 177	$1,174	$ -	$ 27	$ -	$1,378

The following schedule reflects amounts due to or due from other systems as of June 30, 2016, (amounts expressed in thousands):

Due from:	Due to:					
	SCRS	PORS	GARS	JSRS	SCNG	Total
SCRS	$ -	$ 302	$ -	$ -	$ -	$ 302
PORS						-
GARS						-
JSRS						-
SCNG						-
Total	$ -	$ 302	$ -	$ -	$ -	$ 302

V. Related Party Transactions

The pension plans provide pension and other benefits to employees of all state agencies. Revenues attributed to these agencies are recorded in the financial statements as employee and employer contributions and constitute approximately 32 percent of combined contribution revenues. In addition, the Systems receives custodial and related services from the Office of the South Carolina State Treasurer.

At June 30, 2016, liabilities of approximately $65.2 million were due to other state departments and agencies, and contributions receivable of approximately $45 million were due from other state departments and agencies.

The SCNG Supplemental Retirement Plan received state-appropriated contributions in the amount of $4.6 million during the fiscal year.

The Retirement System Investment Commission is a separate state agency; however, the administrative costs of the Commission are funded by transfers from the Systems' trust funds. Transfers in the amount of approximately $13 million were made to the Commission during the fiscal year.

VI. Deferred Retirement Option Plans

The Teacher and Employee Retention Incentive (TERI) program, implemented effective January 1, 2001, is a deferred retirement option plan available to active SCRS members eligible for service retirement on or after January 1, 2001. When a member enters TERI, the member's status changes from an active member to a retiree even though the employee continues to work at his regular job and earn his regular salary for a period of up to five years. TERI participants continue to contribute at the same rate as active members. No additional service credit is earned during this period and participants are ineligible for disability retirement benefits. During the TERI participation period, the retiree's monthly benefits are accumulated in the trust account. Upon termination of employment at the end of the TERI period, funds are distributed and the retiree may elect a payment method to either roll over his funds into a qualified retirement plan or to receive a single-sum distribution (or a combination thereof). No interest is paid on the participant funds accumulated in the TERI account. Retirement reform legislation closes the TERI program to all members effective June 30, 2018.

A total of 8,922 members were actively participating in the TERI program at June 30, 2016.

The activity for this program is reflected in the following schedule:

TERI Benefits Held in Trust

Year Ended June 30, 2016

(Amounts expressed in thousands)

July 1 Benefits Held in Trust	$ 645,739
Additions	261,864
TERI Distributions	(123,151)
TERI Liability	(71,693)
June 30 Benefits Held in Trust	$ 712,759

A deferred retirement option plan also exists under the Retirement System for Judges and Solicitors (JSRS). A member who has not yet reached the age of 60 years, but who is eligible to retire and receive the maximum monthly benefit, may retire and continue to serve as a judge, a solicitor or a circuit public defender. The member's normal monthly retirement benefit is deferred and placed in the system's trust fund on behalf of the member. Upon reaching the age of 60 years, the balance of the member's deferred retirement benefit is distributed to the member. As of June 30, 2016, there were benefits held in trust totaled 84,174.

VII. Capital Assets

Capital assets at June 30, 2016, consist of the following amounts (expressed in thousands).

	Beginning Balances 7/1/2015	Additions	Deletions	Ending Balances 6/30/2016
Asset Class (at Cost)				
Land	$ 582	$ -	$ -	$ 582
Building	4,749			4,749
Equipment	2,057	46	(98)	2,005
Total Capital Assets	7,388	46	(98)	7,336
Accumulated Depreciation				
Building	2,704	119		2,823
Equipment	1,679	191	(98)	1,772
Total Accumulated Depreciation	4,383	310	(98)	4,595
Capital Assets, Net	$ 3,005	$ (264)	$ -	$ 2,741

VIII. Compensated Absences

As state employees, most full-time permanent employees of SC PEBA's Retirement Division earn 15 days of annual leave and 15 days of sick leave per year during their first ten years of service. After ten years of service is complete, most employees earn an additional 1.25 days of annual leave for each year of service over ten until they reach a maximum of 30 days per year. Sick leave earnings remain at 15 days per year regardless of years of service. Employees may carry forward up to 45 days of annual leave and 180 days of sick leave from one calendar year to the next. Upon termination of employment, employees are eligible to receive payment for up to 45 days of accumulated unused annual leave at the pay rate then in effect. Employees are not eligible to receive payment for accumulated unused sick leave upon termination. As of June 30, 2016, the total amount accrued for unused annual leave for PEBA's Retirement Division employees was $904,349, and the associated liability is included in Other Liabilities on the Statement of Fiduciary Net Position.

IX. Participation in Pension Plans

Generally, all employees of PEBA are required to participate in the South Carolina Retirement System or the Optional Retirement Program as a condition of employment. Additional information related to membership, benefits and contribution requirements is contained within these notes to the financial statements.

Employer contributions for Retirement Division staff are paid by PEBA and are allocated to the pension trust funds along with all other administrative expenses. Administrative expenses of the Systems are funded by investment earnings. For the year ended June 30, 2016, PEBA's actual contributions to the South Carolina Retirement System (SCRS) for Retirement Division staff were $883,550.

X. Net Pension Liability

The total pension liability of each defined benefit pension plan summarized below was determined based on the most recent actuarial valuation, which was conducted using membership data as of July 1, 2015, projected forward to the end of the fiscal year, and financial information as of June 30, 2016, using generally accepted actuarial procedures. Information included in the following schedule is based on the certification provided by our consulting actuary, Gabriel, Roeder, Smith and Company. A Schedule of the Employers' Net Pension Liability is intended to provide information about whether the plan fiduciary net positions are increasing or decreasing over time relative to the total pension liability. This schedule as well as a Schedule of Changes in Employers' Net Pension Liability is presented in the Required Supplementary Information (RSI) section.

