Financial Statements

South Carolina Retirement Systems

Year Ended June 30, 2017

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 13, 2017

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, 2017, 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

George L. Kennedy, III, CPA
State Auditor

GLKIII/cwc

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INDEPENDENT AUDITORS' REPORT

The Honorable Henry D. McMaster, 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, 2017, 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, 2017, 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' 2016 financial statements, and we expressed an unmodified audit opinion on those audited financial statements in our report dated October 12, 2016. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2016 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 $8.9 billion (approximately 30% 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 13, 2017 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 solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the South Carolina Retirement Systems' 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

CliftonLarsonAllen LLP

Baltimore, Maryland
October 13, 2017

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, 2017, 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. Effective on July 1, 2017, the Retirement System Funding and Administration Act of 2017 assigned the PEBA Board of Directors as the Custodian of the Retirement Trust Funds and assigned SC PEBA and the Retirement Systems Investment Commission (RSIC) as co-trustees of the Retirement Trust Funds.

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, 2017, with combined total comparative information for the fiscal year ended June 30, 2016:

- 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

- On April 25, 2017, Governor Henry McMaster signed into law the Retirement Funding and Administration Act of 2017 which became effective on July 1, 2017. This legislation increased the employer and employee contribution rates, established a ceiling on the employee contribution rate, lowered the assumed rate of return, required a scheduled reduction of the funding period, and addressed various governance issues including the assignment of the PEBA Board as custodian of the retirement trust funds and assignment of the Retirement System Investment Commission (RSIC) and PEBA as co-trustees. Additional information regarding this legislation is available on our public website.
- Total fiduciary net position for all five defined benefit plans of the Systems combined, increased by $2.15 billion, which was nearly 8 percent from the prior fiscal year ended June 30, 2016. 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 increase in net position from $28.1 billion to $30.2 billion was primarily attributable to positive investment performance.
- For the fiscal year ended June 30, 2017, the net of fee investment performance return on a time-weighted basis reported by the custodial bank, the Bank of New York Mellon (BNYM), was 11.88 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 well above both the prior year's return of negative 0.39 percent and is considered an actuarial gain since it was more than the 7.5 percent actuarial investment rate of return assumed for the plans. The recent pension legislation lowers the assumed rate of return to 7.25 percent effective July 1, 2017. 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 may 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 in the dollar amount of employee and employer contributions collected compared to the prior year, is largely attributable to increased contribution rates. Effective July 1, 2016 employee and employer contribution rates for both SCRS and PORS increased by 0.50 percent of pay. This resulted in SCRS employee and employer rates increasing to 8.66 percent and 11.56 percent, respectively, and similarly, the employee and employer contribution rates for PORS increased to 9.24 percent and 14.24 percent. These employer rates are inclusive of contributions for the death benefit plan which are only applicable to participating employers. Pension reform legislation again increases, but also established a ceiling for employee contribution rates. Effective July 1, 2017, employee rates will increase to a capped rate of 9.00 percent for SCRS and 9.75 percent for PORS. The legislation also increases employer contribution rates effective July 1, 2017 for both SCRS and PORS by 2 percentage points to 13.56 percent and 16.24 percent, respectively. Employer contribution rates are scheduled to continue to increase by a minimum of 1 percentage point each year through July 1, 2022, and further, if the scheduled contributions are not sufficient to meet the funding periods set for the applicable year. The board shall increase the employer contribution rates as necessary to meet the amortization period set in statute.
- Annuity benefits increased 8.4 percent from the prior fiscal year. The total number of retired members and beneficiaries receiving monthly retirement benefits from the Systems increased from approximately 161,000 to nearly 164,000 annuitants during the year. Additionally, monthly benefits increased because eligible SCRS and PORS annuitant payees received an annual benefit adjustment equal to the lesser of 1 percent or $500 on July 1, 2016. Lastly, the largest effect was the surge in the amount of distributions paid to members ending their participation in the Teacher and Employee Retention Incentive (TERI) program which produced an increase of nearly $138 million in annuity benefits paid in the form of TERI distributions.
- TERI 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. Legislation enacted in 2012 closes the TERI program to all participants effective June 30, 2018, so some SCRS members may 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 8,922 at fiscal year-end 2016 to 7,210 at fiscal year-end 2017. There was a decrease in the overall number of members participating in the program at year-end compared to the prior year, which caused a spike in the number of distributions paid as well as an increase in the liability for deferred retirement benefits payable at June 30, 2017. The increase of almost 33 percent occurred because there was a higher volume of TERI distributions payable at fiscal year-end.

- The Systems' investment portfolio participates in a securities lending program, managed by BNYM (Securities Lending Program), whereby securities are loaned for the purpose of generating additional income. As the securities lending agent, BNYM 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 $773 thousand, a decrease from $946 thousand in the prior year. As reported by BNYM, at June 30, 2017, the fair value of securities on loan was $164.65 million, the fair value of the invested cash collateral was $123.27 million, and the securities lending obligations were $170.46 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 BNYM 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 recent legislation assigns RSIC as co-trustee of the retirement trust funds along with the SC PEBA Board, effective July 1, 2017. 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 fiscal year 2017 policy allocation, including target weights, ranges and benchmarks for each asset class, was adopted by the Commission on April 21, 2016 for the fiscal year beginning July 1, 2016. The asset allocation features a long-term policy allocation over a 2 year glide path. Additionally, target weights to Private Equity, Private Debt, and Private Real Estate will be their actual weights, reported by the custodial bank, as of the prior month end. The fiscal year 2017 asset allocation policy also introduces a portable alpha strategy which requires a reclassification of hedge funds into two new asset classes; Hedge Funds (Portable Alpha) and Hedge Funds (non-PA). Total hedge funds, across both of these new asset classes, is limited to a maximum of 20 percent of total assets.
- Through June 30, 2017, the Office of the State Treasurer contracted with BNYM to serve as custodial bank for the Retirement Systems' funds. Under a provision of the 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. The pension reform legislation, effective July 1, 2017, gives the Commission the exclusive authority to select the custodial bank, provided, however, that PEBA is a third-party beneficiary of the contract with the custodial bank with full rights to information under them.
- All investment manager fees, whether directly invoiced or deducted from the fund Net Asset Value (NAV) on a net of fee basis, 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 Systems' 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. Total investment manager fees for fiscal year 2017 were $302.9 million, which includes both invoiced amounts and amounts deducted on a net of fee basis, but excludes bank fees and investment expenses. Comparatively, total investment manager fees were 23 percent higher than the prior fiscal year 2016 total of $246.9 million. The increase is largely attributed to higher performance fees as a result of strong performance for the fiscal year in the asset classes that incur performance fees. This strong performance is evidenced in this year's Plan return of 11.88 percent verses negative 0.39 percent the prior fiscal year.

- PEBA is the governing body responsible for administration of both the state's retirement plans and the employee insurance program, and its administrative costs for retirement operations are funded from the retirement trust funds. Administrative expenses for fiscal year 2017 increased 3.5 percent from the prior year. This change resulted from slightly higher wages and benefits for employees, increased information technology costs, increased medical and health services, costs incurred for the Systems' first actuarial audit and other miscellaneous cost increases related to expenses associated with building and facilities maintenance.
- During the year, PEBA drafted, finalized, and issued a request for proposal to secure a client services vendor for oversight project management, program management, detailed requirements definition, testing support, data bridging support, data conversion support, and change management activity associated with our future benefit administration system solution. An intent to award was issued in January 2017, however, the award was protested. The Procurement Review Panel held a hearing on the protest on October 10, 2017 and issued its decision in PEBA's favor which means PEBA will be able to proceed with awarding the client services vendor contract. PEBA also hired a contract project manager to assist with the management of the project, and the project was named "peba:connect." PEBA personnel drafted business requirements and began data analysis in preparation for peba:connect.
- 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, 2016. GRS 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. These recommended assumption and method changes were adopted and incorporated into the July 1, 2016 valuations. The experience study also recommended reducing the long-term investment rate of return assumption; however, this assumption is set in state statute by the General Assembly. As part of the Retirement System Funding and Administration Act of 2017, the assumed rate of return was reduced from 7.50 to 7.25 percent effective July 1, 2017. The 7.25 percent assumed rate of return expires on July 1, 2021, and every four years thereafter, and as such, the PEBA Board, in consultation with the

Commission, must propose an assumed annual rate of return based on recommendations of the Board's actuary.

- 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 a deferred accrual for 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 valuations reported that approximately 25,000 retirees have returned to covered employment while receiving monthly retirement benefits, either directly or as a TERI participant, thereby making up approximately 9 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 plan so 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 they may elect to opt out of a plan 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 plan administered by four different third party record keepers. The State ORP is an alternative plan available to newly hired employees of state agencies, institutions of higher education, public school districts and individuals first elected to the General Assembly at or after the general election in November 2012. In addition, PEBA is responsible for the South Carolina Deferred Compensation Plan (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	**2017**	**2016**	**Increase / (Decrease)**	**% Increase / (Decrease)**
Cash & cash equivalents, receivables, and prepaid expenses	$ 3,712,085	$ 4,979,349	$ (1,267,264)	(25.45%)
Investments, at fair value	27,995,164	24,790,218	3,204,946	12.93%
Securities lending cash collateral invested	123,275	55,737	67,538	121.17%
Capital Assets, net of accumulated depreciation	2,537	2,741	(204)	(7.44%)
Total Assets	31,833,061	29,828,045	2,005,016	6.72%
Liabilities				
Deferred retirement benefits	95,327	71,693	23,634	32.97%
Obligations under securities lending	123,275	55,737	67,538	121.17%
Other accounts payable	1,397,531	1,633,962	(236,431)	(14.47%)
Total Liabilities	1,616,133	1,761,392	(145,259)	(8.25%)
Total Fiduciary Net Position Restricted for Pensions	$ 30,216,928	$ 28,066,653	$ 2,150,275	7.66%

Changes in Fiduciary Net Position

Years Ended June 30

(Amounts expressed in thousands)

Additions	**2017**	**2016**	**Increase / (Decrease)**	**% Increase / (Decrease)**
Employee contributions	$ 957,779	$ 871,936	$ 85,843	9.85%
Employer contributions	1,375,926	1,262,585	113,341	8.98%
State-appropriated contributions	4,591	4,591	-	0.00%
Net Investment income (loss)	3,269,390	(191,288)	3,460,678	1809.15%
Other income	1,958	1,830	128	6.99%
Total Additions	5,609,644	1,949,654	3,659,990	187.73%
Deductions				
Annuity benefits	3,291,197	3,036,279	254,918	8.40%
Refunds	125,762	112,954	12,808	11.34%
Death benefits	25,133	22,771	2,362	10.37%
Administrative & other expenses	17,277	16,687	590	3.54%
Total Deductions	3,459,369	3,188,691	270,678	8.49%
Increase (Decrease) in Fiduciary Net Position	2,150,275	(1,239,037)	3,389,312	273.54%
Beginning Fiduciary Net Position	28,066,653	29,305,690	(1,239,037)	(4.23%)
Ending Fiduciary Net Position Restricted for Pensions	$ 30,216,928	$ 28,066,653	$ 2,150,275	7.66%

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 $30.2 billion at June 30, 2017, passing the milestone of $30 billion for the first time. This represents an increase of nearly 8 percent in net position from the previous fiscal year-end. The increase in the fiduciary net position from the prior fiscal year was primarily attributable to strong performance of the plan investments which exceeded the impact of net negative cash flows that result from benefit payments exceeding contributions received.

During fiscal year 2017, the total dollar amount of contributions added to the plans increased in accordance with the increase in employer and employee contribution rates, while monthly retirement benefits paid to annuitants also increased compared with the previous fiscal year. As previously referenced, the increase in benefits was attributable to a benefit adjustments granted to eligible SCRS and PORS annuity recipients effective July 1, 2016, an increase in the number of annuitants and a spike in the amount of distributions paid to members ending their participation in the TERI program.

The Plan experienced strong performance for the fiscal year having a net of fee performance return, on a time-weighted basis, of a positive 11.88 percent. The Plan outperformed the policy benchmark, which returned a positive 11.82 percent, by 6 basis points. Additionally, the Plan exceeded the actuarial assumed rate of return of 7.50 percent by 438 basis points.

The Equity asset classes were the highest performing segment on an absolute basis, however, relative to their benchmarks they underperformed. Global Public Equity, which is the largest allocation in the Plan, was the highest performer returning 18.86 percent but falling short of its benchmark by 15 basis points. Private Equity and Equity Options were the next best performers gaining 15.17 percent and 11.49 percent but under performing their benchmarks by 467 basis points and 57 basis points respectively. The Diversified Credit segment of the Plan had the next best performing asset classes with Mixed Credit returning 10.50 percent and outperforming its benchmark by 46 basis points, Private Debt returning 10.01 percent but falling 121 basis points short of its benchmark, and Emerging Debt beating its benchmark by 219 basis points by returning 8.45 percent for the fiscal year. Hedge Funds (non-PA) and Private Real Estate also performed well closing the year with an 8.54 percent return and an 8.22 percent return respectively, however, both fell short of their benchmarks.