The net pension liability (i.e. the Systems' total pension liability determined in accordance with GASB No. 67 less the fiduciary net position) as of June 30, 2016, is as follows (dollar amounts expressed in thousands):

	Total Pension Liability	Plan Fiduciary Net Position	Employers' Net Pension Liability	Plan Fiduciary Net Position as a % of the Total Pension Liability
SCRS	$ 45,356,215	$ 23,996,362	$ 21,359,853	52.9%
PORS	6,412,510	3,876,036	2,536,474	60.4%
GARS	73,702	30,188	43,514	41.0%
JSRS	278,256	140,717	137,539	50.6%
SCNG	63,045	23,350	39,695	37.0%

Actuarial valuations of the ongoing plan involve estimates of the reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality and future salary increases. Amounts determined regarding the net pension liability are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. South Carolina state statute requires that an actuarial experience study be completed at least once in each five-year period. An experience report on the Systems was most recently issued as of July 1, 2015.

The following table provides a summary of the actuarial assumptions and methods used in the July 1, 2015, valuations for each of the individual plans administered by PEBA.

	SCRS	PORS	GARS	JSRS	SCNG
Actuarial cost method	Entry age normal	Entry age normal	Entry age normal	Entry age normal	Entry age normal
Actuarial assumptions:					
Investment rate of return[1]	7.5%	7.5%	7.5%	7.5%	7.5%
Projected salary increases	3.5% to 12.5% (varies by service)[1]	4.0% to 10.0% (varies by service)[1]	None	3%[1]	None
Benefit adjustments	lesser of 1% or $500 annually	lesser of 1% or $500 annually	None	3%	None

[1]Includes inflation at 2.75%

The post-retiree mortality assumption is dependent upon the member's job category and gender. These base rates are adjusted for future improvement in mortality using published Scale AA projected from the year 2000.

Former Job Class	Males	Females
Educators and Judges	RP-2000 Males (with White Collar adjustment) multiplied by 110%	RP-2000 Females (with White Collar adjustment) multiplied by 95%
General Employees and Members of the General Assembly	RP-2000 Males multiplied by 100%	RP-2000 Females multiplied by 90%
Public Safety, Firefighters and members of the South Carolina National Guard	RP-2000 Males (with Blue Collar adjustment) multiplied by 115%	RP-2000 Females (with Blue Collar adjustment) multiplied by 115%

The long-term expected rate of return on pension plan investments is based upon the 30 year capital markets outlook at the end of third quarter 2015. The long-term expected rate of returns represent assumptions developed using an arithmetic building block approach primarily based on consensus expectations and market based inputs. Expected returns are net of investment fees. The expected returns, along with the expected inflation rate, form the basis for the revised target asset allocation adopted beginning 1/1/2016. The long-term expected rate of return is produced by weighting the expected future real rates of return by the target allocation percentage and adding expected inflation and is summarized in the table below. For actuarial purposes, the 7.50 percent assumed annual investment rate of return used in the calculation of the total pension liability includes a 4.75 percent real rate of return and a 2.75 percent inflation component.

Allocation / Exposure[3,5]	Policy Target	Expected Arithmetic Real rate of Return	Long Term Expected Portfolio Real Rate of Return
Global Equity	**43.0%**		
Global Public Equity[1,2]	34.0%	6.52%	2.22%
Private Equity[2]	9.0%	9.30%	0.84%
Real Assets	**8.0%**		
Real Estate	5.0%	4.32%	0.22%
Commodities[1]	3.0%	4.53%	0.13%
Infrastructure	0.0%	6.26%	0.00%
Other Real Assets	0.0%		
Opportunistic	**20.0%**		
GTAA/Risk Parity[1]	10.0%	3.90%	0.39%
HF (Low Beta)[1]	10.0%	3.87%	0.39%
Diversified Credit	**17.0%**		
Mixed Credit[1,2]	5.0%	3.52%	0.17%
Emerging Markets Debt[1]	5.0%	4.91%	0.25%
Private Debt[1,2]	7.0%	4.47%	0.31%
Other Credit	0.0%		0.00%
Conservative Fixed Income	**12.0%**		
Core Fixed Income	10.0%	1.72%	0.17%
Global Fixed Income	0.0%		
Cash and Short Duration (Net)	2.0%	0.71%	0.01%
Total Expected Return	100.0%		5.10%
Inflation for Actuarial Purposes			2.75%
			7.85%

[1]Asset classes in which hedge funds can be used, up to a maximum of 20 percent across the entire portfolio.
[2]The target weights to Private Equity and Private Debt will be equal to their actual weights as of prior month end. Private Equity and Public Equity will combine for 43 percent of entire portfolio. Private Debt and Mixed Credit will combine for 12 percent of the entire portfolio.

The discount rate used to measure the total pension liability was 7.5 percent. The projection of cash flows used to determine the discount rate assumed that contributions from participating employers in SCRS and PORS will be made based on the actuarially determined rates based on provisions in the South Carolina Code of Laws. The contributions required for JSRS, GARS, and the SCNG are based on PEBA's current funding policy. Based on those assumptions, the System's fiduciary net position was projected to be available to make all the projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

In accordance with GASB 67 regarding the disclosure of the sensitivity of the net pension liability to changes in the discount rate, the following table presents the net pension liability of the participating employers calculated using the discount rate of 7.50 percent, as well as what the employers' net pension liability would be if it were calculated using a discount rate that is 1.00 percent lower (6.50 percent) or 1.00 percent higher (8.50 percent) than the current rate.

Discount Rate Sensitivity Analysis

(Amounts expressed in thousands)

	1% Decrease (6.50%)	Current Discount Rate (7.50%)	1% Increase (8.50%)
SCRS	$ 26,645,831	$ 21,359,853	$ 16,959,474
PORS	3,324,267	2,536,474	1,828,495
GARS	49,789	43,514	38,104
JSRS	167,529	137,539	112,020
SCNG	47,433	39,695	33,327

XI. Death Benefit Program

In addition to monthly pension benefits provided through the Systems, a death benefit program is available to employers. For participating employers, incidental death benefits are provided for both active and retired members. These benefits are funded through separate death benefit programs within SCRS and PORS on a cost-sharing, multiple-employer basis. The assets in the death benefits fund are not held separately in a dedicated trust for the sole purpose of paying death benefits to beneficiaries of deceased members. These benefits are considered allowable within the defined benefit plans and are held within the pension trust funds. Coverage is provided to eligible active and retired working members as well as non-working retirees under the governing statute. Funding for the plans is collected as a percent of covered payroll as determined by the Systems' actuary and approved by the governing board. The current employer contribution rates for the programs are 0.15 percent and 0.20 percent of payroll for SCRS and PORS respectively. These contributions fund both the active and retiree death benefits.