The Other Opportunistic asset class, which was comprised entirely of Commodities exposure, had a challenging year returning a negative 5.05 percent but still outperformed the sector as measured by the Bloomberg Commodity Index which returned a negative 6.50 for the fiscal year. The only other asset classes to have negative performance were Public Real Estate closing the year with a negative 2.60 percent return, trailing its benchmark by 90 basis points, and Core Fixed Income which matched its benchmark with a negative 0.31 percent return.

Actuarial Valuations and Funding Progress

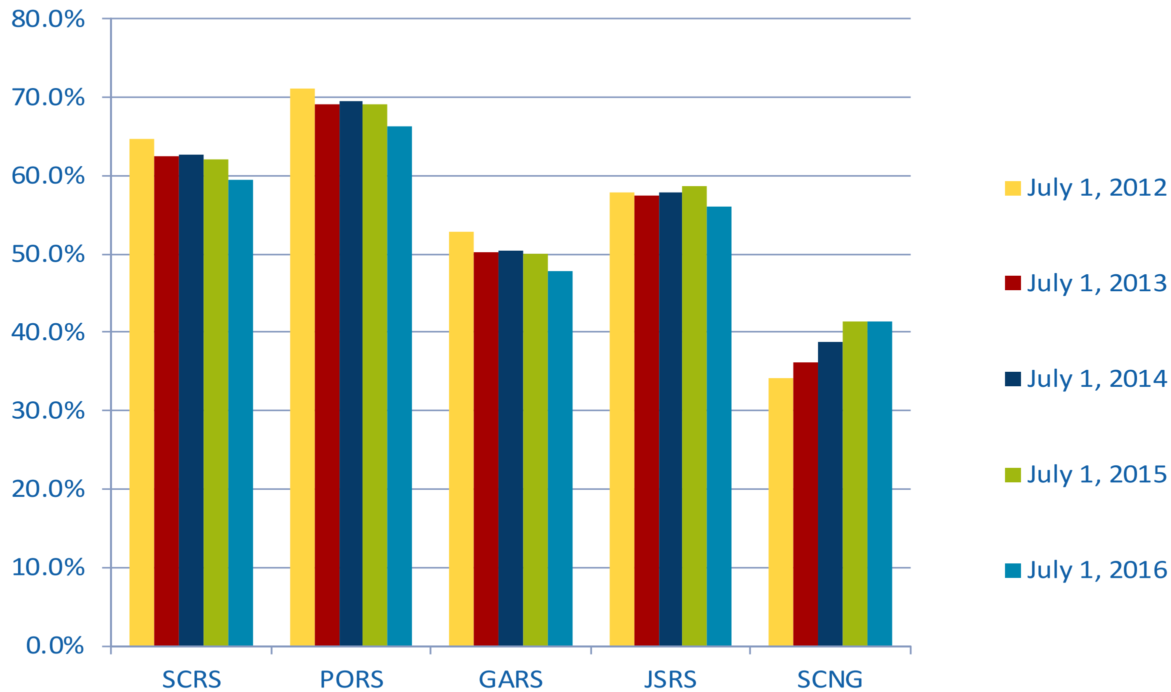
Actuarial valuations are performed annually by an external consulting actuary for each of the five defined benefit plans to ensure applicable contribution rates satisfy the funding parameters specified in Title 9 of the South Carolina Code of Laws. Under these provisions, SCRS and PORS contribution requirements 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. The Retirement System Funding and Administration Act of 2017, which became effective on July 1, 2017, schedules the amortization period to be reduced by one year for each of the next 10 years to 20 years and prohibits the Board from decreasing the contribution rates until the funded ratio is at least 85 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.

For the most recently completed valuations, prepared as of July 1, 2016, investment performance for purposes of developing the actuarially determined contribution rate, was recognized using the smoothing method which recognizes each year's investment gain or loss, determined on a market value of assets basis, over a closed five year period at a rate of 20 percent per year. 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, 2016, showed a slight decrease in funded status for SCRS, PORS, GARS and JSRS while the funded ratio for SCNG stayed relatively level. 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 the guidelines established in Title 9 of the SC Code of Laws. The actuarial funded ratios of the five plans are presented in the graph on the following page. Percentages for GASB Statement No. 67 reporting purposes can be found in the Schedule of Employers' Net Pension Liability beginning on Page 60.

Actuarial Funded Ratios

(Actuarial assets as a percentage of actuarial accrued liabilities)



Requests for Information

This financial report is designed to provide a general overview of the Retirement Systems' financial activities and position 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, 2017

With comparative totals for June 30, 2016

(Amounts expressed in thousands)

	SCRS	PORS	GARS	JSRS	SCNG	TOTAL	2016 TOTAL
ASSETS							
Cash and cash equivalents	$ 2,252,408	$ 373,757	$ 4,637	$ 15,938	$ 4,533	$ 2,651,273	$ 3,967,278
Receivables							
Due from other systems		397				397	302
Employee and employer contributions	229,633	26,152	42	662	2	256,491	233,308
Accrued investment income	36,851	6,108	44	217	36	43,256	38,738
Unsettled investment sales	644,299	106,647	746	3,729	592	756,013	695,775
Other investment receivables	690	114	1	4		809	40,363
Total receivables	911,473	139,418	833	4,612	630	1,056,966	1,008,486
Investments, at fair value							
Short-term securities	556,942	92,187	645	3,224	512	653,510	791,658
Fixed Income	5,447,691	901,724	6,306	31,535	5,005	6,392,261	5,847,385
Global Public Equity	8,470,968	1,402,149	9,806	49,037	7,782	9,939,742	7,200,985
Global Tactical Asset Allocation	1,760,338	291,378	2,037	10,190	1,618	2,065,561	1,963,716
Alternatives	7,622,442	1,261,697	8,823	44,125	7,003	8,944,090	8,986,474
Total investments	23,858,381	3,949,135	27,617	138,111	21,920	27,995,164	24,790,218
Securities lending cash collateral invested	105,059	17,390	122	608	96	123,275	55,737
Prepaid expenses	3,301	519	4	19	3	3,846	3,585
Capital assets, net of accumulated depreciation	2,281	238	7	11		2,537	2,741
Total assets	27,132,903	4,480,457	33,220	159,299	27,182	31,833,061	29,828,045
LIABILITIES							
Due to other systems	397					397	302
Accounts payable - unsettled investment purchases	1,066,187	176,480	1,234	6,172	980	1,251,053	1,439,720
Investment fees payable	10,881	1,801	12	63	10	12,767	9,439
Obligations under securities lending	105,059	17,390	122	608	96	123,275	55,737
Deferred retirement benefits	95,327					95,327	71,693
Due to Employee Insurance Program	62,733	1,205				63,938	65,258
Benefits payable	3,764	431	2		11	4,208	3,845
Other liabilities	55,726	9,027	61	305	49	65,168	115,398
Total liabilities	1,400,074	206,334	1,431	7,148	1,146	1,616,133	1,761,392
Net Position Restricted for Pensions	$ 25,732,829	$ 4,274,123	$ 31,789	$ 152,151	$ 26,036	$ 30,216,928	$ 28,066,653

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, 2017

With comparative totals for the year ended June 30, 2016

(Amounts expressed in thousands)

	SCRS	PORS	GARS	JSRS	SCNG	TOTAL	2016 TOTAL
Additions							
Contributions							
Employee	$ 826,543	$ 127,840	$ 468	$ 2,928	$ -	$ 957,779	$ 871,936
Employer	1,168,847	192,006	4,539	10,534		1,375,926	1,262,585
State appropriated					4,591	4,591	4,591
Total contributions	1,995,390	319,846	5,007	13,462	4,591	2,338,296	2,139,112
Investment Income							
Net appreciation (depreciation) in fair value of investments	2,641,803	431,853	3,130	15,462	2,384	3,094,632	(324,236)
Interest and dividend income	416,925	68,259	510	2,488	395	488,577	394,631
Investment expense	(268,173)	(44,306)	(312)	(1,555)	(246)	(314,592)	(262,629)
Net income (loss) from investing activities	2,790,555	455,806	3,328	16,395	2,533	3,268,617	(192,234)
From securities lending activities:							
Securities lending income	488	80	1	3		572	188
Securities lending borrower rebates	172	28		1		201	758
Net income from securities lending activities	660	108	1	4	-	773	946
Total net investment income (loss)	2,791,215	455,914	3,329	16,399	2,533	3,269,390	(191,288)
Supplemental retirement benefits funded by the State	393	15				408	452
Transfers of contributions from other Systems		1,278	19	253		1,550	1,378
Total additions	4,786,998	777,053	8,355	30,114	7,124	5,609,644	1,949,654
Deductions							
Refunds of contributions to members	105,169	19,964		629		125,762	112,954
Transfers of contributions to other Systems	1,550					1,550	1,378
Regular retirement benefits	2,574,859	352,986	6,678	17,679	4,425	2,956,627	2,839,393
Deferred retirement benefits	332,414					332,414	194,844
Supplemental retirement benefits	393	15				408	452
Death Benefits	22,677	2,104	59	293		25,133	22,771
Accidental death benefits		1,748				1,748	1,590
Depreciation	236	32		1		269	310
Administrative expenses	13,233	2,117	17	78	13	15,458	14,999
Total deductions	3,050,531	378,966	6,754	18,680	4,438	3,459,369	3,188,691
Net increase (decrease) in Net Position	1,736,467	398,087	1,601	11,434	2,686	2,150,275	(1,239,037)
Net Position Restricted for Pensions							
Beginning of year	23,996,362	3,876,036	30,188	140,717	23,350	28,066,653	29,305,690
End of year	$ 25,732,829	$ 4,274,123	$ 31,789	$ 152,151	$ 26,036	$ 30,216,928	$ 28,066,653

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 1 of even numbered years. The Retirement System Funding and Administration Act effective July 1, 2017, changed the PEBA board members' terms to four years, on a staggered schedule.

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, 2016.

	State[1]	School	Other	Total
SCRS				
Number of Employers	31	117	576	724
Annual Covered Payroll for Active Members	$2,321,521	$3,357,550	$2,211,836	$7,890,907
Average Number of:				
Active Contributing Members	51,018	84,916	54,989	190,923
Retirees and beneficiaries currently receiving benefits				137,855
Terminated members entitled to but not yet receiving benefits[2]				169,806
Total SCRS Membership				498,584
PORS				
Number of Employers	17	1	269	287
Annual Covered Payroll for Active Members	$361,065	$ -	$775,337	$1,136,402
Average Number of:				
Active Contributing Members	9,134		17,517	26,651
Retirees and beneficiaries currently receiving benefits				17,288
Terminated members entitled to but not yet receiving benefits[2]				15,001
Total PORS Membership				58,940
GARS				
Number of Employers	1			1
Annual Covered Payroll for Active Members	$2,316			$2,316
Average Number of:				
Active Members	102			102
Retirees and beneficiaries currently receiving benefits	358			358
Terminated members entitled to but not yet receiving benefits	32			32
Total GARS Membership	492			492
JSRS				
Number of Employers	1			1
Annual Covered Payroll for Active Members	$21,958			$21,958
Average Number of:				
Active Members (160 positions)	157			157
Retirees and beneficiaries currently receiving benefits	210			210
Terminated members entitled to but not yet receiving benefits	2			2
Total JSRS Membership	369			369
SCNG				
Number of Employers	1			1
Annual Covered Payroll for Active Members[3]	N/A			N/A
Average Number of:				
Active Members	12,253			12,253
Retirees and beneficiaries currently receiving benefits	4,709			4,709
Terminated members entitled to but not yet receiving benefits	1,969			1,969
Total SCNG Membership	18,931			18,931

[1] *Although there are 89 SCRS and 26 PORS state agencies that 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 an account administered by one of four third party administrators. The Retirement Systems assumes no liability for State ORP benefits. Rather, the benefits are the liability of the four third party administrators. For this reason, State ORP assets 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 (8.66 percent) and a portion of the employer contribution (5 percent). A direct remittance is also required to SCRS for a portion of the employer contribution (6.41 percent) and a death benefit contribution (0.15 percent), which is retained by SCRS. The activity for the State ORP is as follows:

State ORP Activity

Year Ended June 30, 2017

(Dollar amounts expressed in thousands)

Active Contributing Participants	28,291
Annual Covered Payroll	$1,422,607
Employer Contributions Retained by SCRS	$91,189
Death Benefit Contributions Retained by SCRS	$2,134
Employee Contributions to Investment Providers	$123,198
Employer Contributions to Investment Providers	$71,130

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 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 beneficiaries of deceased 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. 82, *Pension Issues – an amendment of GASB Statements No. 67, No. 68, and No. 73* is effective for financial statements for periods beginning after June 15, 2016 and has been implemented in the financial statements prepared by PEBA's Retirement Division for the fiscal year ended June 30, 2017. This statement addresses issues regarding (1) the presentation of payroll-related measures in required supplementary information, (2) the selection of assumptions and the treatment of deviations from the guidance in an Actuarial Standard of Practice for financial reporting purposes, and (3) the classification of payments made by employers to satisfy employee (plan member) contribution requirements.