Active Death Benefits

Upon the death of an SCRS or PORS contributing member in service who had at least one full year of membership or who died as a result of an injury arising in the course of performing his duties regardless of length of membership, an incidental death benefit equal to the annual earnable compensation of the member at the time of death is payable apart and separate from the payment of pension benefits.

Retiree Death Benefits

Retired members of SCRS and PORS whose last employer prior to retirement is covered by the program, and who met applicable service credit requirements, are also protected under the state-sponsored death benefit program. Upon the death of a retired member, the beneficiary of a non-working retiree will receive a benefit payment of $2,000, $4,000 or $6,000 based on the member's total creditable service at the time of retirement.

Members who work after retirement by either participating in the TERI program or by returning to covered employment as a working retiree are eligible for an increased level of death benefits. Beneficiaries of working retirees are provided with a death benefit equal to the amount of the member's annual earnable compensation in lieu of the standard $2,000, $4,000 or $6,000 retired member benefit.

All benefits provided by the Systems are included in the actuarial valuation, including the incidental death benefit program for SCRS, PORS, GARS and JSRS. The July 1, 2015 actuarial valuations reflect the inclusion of the assets and liabilities of the incidental death benefit program and accidental death benefits for PORS.

XII. Litigation

In addition to the litigation mentioned below, controversies or disputes between the South Carolina Retirement Systems and its members arising out of the provisions of Title 9 of the South Carolina Code of Laws (Retirement provisions) are resolved through the "South Carolina Retirement Systems Claims Procedures Act" established by S.C. Code Ann. §9-21-10 et seq. Claims brought pursuant to the Claims Procedures Act generally involve matters pertinent to the individual member or beneficiary. Claims may not be brought on behalf of a class under the Claims Procedures Act.

Gail M. Hutto et al. v. the South Carolina Retirement System et al., C/A No. 4:10-cv-02018-JMC, was a putative class action suit that was filed in federal district court in August 2010. In this matter, Plaintiffs asserted that the provisions of Act No. 153 of 2005 of the South Carolina General Assembly requiring working retirees in the South Carolina Retirement System (SCRS) and the South Carolina Police Officers' Retirement System (PORS) to make contributions to the systems are unconstitutional and illegal. As of June 30, 2012, the Retirement Systems had collected approximately $121 million in the form of retirement contributions from members of those retirement systems who retired and returned to work on or after July 1, 2005, and contributions have continued to be collected from those retired members who have returned to covered employment. Pursuant to Defendants' motion to dismiss, the federal district court dismissed Plaintiffs' suit on September 27, 2012, finding that Defendants were immune from suit in federal court under the Eleventh Amendment. On appeal, the Fourth Circuit Court of Appeals affirmed the district court's order on December 5, 2014. No further appeal was taken by Plaintiffs. On March 19, 2015, the same Plaintiffs re-filed their claims in state court, alleging violations of their federal constitutional rights. The circuit court granted Defendants' motion to dismiss on November 2, 2015, and, on appeal, the South Carolina Supreme Court affirmed the dismissal of Plaintiffs' complaint on August 10, 2016. Plaintiffs did not seek reconsideration of the decision and have not filed an appeal of the decision. If Plaintiffs do not appeal to the United States Supreme Court by November 8, 2016, the favorable decision is this matter will be final.

Anderson County v. Joey Preston and the South Carolina Retirement System, Case No. 2009-CP-04-4482, is a civil action that was filed in the Tenth Judicial Circuit Court of Common Pleas. Defendant Joey Preston ("Preston") is a retired member of the South Carolina Retirement System who was employed by Plaintiff. In its complaint, Plaintiff sought to rescind a severance agreement entered into between Plaintiff and Preston, in which, among

other things, Plaintiff agreed to pay, and did pay, approximately $355,000 to the System to purchase retirement service credit on behalf of Preston. Plaintiff named the South Carolina Retirement System as a defendant in this matter as a stakeholder of a portion of the disputed severance funds and sought a return of the $355,000 paid to the System. By an Order dated May 3, 2013, the circuit court ruled against Plaintiff Anderson County on all claims. Plaintiff appealed to the South Carolina Court of Appeals. The case has been briefed and argued at the court of appeals and the parties are awaiting a decision. At the trial of this matter before the circuit court and on appeal to the court of appeals, Plaintiff modified its request for relief related to the System such that it is no longer seeking a return of funds from the System, but is only seeking to attach Preston's retirement benefits. Accordingly, the outcome of this matter will not have a fiscal impact upon the System.

Marc S. Kirschner, as Litigation Trustee for the Tribune Litigation Trust v. Dennis J. Fitzsimmons, et al., United States District Court Southern District of New York, Case No. 1:11-cv-02652. This case is a bankruptcy litigation matter filed on December 20, 2011, and has been stayed since shortly after it was filed. The Plaintiff attempted to serve a summons on the South Carolina Retirement System in August 2013. SCRS is a defendant as a result of selling Tribune Company stock in connection with a leveraged buyout of the Tribune Company in 2007. Through this lawsuit the creditors of the Tribune Company are attempting to claw-back funds received by SCRS in connection with the sale of the stock. The plaintiff has asserted a claim of approximately two million dollars against SCRS. The South Carolina Retirement System Investment Commission contests the amount the plaintiff alleges SCRS received, contends that there are persuasive arguments favoring dismissal, and has engaged counsel to represent SCRS in this matter.