Basis of Accounting

All funds are accounted for using the economic resources measurement focus and 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 the trust funds and are allocated to each of the systems 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, costs for contractual services and operating expenses.

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 and ex officio Commissioners. Effective July 1, 2017, the Retirement System Funding and Administration Act of 2017 changed the composition of the Commission from seven members to eight members as provided in Section 9-16-315 of the South Carolina Code of Laws. 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 external investment consultants, who are 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, 2016.

Asset Class	Policy Allocation	Minimum	Maximum
Equity	**45.0%**	**42.0%**	**52.0%**
Global Equity[1,2]	31.0%	22.0%	36.0%
Private Equity[2,3]	9.0%	6.0%	12.0%
Equity Options Strategies	5.0%	0.0%	6.0%
Conservative Fixed Income	**12.0%**	**10.0%**	**16.0%**
Cash & Short Duration	2.0%	0.0%	7.0%
Core Bonds	10.0%	5.0%	15.0%
Diversified Credit	**18.0%**	**15.0%**	**21.0%**
Mixed Credit [1,2]	6.0%	4.0%	8.0%
Private Debt[1,2,3]	7.0%	4.0%	10.0%
Emerging Markets Debt[1]	5.0%	3.0%	7.0%
Opportunistic	**17.0%**	**9.0%**	**19.0%**
GAA[1]	10.0%	3.0%	12.0%
Hedge Funds (Non-PA)[1]	4.0%	0.0%	8.0%
Other Opportunistic Strategies[1]	3.0%	0.0%	5.0%
Real Assets	**8.0%**	**8.0%**	**14.0%**
Real Estate-REITs[2]	2.0%	0.0%	3.0%
Real Estate-Private[2,3]	5.0%	4.0%	10.0%
World Infrastructure	1.0%	0.0%	5.0%

[1]Asset classes in which hedge funds can be used, including for portable alpha implementation, up to a maximum of 20% of total assets. Portable Alpha Strategies are capped at 12% of total assets.

[2]The target weights to Private Equity, Private Debt and Real Estate will be equal to their actual weights as of prior month end. Private Equity and Public Equity will combine for 40% of the entire portfolio. Private Debt and Mixed Credit will combine for 13% of the entire portfolio. Private Real Estate and Real Estate (REITs) will combine for 7% of the entire portfolio.

[3]Staff and Consultant will notify the Commission if Private Markets assets exceed 25% of total assets.

At June 30, 2017, 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, 2017, the annual money weighted rate of return on plan investments was 11.88 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, 2017, legal agreements were in place with 134 investment managers.

Effective July 1, 2017, the Retirement System Funding and Administration Act of 2017 assigned the PEBA Board as custodian of the retirement trust funds and designated PEBA and RSIC as co-trustees of the retirement trust funds. The legislation also gave the Commission the exclusive authority to select the custodial bank provided that PEBA is a third-party beneficiary of the contract with the custodial bank, with full rights to information.

BNYM serves as custodial bank of the funds of the Retirement Systems. Assets also include investments not custodied at BNYM, such as funds held in partnerships, commingled accounts, or private market asset classes. The custodial bank provides consolidated recordkeeping services which reflects these 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, 2017. 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.

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.

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.

The Retirement System Funding and Administration Act increases employer contribution rates to 13.56 percent for SCRS and 16.24 percent for PORS, effective July 1, 2017. It also removes the 2.9 percent and 5 percent differential and increases and establishes a ceiling on employee contribution rates at 9 percent and 9.75 percent for SCRS and PORS respectively. The employer contribution rates will continue to increase annually by 1 percent through July 1, 2022. The legislation's ultimate scheduled employer rate is 18.56 percent for SCRS and 21.24 percent for PORS. The amortization period is scheduled to be reduced one year for each of the next 10 years to a twenty year amortization schedule. The recent pension reform legislation also changes the long term funded ratio requirement from ninety to eighty-five.

Following are the employee and employer contribution rates applicable for fiscal year 2017:

System	Employee Rate	Employer Rate
SCRS	8.66%	11.56%[1]
PORS	9.24%	14.24%[2]
GARS	11%	$4,539,000[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) $427,156 and $22,539 respectively in retiree insurance surcharges ($75,415 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, 2017, were as follows (amounts expressed in thousands):

	SCRS	PORS	GARS	JSRS	SCNG	Total
Employee Fund	$ 7,938,850	$ 1,034,549	$ 6,852	$ 26,703	$ -	$ 9,006,954
Employer Fund	17,669,644	3,139,081	24,937	125,448	26,036	20,985,146
Death Benefit Fund	124,335	42,956				167,291
Accidental Death Fund		57,537				57,537
QEBA Fund						-
Totals	$ 25,732,829	$ 4,274,123	$ 31,789	$ 152,151	$ 26,036	$ 30,216,928

III. Deposits and Investments

Deposit and Investment Risk Disclosures

The tables presented on Pages 36-39 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 Retirement System Funding and Administration Act of 2017 designates the PEBA board as custodian effective July 1, 2017.

The Systems' deposits at June 30, 2017, were as follows (amounts expressed in thousands):

	Carrying Amount
SCRS	$27,278
PORS	3,031
GARS	62
JSRS	73
SCNG	53
Total	$30,497

Actual bank balances at June 30, 2017, totaled $30,583 (amount expressed in thousands).

As of June 30, 2017, cash held by the custodian, in broker and strategic partnerships accounts as well as forward contracts and foreign currencies totaled $408.5 million. These balances are classified as cash and cash equivalents on the Statement of Fiduciary Net Position.