South Carolina Retirement Systems
Required Supplementary Information

Schedule of Changes in the Employers' Net Pension Liability[1]

Years Ended June 30

(Amounts expressed in thousands)

	SCRS			PORS		
	2016	2015	2014	2016	2015	2014
Total pension liability						
Service Cost	$ 763,357	$ 744,197	$ 739,021	$ 156,567	$ 154,102	$ 149,606
Interest	3,231,572	3,148,090	3,021,004	453,696	435,329	417,950
Benefit Changes						-
Difference between actual and expected experience	46,714	(44,636)	638,745	11,582	6,771	64,336
Assumption Changes						
Benefit Payments	(2,782,738)	(2,705,547)	(2,571,049)	(360,656)	(344,410)	(331,783)
Net Change in Total Pension Liability	1,258,905	1,142,104	1,827,721	261,189	251,792	300,109
Total Pension Liability - Beginning	44,097,310	42,955,206	41,127,485	6,151,321	5,899,529	5,599,420
Total Pension Liability - Ending (a)	$ 45,356,215	$ 44,097,310	$ 42,955,206	$ 6,412,510	$ 6,151,321	$5,899,529
Plan Fiduciary Net Position						
Contributions - Employer	$ 1,072,659	$ 1,022,478	$ 962,798	$ 175,223	$ 166,451	$ 155,608
Contributions - Member	754,153	716,107	652,631	115,188	106,854	96,004
Refunds of contributions to members	(93,694)	(95,104)	(90,250)	(19,178)	(17,453)	(16,184)
Retirement benefits	(2,668,385)	(2,590,299)	(2,461,559)	(337,928)	(323,252)	(311,593)
Death benefits	(20,659)	(20,144)	(19,240)	(3,550)	(3,705)	(4,007)
Net Investment Income	(165,394)	374,152	3,517,324	(24,636)	58,705	538,386
Administrative Expense	(13,149)	(12,554)	(11,765)	(2,055)	(1,938)	(1,820)
Net transfers to affiliated systems	(997)	(1,329)	(2,470)	1,147	1,061	2,260
Net Change in Plan Fiduciary Net Position	(1,135,466)	(606,693)	2,547,469	(95,789)	(13,277)	458,654
Plan Fiduciary Net Position - Beginning	25,131,828	25,738,521	23,191,052	3,971,825	3,985,102	3,526,448
Plan Fiduciary Net Position - Ending (b)	$ 23,996,362	$ 25,131,828	$ 25,738,521	$ 3,876,036	$ 3,971,825	$3,985,102
Net Pension Liability - Ending (a) - (b)	$ 21,359,853	$ 18,965,482	$ 17,216,685	$ 2,536,474	$ 2,179,496	$1,914,427

[1] *Schedules are intended to show information for 10 years. Additional years will be displayed as they become available.*

Schedule of Changes in the Employers' Net Pension Liability[1]

Years Ended June 30

(Amounts expressed in thousands)

	GARS			JSRS		
	2016	2015	2014	2016	2015	2014
Total pension liability						
Service Cost	$ 493	$ 553	$ 572	$ 5,886	$ 5,760	$ 5,571
Interest	5,301	5,380	5,437	20,022	19,440	18,857
Benefit Changes					666	
Difference between actual and expected experience	798	(294)	(2,585)	(3,085)	(1,138)	(3,240)
Assumption Changes						
Benefit Payments	(6,656)	(6,660)	(6,861)	(17,191)	(16,836)	(16,684)
Net Change in Total Pension Liability	(64)	(1,021)	(3,437)	5,632	7,892	4,504
Total Pension Liability - Beginning	73,766	74,787	78,224	272,624	264,732	260,228
Total Pension Liability - Ending (a)	$ 73,702	$ 73,766	$ 74,787	$ 278,256	$ 272,624	$ 264,732
Plan Fiduciary Net Position						
Contributions - Employer	$ 4,501	$ 4,275	$ 4,063	$ 10,202	$ 10,109	$ 9,659
Contributions - Member	292	369	384	2,303	3,153	2,448
Refunds of contributions to members	(22)		(41)	(60)		
Retirement benefits	(6,625)	(6,639)	(6,799)	(16,989)	(16,832)	(16,675)
Death benefits	(9)	(21)	(20)	(143)	(4)	(10)
Net Investment Income	(266)	500	4,545	(871)	2,216	19,962
Administrative Expense	(18)	(18)	(17)	(75)	(71)	(68)
Net transfers to affiliated systems	(147)	(18)	15	(3)	286	195
Net Change in Plan Fiduciary Net Position	(2,294)	(1,552)	2,130	(5,636)	(1,143)	15,511
Plan Fiduciary Net Position - Beginning	32,482	34,034	31,904	146,353	147,496	131,985
Plan Fiduciary Net Position - Ending (b)	$ 30,188	$ 32,482	$ 34,034	$ 140,717	$ 146,353	$ 147,496
Net Pension Liability - Ending (a) - (b)	$ 43,514	$ 41,284	$ 40,753	$ 137,539	$ 126,271	$ 117,236

[1] *Schedules are intended to show information for 10 years. Additional years will be displayed as they become available.*

Schedule of Changes in the Employers' Net Pension Liability[1]

Years Ended June 30
(Amounts expressed in thousands)

	2016	2015	2014
Total pension liability			
Service Cost	$ 689	$ 690	$ 697
Interest	4,594	4,481	4,417
Benefit Changes			
Difference between actual and expected experience	(992)	612	(262)
Assumption Changes			
Benefit Payments	(4,310)	(4,249)	(4,248)
Net Change in Total Pension Liability	(19)	1,534	604
Total Pension Liability - Beginning	63,064	61,530	60,926
Total Pension Liability - Ending (a)	$ 63,045	$ 63,064	$ 61,530
Plan Fiduciary Net Position			
Contributions - Employer	$ 4,591	$ 4,591	$ 4,586
Contributions - Member			
Refunds of contributions to members			
Retirement benefits	(4,310)	(4,249)	(4,248)
Death benefits			
Net Investment Income	(121)	313	2,806
Administrative Expense	(12)	(11)	(10)
Net transfers to affiliated systems			
Net Change in Plan Fiduciary Net Position	148	644	3,134
Plan Fiduciary Net Position - Beginning	23,202	22,558	19,424
Plan Fiduciary Net Position - Ending (b)	$ 23,350	$ 23,202	$ 22,558
Net Pension Liability - Ending (a) - (b)	$ 39,695	$ 39,862	$ 38,972

[1] *Schedules are intended to show information for 10 years. Additional years will be displayed as they become available.*