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 following table presents the fair value of investments as of June 30, 2017:

Statement of Invested Assets

June 30, 2017

(Amounts expressed in thousands)

Investment Type	Fair Value	Investment Type	Fair Value
Short Term Investments		**Fixed Income Allocation**	
Short Term Investment Funds (U.S. Regulated)	$ 1,323,167	**U.S. Government**	
Repurchase Agreements	307,428	U.S. Government Treasuries[1]	$ 266,452
Certificates of Deposit	30,515	U.S. Government Agencies	578,079
Commercial Paper	656,904	**Mortgage Backed**	
Discount Notes	26,032	Government National Mortgage Association	72,534
U. S. Treasury Bills	272,129	Federal National Mortgage Association	29,044
Global Short Term	3,440	Federal Home Loan Mortgage Association	6,546
Corporate Bonds	5,679	Federal Home Loan Mortgage Association (Multiclass)	14,629
Strategic Partnership Short Duration	239,713	Collateralized Mortgage Obligations	25,027
Options - Cash	740	**Municipals**	13,486
Futures - Cash	76	**Corporate**	
Total Short Term Investments	$ 2,865,823	Corporate Bonds	2,755,797
		Mixed Credit	7,882
Equity Allocation		Asset Backed Securities	430,715
Global Public Equity[2]		**Private Placements**	944,290
Common Stocks	$ 8,452,520	**Yankee Bonds**	928
Real Estate Investment Trusts	705,235	**Emerging Debt**	1,245,242
Preferred	52,730	**Options - Fixed Income**	851
Convertible Preferred	1,458	**Futures - Fixed Income**	(1,377)
Options - Equity	753,471	**Swaps - Fixed Income**	2,136
Futures - Equity	(24,645)	**Total Fixed Income**	$ 6,392,261
Swaps - Equity	(1,027)		
Total Global Public Equity	$ 9,939,742		
Global Tactical Asset Allocation			
Commingled Funds Balanced	$ 2,065,561		
Total Global Tactical Asset Allocation	$ 2,065,561		
Alternatives			
Hedge Funds	$ 3,033,440		
Private Equity Limited Partnerships	2,322,317		
Private Debt	1,782,647		
Real Estate	1,814,011		
Swaps - Commodities	(8,325)		
Total Alternative Investments	$ 8,944,090		
Total Invested Assets		$ 30,207,477	
Invested Securities Lending Collateral		$ 123,275	

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

Total Invested Assets	$ 30,207,477
Short Term Investments classified as Cash & Cash Equivalents on *Statement of Fiduciary Net Position*	
Short Term Investment Funds (U.S. Regulated)	(1,323,167)
Repurchase Agreements	(307,428)
Certificates of Deposit	(9,400)
Commercial Paper	(562,222)
Discount Notes	(9,280)
Options - Cash	(740)
Futures - Cash	(76)
Total Investments on *Statement of Fiduciary Net Position*	$ 27,995,164

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

[2] *RSIC's Public Equity benchmark as of 6/30/2017 is the MSCI All Country World Investable Market Index. The Benchmark is comprised of 52.24% MSCI US Equity, 36.52% MSCI EAFE + CAD, and 11.24% MSCI EM Equity. As of June 30, 2017, RSIC had a NAV of $4,850,149,291 in Global Equity managers that invest to the MSCI World. The MSCI World is comprised of 59.32% MSCI US and 40.68% 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 the 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, 2017 (amounts in thousands):

Investments by Fair Value Level	At 6/30/2017	Fair Value Measurements Using: Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Short Term Investments				
Short Term Investment Funds (U. S. Regulated)	$ 1,323,167	$ 1,323,167	$ -	$ -
Repurchase Agreements	307,428		26,600	280,828
Certificates of Deposit	30,515		30,515	
Commercial Paper	656,904		656,904	
Discount Notes	26,032		26,032	
U. S. Treasury Bills	272,129	272,129		
Global Short Term	3,440		3,440	
Corporate Bonds	5,679		5,679	
Total Short Term Investments	$ 2,625,294	$ 1,595,296	$ 749,170	$ 280,828
Equity Allocation				
Global Public Equity				
Common Stocks	$ 4,201,014	$ 4,201,014	$ -	$ -
Real Estate Investment Trusts	705,235	705,235		
Preferred	52,730	6,114	46,616	
Convertible Preferred	1,458		1,458	
Total Global Public Equity	$ 4,960,437	$ 4,912,363	$ 48,074	$ -
Fixed Income Allocation				
U. S. Government				
U.S. Government Treasuries	266,452	266,452	$ -	$ -
U.S. Government Agencies	578,079		578,079	
Mortgage Backed				
Government National Mortgage Association	72,534		72,534	
Federal National Mortgage Association	29,044		29,044	
Federal Home Loan Mortgage Association	6,546		6,546	
Federal Home Loan Mortgage Association (Multiclass)	14,629		14,629	
Collateralized Mortgage Obligations	25,027		25,027	
Municipals	13,486		13,486	
Corporate				
Corporate Bonds	2,755,797		2,127,617	628,180
Asset Backed Securities	430,715		430,715	
Private Placements	944,290		944,290	
Yankee Bonds	928		928	
Total Fixed Income	$ 5,137,527	$ 266,452	$ 4,242,895	$ 628,180
Total Investments by Fair Value Level	$ 12,723,258	$ 6,774,111	$ 5,040,139	$ 909,008
Investments measured at the net asset value (NAV)				
Strategic Partnership Short Duration	$ 239,713			
Global Equity	4,251,506			
Global Tactical Asset Allocation	2,065,561			
Mixed Credit	7,882			
Emerging Debt	1,245,242			
Hedge Funds	3,033,440			
Private Equity	2,322,317			
Private Debt	1,782,647			
Real Estate	1,814,011			
Total investments measured at the NAV	$ 16,762,319			
Total investments measured at fair value	$ 29,485,577			
Investment derivative instruments				
Short Term Investments				
Options - Cash	$ 740	$ 764	$ (24)	
Futures - Cash	76	76		
Equity Investments				
Options - Equity	753,471		753,471	
Futures - Equity	(24,645)	(24,645)		
Swaps - Equity	(1,027)		(1,027)	
Fixed Income Investments				
Options - Fixed Income	851	746	105	
Futures - Fixed Income	(1,377)	(1,377)		
Swaps - Fixed Income	2,136		2,136	
Alternative Investments				
Swaps - Commodities	(8,325)		(8,325)	
Total investment derivative instruments	$ 721,900	$ (24,436)	$ 746,336	$ -
Total Invested Assets	$ 30,207,477			

Investments Measured at the Net Asset Value (NAV):

	Fair Value	Unfunded Commitments[1]	Redemption Frequency (if Currently Eligible)	Redemption Notice Period
Strategic Partnership Short Duration	$ 239,713	$ -	Monthly	5 - 10 days
Global Equity	4,251,506		Daily/Monthly	5 - 30 days
Global Tactical Asset Allocation	2,065,561		Monthly/Quarterly	5 - 14 days
Mixed Credit	7,882		Monthly	5 - 30 days
Emerging Debt	1,245,242		Daily/Monthly	10 - 15 days
Hedge Funds	3,033,440		Monthly/Quarterly	2 - 90 days
Private Equity	2,322,317	921,804	Illiquid	Illiquid
Private Debt	1,782,647	1,656,108	Illiquid	Illiquid
Real Estate	1,814,011	812,614	Illiquid	Illiquid
Total investments measured at the NAV	$ 16,762,319			

[1] For purposes of this table, amounts are reported in thousands in US Dollars. The Private Equity Category includes €132,604,029 and AUD $55,400,000 that have been converted to USD.

Strategic Partnership Short Duration Funds. This investment type contains one fund that invests 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 one fund that generally invests 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.

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 15 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 eight of these funds, or approximately 55 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 44 funds that consist of investments in limited partnerships or co-investments and five 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 24 funds that consist of investments in limited partnerships and five 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 27 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, 2017, 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)	$ 1,323,167	$ -	$ 1,323,167	0.08
Repurchase Agreements	307,428		307,428	0.07
Invested Securities Lending Collateral	123,275		123,275	0.01
Certificates of Deposit	30,515		30,515	0.39
Commercial Paper	656,904	5,000	651,904	0.11
Discount Notes	26,032		26,032	0.21
U. S. Treasury Bills	272,129		272,129	0.24
Global Short Term	3,440		3,440	0.13
Corporate Bonds	5,679		5,679	0.16
Strategic Partnership Short Duration	239,713		239,713	0.06
Options - Cash	740		740	(23.83)
Futures - Cash	76		76	0.25
Total Short Term Investments	2,989,098	5,000	2,984,098	
Equity Allocation				
Preferred	52,730	5,362	47,368	6.70
Convertible Preferred	1,458		1,458	9.52
Total Equity Investments	54,188	5,362	48,826	
Fixed Income Allocation				
U. S. Government				
U.S. Government Treasuries	266,452		266,452	9.50
U. S. Government Agencies	578,079	5,741	572,338	0.68
Mortgage Backed				
Government National Mortgage Association	72,534		72,534	2.82
Federal National Mortgage Association	29,044		29,044	3.14
Federal Home Loan Mortgage Corporation	6,546		6,546	4.31
Federal Home Loan Mortgage Association (FHLMC Multiclass)	14,629		14,629	5.98
Collateralized Mortgage Obligations	25,027		25,027	5.00
Municipals	13,486		13,486	7.07
Corporate				
Corporate Bonds	2,755,797	630,604	2,125,193	3.71
Mixed Credit	7,882	7,882		
Asset Backed Securities	430,715	33,022	397,693	1.42
Private Placements	944,290	188,030	756,260	2.59
Yankee Bonds	928		928	14.60
Emerging Debt	1,245,242		1,245,242	5.59
Options - Fixed Income	851	745	106	(188.77)
Futures - Fixed Income	(1,377)		(1,377)	(1.13)
Swaps - Fixed Income	2,136	(535)	2,671	(5.75)
Total Fixed Income	$ 6,392,261	$ 865,489	$ 5,526,772	
Total Invested Assets	**$ 9,435,547**	**$ 875,851**	**$ 8,559,696**	
Total Portfolio Effective Duration (option adjusted duration)				**2.51**

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, 2017, were rated by Moody's and are presented below (amounts expressed in thousands).

Credit Risk

June 30, 2017

(Amounts expressed in thousands)

Investment Type and Fair Value	AAA	AA	A	BAA	BA
Short Term Investments					
Short Term Investment Funds (U. S. Regulated)	$ 1,323,167	$ -	$ -	$ -	$ -
Repurchase Agreements					
Invested Securities Lending Collateral					
Certificates of Deposit		11,500	9,400		
Commercial Paper		200,386		428,621	
Discount Notes	26,032				
Global Short Term					
Corporate Bonds		5,005			
Strategic Partnership Short Duration					
Options - Cash					
Futures - Cash					
Equity Investments					
Preferred				14,371	18,242
Convertible Preferred				1,458	
Fixed Income Allocation[2]					
Mortgage Backed:					
Federal National Mortgage Association	29,044				
Federal Home Loan Mortgage Association	6,546				
Federal Home Loan Mortgage Association (Multiclass)	14,629				
Collateralized Mortgage Association	25,027				
Municipals	2,401	2,370		1,123	
Corporate:					
Corporate Bonds	138,628	161,222	393,559	414,166	277,428
Mixed Credit					
Asset Backed Securities	110,311	17,350	62,538	39,921	79,223
Private Placements	84,638	114,595	172,506	61,202	71,879
Yankee Bonds				928	
Emerging Debt					
Options - Fixed Income					
Futures - Fixed Income					
Swaps - Fixed Income					
Totals	**$ 1,760,423**	**$ 512,428**	**$ 638,003**	**$ 961,790**	**$ 446,772**

Chart continued on Page 38

[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 $1.19 billion are not included because they are not subject to credit risk.

Chart continued from Page 37

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
$ -	$ -	$ -	$ -	$ -	$ -	$ 1,323,167
					307,428	307,428
					123,275	123,275
					9,615	30,515
					27,897	656,904
						26,032
					3,440	3,440
					674	5,679
			239,713			239,713
					740	740
					76	76
				14,003	6,114	52,730
						1,458
						29,044
						6,546
						14,629
						25,027
				7,592		13,486
351,365	66,957	2,755		350,163	599,554	2,755,797
			7,882			7,882
7,698	4,748			67,329	41,597	430,715
90,357	60,588			181,960	106,565	944,290
						928
			1,245,242			1,245,242
					851	851
					(1,377)	(1,377)
					2,136	2,136
$ 449,420	**$ 132,293**	**$ 2,755**	**$ 1,492,837**	**$ 621,047**	**$ 1,228,585**	**$ 8,246,353**

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, 2017, 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 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, 2017, (amounts expressed in thousands):

Currency	Cash & Cash Equivalents	Forward Contracts	Futures Contracts	Private Equity	Preferred Securities	Fixed Income	Equity	Total
Australian Dollar	$ 902	$ 75,569	$ 311	$ 32,153	$ -	$ -	$ 100,400	$ 209,335
Brazil Real	144	869				8,675		9,688
Canadian Dollar	1,922	95,058	(1,733)			(210)	169,766	264,803
Danish Krone	332	(78,915)				76,816	24,238	22,471
Euro Currency	5,641	215,923	(13,313)	176,507	6,114	249,744	450,656	1,091,272
Hong Kong Dollar	2,274	40,489	(174)				69,182	111,771
Israeli Shekel	183						4,348	4,531
Japanese Yen	5,949	264,204	1,048			(177)	345,645	616,669
Mexican New Peso	3,768	(3,517)					4,506	4,757
New Taiwan Dollar		(32,405)						(32,405)
New Zealand Dollar	299						4,580	4,879
Norwegian Krone	79	(96)					14,289	14,272
Pound Sterling	(19)	193,942	(4,077)			9,880	261,706	461,432
Russian Ruble (New)	(768)	(202)						(970)
Singapore Dollar	476	(14,825)					16,505	2,156
South African Rand		124						124
South Korean Won		(23,110)						(23,110)
Swedish Krona	2,014	23,122	(678)			5,029	52,149	81,636
Swiss Franc	354	4,665					101,988	107,007
Totals	$ 23,550	$ 760,895	$ (18,616)	$ 208,660	$ 6,114	$ 349,757	$ 1,619,958	$ 2,950,318