Schedule of Employers' Net Pension Liability[1]

(Dollar amounts expressed in thousands)

	Total Pension Liability	Plan Fiduciary Net Position	Employers' Net Pension Liability (Asset)	Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	Projected Covered Employee Payroll[2]	Net Pension Liability as a Percentage of Covered Employee Payroll
SCRS						
6/30/2016	$ 45,356,215	$ 23,996,362	$ 21,359,853	52.9%	$ 7,765,588	275.1%
6/30/2015	44,097,310	25,131,828	18,965,482	57.0%	7,539,996	251.5%
6/30/2014	42,955,206	25,738,521	17,216,685	59.9%	7,434,820	231.6%
PORS						
6/30/2016	6,412,510	3,876,036	2,536,474	60.4%	1,105,703	229.4%
6/30/2015	6,151,321	3,971,825	2,179,496	64.6%	1,076,885	202.4%
6/30/2014	5,899,529	3,985,102	1,914,427	67.5%	1,033,189	185.3%
GARS						
6/30/2016	73,702	30,188	43,514	41.0%	2,338	1,861.0%
6/30/2015	73,766	32,482	41,284	44.0%	2,601	1,587.5%
6/30/2014	74,787	34,034	40,753	45.5%	2,688	1,516.2%
JSRS						
6/30/2016	278,256	140,717	137,539	50.6%	21,267	646.7%
6/30/2015	272,624	146,353	126,271	53.7%	20,815	606.6%
6/30/2014	264,732	147,496	117,236	55.7%	20,407	574.5%
SCNG						
6/30/2016	63,045	23,350	39,695	37.0%	Not Applicable[3]	Not Applicable[3]
6/30/2015	63,064	23,202	39,862	36.8%	Not Applicable[3]	Not Applicable[3]
6/30/2014	61,530	22,558	38,972	36.7%	Not Applicable[3]	Not Applicable[3]

[1] Schedules are intended to show information for 10 years. Additional years will be displayed as they become available.

[2] Projected covered employee payroll is based on the actuarial valuation associated with the measurement date and includes payroll for members earning but not yet receiving benefits.

[3] The contributions and benefits associated with the SCNG are not determined as a function of payroll.

Schedule of Employers' Contributions

(Dollar amounts expressed in thousands)

	Actuarially Determined Contributions[1]	Amount of Contributions Recognized	Difference Between Actuarially Determined Contributions[2] and Contributions Recognized	Projected Covered-Employee Payroll[3]	Percentage of Contributions to Covered-Employee Payroll
SCRS					
6/30/2016	$ 1,072,659	$ 1,072,659	$ -	$ 7,765,588	13.8%
6/30/2015	1,022,478	1,022,478		7,539,996	13.6%
6/30/2014	962,798	962,798		7,434,820	12.9%
6/30/2013	948,157	948,157		7,356,231	12.9%
6/30/2012	824,652	824,652		7,687,558	10.7%
6/30/2011	808,343	808,343		7,769,820	10.4%
6/30/2010	818,523	818,523		7,761,808	10.5%
6/30/2009	827,502	827,502		7,559,172	10.9%
6/30/2008	774,269	774,269		7,093,181	10.9%
6/30/2007	644,350	644,350		6,733,379	9.6%
PORS					
6/30/2016	175,223	175,223		1,105,703	15.8%
6/30/2015	166,451	166,451		1,076,885	15.5%
6/30/2014	155,608	155,608		1,033,189	15.1%
6/30/2013	143,389	143,389		1,019,241	14.1%
6/30/2012	134,299	134,299		1,087,587	12.3%
6/30/2011	129,314	129,314		1,076,467	12.0%
6/30/2010	123,163	123,163		1,084,154	11.4%
6/30/2009	124,148	124,148		1,060,747	11.7%
6/30/2008	114,095	114,095		992,849	11.5%
6/30/2007	106,753	106,753		931,815	11.5%
GARS[4]					
6/30/2016	4,501	4,501		2,338	192.5%
6/30/2015	4,275	4,275		2,601	164.4%
6/30/2014	4,063	4,063		2,688	151.2%
6/30/2013	2,831	2,831		3,854	73.5%
6/30/2012	2,532	2,532		3,854	65.7%
6/30/2011	2,414	2,414		3,854	62.6%
6/30/2010	2,598	2,598		3,854	67.4%
6/30/2009	2,495	2,495		3,854	64.7%
6/30/2008	2,440	2,440		3,854	63.3%
6/30/2007	2,358	2,358		3,854	61.2%

Schedule of Employers' Contributions continued on next page

Schedule of Employers' Contributions (cont.)

(Dollar amounts expressed in thousands)

	Actuarially Determined Contributions[1]	Amount of Contributions Recognized	Difference Between Actuarially Determined Contributions[2] and Contributions Recognized	Projected Covered-Employee Payroll[3]	Percentage of Contributions to Covered-Employee Payroll
JSRS					
6/30/2016	$ 10,202	$ 10,202	$ -	$ 21,267	48.0%
6/30/2015	10,109	10,109		20,815	48.6%
6/30/2014	9,659	9,659		20,407	47.3%
6/30/2013	8,667	8,667		19,221	45.1%
6/30/2012	8,414	8,414		18,661	45.1%
6/30/2011	8,414	8,414		18,661	45.1%
6/30/2010	8,414	8,414		18,661	45.1%
6/30/2009	8,414	8,414		18,661	45.1%
6/30/2008	7,613	7,613		16,407	46.4%
6/30/2007	6,706	6,706		15,929	42.1%
SCNG[5]					
6/30/2016	4,570	4,591	(21)	Not Applicable	Not Applicable
6/30/2015	4,591	4,591		Not Applicable	Not Applicable
6/30/2014	4,586	4,586		Not Applicable	Not Applicable
6/30/2013	4,539	4,539		Not Applicable	Not Applicable
6/30/2012	3,937	3,937		Not Applicable	Not Applicable
6/30/2011	3,905	3,905		Not Applicable	Not Applicable
6/30/2010	3,945	3,945		Not Applicable	Not Applicable
6/30/2009	4,052	4,052		Not Applicable	Not Applicable
6/30/2008	3,923	3,923		Not Applicable	Not Applicable
6/30/2007	3,948	3,948		Not Applicable	Not Applicable

[1] The actuarially determined contribution rate for SCRS and PORS is determined in accordance with the SC State Code of Laws. The contribution rate for JSRS is based on the funding policy maintained by the SC Public Employee Benefit Authority.

[2] The actuarially determined contributions are based on the funding policy maintained by the SC Public Employee Benefit Authority.

[3] Projected covered employee payroll is based on the actuarial valuation associated with the measurement date and includes payroll for members earning but not yet receiving benefits.

[4] GARS was closed to new members beginning with the 2012 general election.

[5] Benefits for members in the SCNG are not a function of pay. For years prior to June 30, 2010, the Annual Pension Cost (APC) for SCNG includes both the Annual Required Contribution (ARC) and the discounted present value of the balance of the Net Pension Obligation (NPO). For fiscal years ended June 30, 2010 forward, the APC was calculated as part of the actuarial valuation and includes in the ARC.

Schedule of Investment Returns[1]

Fiscal Year Ending June 30	Annual Money Weighted Rate of Return, Net of Investment Expense
2016	(.47)%
2015	1.59
2014	15.30

[1]Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

Notes to Required Supplementary Information

The following table provides a summary of the actuarial methods and significant assumptions used in calculations of the actuarially determined contributions for each of the individual plans administered by PEBA.

Summary of Actuarial Methods and Significant Assumptions

	SCRS	PORS	GARS	JSRS	SCNG
Valuation date	07/01/15	07/01/15	07/01/15	07/01/15	07/01/15
Actuarial cost method	Entry age normal	Entry age normal	Entry age normal	Entry age normal	Entry age normal
Amortization method	Level percent open	Level percent open	Level dollar closed	Level percent open	Level dollar closed
Amortization period	30 years	27 years	12 years	27 years	17 years
Asset Valuation method	20% difference recognition method	20% difference recognition method	20% difference recognition method	20% difference recognition method	20% difference recognition method
Actuarial assumptions:					
Inflation rate	2.75%	2.75%	2.75%	2.75%	2.75%
Projected salary increases	3.5% to 12.5% (varies by service)[1]	4.0% to 10.0% (varies by service)[1]	None	3.0%[1]	None
Investment rate of return	7.5%	7.5%	7.5%	7.5%	7.5%
Benefit adjustments	lesser of 1% or $500 annually	lesser of 1% or $500 annually	None	3.0%	None

[1]Includes inflation at 2.75%.

South Carolina Retirement Systems
Schedule of Changes in Fiduciary Net Position

SCRS Pension Trust Fund

Year Ended June 30, 2016

With comparative totals for the year ended June 30, 2015

(Amounts expressed in thousands)

	EMPLOYEE FUND	EMPLOYER FUND	DEATH BENEFIT FUND	QEBA FUND	TOTALS	TOTALS 2015
Additions						
Employee contributions						
State department employees	$ 204,233	$ 27,455	$ -	$ -	$ 231,688	$ 217,963
Public school employees	283,096	40,126			323,222	311,474
Other political subdivision employees	184,865	14,378			199,243	186,670
Employer contributions						
State department employees		347,783	5,400	622	353,805	336,923
Public school employees		448,353	6,429		454,782	437,166
Other political subdivision employees		260,976	3,096		264,072	248,389
Total contributions	672,194	1,139,071	14,925	622	1,826,812	1,738,585
Investment Income						
Net appreciation in fair value of investments		(277,960)	(1,385)		(279,345)	390,742
Interest and dividend income		336,242	1,671		337,913	291,619
Investment expense		(223,658)	(1,114)		(224,772)	(309,909)
Income from investing activities		(165,376)	(828)		(166,204)	372,452
From securities lending activities:						
Securities lending income		160	1		161	144
Securities lending borrower rebates		646	3		649	1,556
Net income from securities lending activities		806	4		810	1,700
Total net investment income		(164,570)	(824)		(165,394)	374,152
Supplemental retirement benefits funded by the State		434			434	507
Transfers of contributions from other Systems	177				177	7
Total additions	672,371	974,935	14,101	622	1,662,029	2,113,251
Deductions						
Refunds of contributions to members	93,694				93,694	95,104
Transfers of contributions to other Systems	722	452			1,174	1,336
Regular retirement benefits		2,472,919		622	2,473,541	2,378,317
Deferred retirement benefits		194,844			194,844	211,982
Supplemental retirement benefits		434			434	507
Death Benefits		(21)	20,680		20,659	20,144
Depreciation		269	2		271	227
Administrative expenses		12,814	64		12,878	12,327
Total deductions	94,416	2,681,711	20,746	622	2,797,495	2,719,944
Interfund transfers according to statutory requirements						
Contributions by members at retirement	(429,338)	429,338				
Interest credited to members' accounts	244,548	(244,548)				
Net interfund transfers	(184,790)	184,790				
Net increase (decrease)	393,165	(1,521,986)	(6,645)		(1,135,466)	(606,693)
Net position restricted for Pensions						
Beginning of year	7,054,277	17,952,972	124,579		25,131,828	25,738,521
End of year	$7,447,442	$16,430,986	$117,934	$ -	$ 23,996,362	$ 25,131,828

South Carolina Retirement Systems
Schedule of Changes in Fiduciary Net Position

PORS Pension Trust Fund

Year Ended June 30, 2016

With comparative totals for the year ended June 30, 2015

(Amounts expressed in thousands)

	EMPLOYEE FUND	EMPLOYER FUND	DEATH BENEFIT FUND	ACCIDENTAL DEATH FUND	QEBA FUND	TOTALS	TOTALS 2015
Additions							
Employee contributions							
State department employees	$ 33,561	$ 2,045	$ -	$ -	$ -	$ 35,606	$ 34,373
Public school employees	80	8,525				8,605	368
Other political subdivision employees	70,628	349				70,977	72,113
Employer contributions							
State department employees		52,782	791	$ 791	2	54,366	53,659
Public school employees		586	9	9		604	575
Other political subdivision employees		116,944	1,703	1,606		120,253	112,217
Total contributions	104,269	181,231	2,503	2,406	2	290,411	273,305
Investment Income							
Net appreciation in fair value of investments		(41,726)	(405)	(541)		(42,672)	61,552
Interest and dividend income		52,812	510	681		54,003	45,614
Investment expense		(35,296)	(343)	(457)		(36,096)	(48,726)
Income from investing activities		(24,210)	(238)	(317)		(24,765)	58,440
From securities lending activities:							
Securities lending income		26		-		26	22
Securities lending borrower rebates		101	1	1		103	243
Net income from securities lending activities		127	1	1		129	265
Total net investment income		(24,083)	(237)	(316)		(24,636)	58,705
Supplemental retirement benefits funded by the State		18				18	22
Transfers of contributions from other Systems	722	452				1,174	1,061
Total additions	104,991	157,618	2,266	2,090	2	266,967	333,093
Deductions							
Refunds of contributions to members	19,176	2				19,178	17,453
Transfers of contributions to other Systems	27					27	
Regular retirement benefits		337,926			2	337,928	323,252
Supplemental retirement benefits		18				18	22
Death Benefits		(6)	1,966			1,960	2,150
Accidental death benefits				1,590		1,590	1,555
Depreciation		36		1		37	29
Administrative expenses		1,973	19	26		2,018	1,909
Total deductions	19,203	339,949	1,985	1,617	2	362,756	346,370
Interfund transfers according to statutory requirements							
Contributions by members at retirement	(55,655)	55,655					
Interest credited to members' accounts	32,821	(32,821)					
Net interfund transfers	(22,834)	22,834					
Net increase (decrease)	62,954	(159,497)	281	473		(95,789)	(13,277)
Net position restricted for Pensions							
Beginning of year	905,768	2,978,028	37,699	50,330		3,971,825	3,985,102
End of year	$ 968,722	$ 2,818,531	$ 37,980	$ 50,803	$ -	$ 3,876,036	$ 3,971,825

South Carolina Retirement Systems
Schedule of Changes in Fiduciary Net Position

GARS Pension Trust Fund

Year Ended June 30, 2016

With comparative totals for the year ended June 30, 2015

(Amounts expressed in thousands)

	EMPLOYEE FUND	EMPLOYER FUND	TOTAL	TOTAL 2015
Additions				
Contributions				
Employee contributions - State departments	$ 292	$ -	$ 292	$ 369
Employer contributions - State departments		4,501	4,501	4,275
Total contributions	292	4,501	4,793	4,644
Investment Income				
Net appreciation in fair value of investments		(422)	(422)	503
Interest and dividend income		420	420	375
Investment expense		(265)	(265)	(380)
Net income from investing activities		(267)	(267)	498
From securities lending activities:				
Securities lending income				
Securities lending borrower rebates		1	1	2
Net income from securities lending activities		1	1	2
Total net investment income		(266)	(266)	500
Transfers of contributions from other Systems				
Total additions	292	4,235	4,527	5,144
Deductions				
Refunds of contributions to members	22		22	
Transfers of contributions to other systems	147		147	18
Regular retirement benefits		6,625	6,625	6,639
Death benefits		9	9	21
Depreciation		1	1	1
Administrative expenses		17	17	17
Total deductions	169	6,652	6,821	6,696
Interfund transfers according to statutory requirements				
Contributions by members at retirement	(295)	295		
Interest credited to members' accounts	211	(211)		
Net interfund transfers	(84)	84		
Net increase (decrease)	39	(2,333)	(2,294)	(1,552)
Net position Restricted for Pensions				
Beginning of year	7,295	25,187	32,482	34,034
End of year	$ 7,334	$ 22,854	$ 30,188	$ 32,482

South Carolina Retirement Systems
Schedule of Changes in Fiduciary Net Position

JSRS Pension Trust Fund

Year Ended June 30, 2016

With comparative totals for the year ended June 30, 2015

(Amounts expressed in thousands)

	EMPLOYEE FUND	EMPLOYER FUND	QEBA FUND	TOTALS	TOTALS 2015
Additions					
Contributions					
Employee contributions - State departments	$ 2,005	$ 298	$ -	$ 2,303	$ 3,153
Employer contributions - State departments		10,070	132	10,202	10,109
Total contributions	2,005	10,368	132	12,505	13,262
Investment Income					
Net appreciation in fair value of investments		(1,577)		(1,577)	2,263
Interest and dividend income		2,000		2,000	1,713
Investment expense		(1,299)		(1,299)	(1,770)
Net income from investing activities		(876)		(876)	2,206
From securities lending activities:					
Securities lending income		1		1	1
Securities lending borrower rebates		4		4	9
Net income from securities lending activities		5		5	10
Total net investment income		(871)		(871)	2,216
Transfers of contributions from other Systems	27			27	286
Total additions	2,032	9,497	132	11,661	15,764
Deductions					
Refunds of contributions to members	60			60	
Transfer of contributions to other systems	30			30	
Regular retirement benefits		16,857	132	16,989	16,832
Deferred retirement benefits					-
Death benefits		143		143	4
Depreciation		1		1	1
Administrative expenses		74		74	70
Total deductions	90	17,075	132	17,297	16,907
Interfund transfers according to statutory requirements					
Contributions by members at retirement	(2,408)	2,408			
Interest credited to members' accounts	898	(898)			
Net interfund transfers	(1,510)	1,510			
Net increase (decrease)	432	(6,068)		(5,636)	(1,143)
Net position restricted for Pensions					
Beginning of year	24,650	121,703		146,353	147,496
End of year	$ 25,082	$ 115,635	$ -	$ 140,717	$ 146,353

South Carolina Retirement Systems
Schedule of Changes in Fiduciary Net Position

SCNG Pension Trust Fund
Year Ended June 30, 2016
With comparative totals for the year ended June 30, 2015
(Amounts expressed in thousands)

	Totals 2016	Totals 2015
Additions		
Contributions		
State appropriated contributions	$ 4,591	$ 4,591
Total contributions	4,591	4,591
Investment Income		
Net appreciation in fair value of investments	(220)	332
Interest income	295	241
Investment expense	(197)	(261)
Income from investing activities	(122)	312
From securities lending activities:		
Securities lending income		
Securities lending borrower rebates	1	1
Net income from securities lending activities	1	1
Total net investment income	(121)	313
Total additions	4,470	4,904
Deductions		
Regular retirement benefits	4,310	4,249
Administrative expenses	12	11
Total deductions	4,322	4,260
Net increase	148	644
Net position restricted for Pensions		
Beginning of year	23,202	22,558
End of year	$ 23,350	$ 23,202

South Carolina Retirement Systems
Schedule of Administrative Expenses

Year Ended June 30, 2016

(Amounts expressed in thousands)

	SCRS	PORS	GARS	JSRS	SCNG	TOTAL
Personal Services						
Salaries and Wages	$ 7,109	$ 1,115	$ 9	$ 41	$ 6	$ 8,280
Employee Benefits	2,463	386	3	14	2	2,868
Contractual Services						
Information Technology	634	99	1	4	1	739
Medical & Health Services	306	48		2		356
Financial Audit	155	24		1		180
Actuarial Services	271	43		2		316
Other Professional Services	844	132	1	5	1	983
Legal Services	54	8				62
Operating Expenses						
Facilities Management	274	43	1	2		320
Telephone	113	18				131
Insurance	164	26		1		191
Postage	161	25	1	1		188
Supplies	111	17	1		1	130
Other Miscellaneous Expenses	219	34		1	1	255
Total Administrative Expenses	$ 12,878	$ 2,018	$ 17	$ 74	$ 12	$ 14,999

South Carolina Retirement Systems[1]
Schedule of Professional and Consultant Fees

Year Ended June 30, 2016

(Amounts expressed in thousands)

Professional / Consultant Type	Nature of Service Provided	Amounts Paid
Information Technology (IT)		
Data Network Solutions	IT Maintenance & Support	$ 28
Hewlett Packard	IT Maintenance & Support	39
NWN Corporation	IT Services Software & License	13
OPTIV Security	IT Security Consulting Services	256
SHI International	IT Maintenance & Support	70
Software AG Inc.	IT Enterprise License & Maintenance	100
SunGard Availability Service	IT Disaster Recovery	140
Tapfin	Application Development Resources	385
Legal		
Ice Miller	IRC Consulting Services	17
Sowell Gray Stepp & Lafitte	Legal Services	45
Management		
CliftonLarsonAllen LLP	Audit	182
Gabriel Roeder Smith & Company	Actuary Services	325
Linea Solutions Inc.	Operational Consulting Services	256
Summit Strategies Inc.	Optional Retirement Plan Consultants	123
TeamIA Inc.	Imaging Maintenance/Auditing	142
University Specialty Clinic	Disability Review	68
USC Department of Internal Medicine	Disability Review	55
Vocational Rehabilitation	Disability Review	233
		$ 2,477

[1] *A Schedule of Investment Managers and Fees can be found in the Investment Section of this report.*

South Carolina Retirement Systems
Schedule of Investment Fees and Expenses

Year Ended June 30, 2016

(Amounts expressed in thousands)

	SCRS	PORS	GARS	JSRS	SCNG	TOTALS[1]
Short Term	$ 2,313	$ 371	$ 3	$ 13	$ 2	$ 2,702
Fixed Income:						
Core Fixed Income	2,845	457	3	16	3	3,324
Mixed Credit	9,074	1,458	11	53	8	10,604
Global Fixed Income	44	7				51
Emerging Market Debt	3,257	523	4	19	3	3,806
Global Public Equity	19,765	3,169	24	115	17	23,090
Infrastructure	35	5				40
Global Tactical Asset Allocation	8,866	1,424	10	51	8	10,359
Alternatives:						
Hedge Funds (Low Beta)	58,652	9,439	68	339	52	68,550
Private Debt	25,383	4,085	30	147	22	29,667
Private Equity	32,285	5,195	38	187	28	37,733
Real Estate	36,604	5,890	43	212	32	42,781
Strategic Partnerships[2]	11,392	1,833	13	66	10	13,314
Beta Overlay	778	125	1	4	1	909
Total Investment Manager Fees	211,293	33,981	248	1,222	186	246,930
Bank Fees and Investment Expenses[3]	13,479	2,115	17	77	11	15,699
Total Investment Expenses	224,772	36,096	265	1,299	197	262,629
Securities Lending Expenses:						
Borrower Rebates	$ (649)	$ (103)	$ (1)	$ (4)	$ (1)	$ (758)
Total Securities Lending Expenses	$ (649)	$ (103)	$ (1)	$ (4)	$ (1)	$ (758)

[1] All investment manager fees, whether directly invoiced ($36,535) or deducted from the fund on a net basis ($210,395) are classified and reported as Investment Expense. Investment expenses include amounts for investment management fees, performance fees (including carried interest allocations), other expenses such as organizational expenses in limited partnership structures as well as offsets which may have the effect of reducing the total.

[2] Represents management and other fees at the Strategic Partnership level, not fees at the underlying investment level included in each applicable asset class.

[3] Includes miscellaneous investment expenses, commissions on futures, bank fees and RSIC administrative expenses.

CliftonLarsonAllen

CliftonLarsonAllen LLP
www.CLAconnect.com

INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS*

The Honorable Nikki R. Haley, Governor
Mr. George L. Kennedy, CPA, State Auditor
and
Board of Directors
South Carolina Public Employee Benefit Authority
Columbia, South Carolina

We have audited, in accordance with the 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, the financial statements of the South Carolina Retirement Systems (the Systems) as administered by the South Carolina Public Employee Benefit Authority, which comprise the statement of fiduciary net position as of June 30, 2016, and the related statement of changes in fiduciary net position for the year then ended, and the related notes to the financial statements, and have issued our report thereon dated October 12, 2016

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the Systems' internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Systems' internal control. Accordingly, we do not express an opinion on the effectiveness of the Systems' internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Systems' financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the result of that testing, and not to provide an opinion on the effectiveness of the Systems' internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Systems' internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

CliftonLarsonAllen LLP

CliftonLarsonAllen LLP

Baltimore, Maryland
October 12, 2016