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 $107.1 and $306.9 million, respectively, were held in trust by the clearing brokers on June 30, 2017. 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, 2017, (amounts expressed in thousands):

	Changes in Fair Value	
	Classification	Gain/(Loss)
Futures Contracts	Net appreciation/(depreciation)	$ (63,729)
Forward Contracts	Net appreciation/(depreciation)	18,304
Swaps	Net appreciation/(depreciation)	1,631
Options	Net appreciation/(depreciation)	(27,580)

	Fair Value			
	Forward Contracts	Futures	Options	Swaps
Cash and Cash Equivalents	$ (7,023)	$ 76	$ 740	$ -
Fixed Income		(1,377)	851	2,136
Equity		(24,645)	753,471	(1,027)
Alternatives				(8,325)
Totals	$ (7,023)	$ (25,946)	$ 755,062	$ (7,216)

At June 30, 2017, the Systems had the following exposure via futures contracts (dollar amounts expressed in thousands):

Futures Contracts	Expiration	Long/Short	Quantity	Notional Value[1]
90DAY EURODOLLAR FUTURE (CME)	EXP MAR 18	Short	(158)	$ (38,884)
90DAY EURODOLLAR FUTURE (CME)	EXP JUN 18	Short	(342)	(84,102)
90DAY EURODOLLAR FUTURE (CME)	EXP DEC 17	Short	(110)	(27,094)
90DAY EURODOLLAR FUTURE (CME)	EXP DEC 18	Short	(148)	(36,334)
Total Cash & Cash Equivalents				(186,414)
SPI 200 INDEX FUTURE (SFE)	EXP SEP 17	Long	671	72,687
S&P/TSE 60 INDEX FUTURE (MSE)	EXP SEP 17	Long	691	94,624
DAX INDEX FUTURE (EUX)	EXP SEP 17	Long	295	103,630
EURO STOXX 50 FUTURE (EUX)	EXP SEP 17	Long	2,784	108,944
IBEX 35 INDEX FUTURE (MFM)	EXP JUL 17	Long	329	39,047
CAC 40 EURO INDEX FUTURE (EOP)	EXP JUL 17	Long	2,025	118,171
S & P/MIB INDEX FUTURE (MIL)	EXP SEP 17	Long	244	28,524
AMSTERDAM INDEX FUTURE(E0E)	EXP JUL 17	Long	347	40,092
HANG SENG INDEX FUTURE (HKG)	EXP JUL 17	Long	257	42,115
TOPIX INDEX FUTURE (OSE)	EXP SEP 17	Long	1,708	244,966
FTSE 100 INDEX FUTURE (ICF)	EXP SEP 17	Long	1,893	178,087
OMX INDEX FUTURE (SSE)	EXP JUL 17	Long	1,548	29,416
S & P 500 EMINI IND FUT (CME)	EXP SEP 17	Long	14,603	1,767,620
Total Equity				2,867,923
US TREAS BD FUTURE (CBT)	EXP SEP 17	Long	46	7,070
US TREAS BD FUTURE (CBT)	EXP SEP 17	Long	75	11,527
US TREAS BD FUTURE (CBT)	EXP SEP 17	Long	398	61,168
US ULTRA BOND (CBT)	EXP SEP 17	Long	435	72,156
US ULTRA BOND (CBT)	EXP SEP 17	Long	16	2,654
US 10YR ULTRA FUTURE (CBT)	EXP SEP 17	Long	5	674
US 10YR ULTRA FUTURE (CBT)	EXP SEP 17	Long	114	15,369
US 10 YR TREAS NTS FUTURE(CBT)	EXP SEP 17	Long	1,619	203,235
US 10 YR TREAS NTS FUTURE(CBT)	EXP SEP 17	Long	1,454	182,523
US 10 YR TREAS NTS FUTURE(CBT)	EXP SEP 17	Short	(56)	(7,030)
US 5YR TREAS NTS FUTURE (CBT)	EXP SEP 17	Long	2,619	308,612
US 5YR TREAS NTS FUTURE (CBT)	EXP SEP 17	Long	1,625	191,483
US 5YR TREAS NTS FUTURE (CBT)	EXP SEP 17	Short	(172)	(20,268)
US 2YR TREAS NTS FUT (CBT)	EXP SEP 17	Long	1,116	241,178
US 2YR TREAS NTS FUT (CBT)	EXP SEP 17	Long	141	30,471
EURO-OAT FUTURE (EUX)	EXP SEP 17	Short	(354)	(59,949)
CANADA 10YR BOND FUTURE (MSE)	EXP SEP 17	Long	28	3,030
EURO-BUND FUTURE (EUX)	EXP SEP 17	Long	52	9,600
JPN 10Y BOND FUTURE (OSE)	EXP SEP 17	Short	(18)	(24,048)
LONG GILT FUTURE (ICF)	EXP SEP 17	Short	(116)	(18,921)
Total Fixed Income				1,210,534
Total				$ 3,892,043

[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, 2017, the Systems had the following forward exposures, listed by counterparty (amounts expressed in thousands):

Broker	Notional Value	Fair Value	Counterparty Exposure
Bank of America	$ 78,818	$ (2,377)	3.63%
Bank of Montreal	178,668	520	8.23%
BNP Paribas	503,108	(2,744)	23.16%
BNY Mellon	251,107	(2,751)	11.56%
Brown Brothers Harriman	12,202	(223)	0.56%
Citibank	23,103	(166)	1.07%
Credit Suisse International London	25,083	396	1.15%
Deutsche Bank London	4,187	(1)	0.19%
Goldman Sachs	83,851	(1,562)	3.86%
HSBC Bank PLC London	3,248	5	0.15%
JP Morgan Chase Bank	87,105	68	4.01%
Merrill Lynch International London	819	(3)	0.04%
Morgan Stanley	2,575	(104)	0.12%
Royal Bank of Canada	178,609	579	8.22%
Standard Chartered Bank London	198,519	350	9.14%
State Street Boston Capital Market	179,053	401	8.24%
Toronto Dominion	5,849	(3)	0.27%
UBS AG/Stamford	356,353	592	16.40%
Totals	$ 2,172,257	$ (7,023)	100%

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, 2017, for currency forwards, swap agreements, and options (amounts in thousands):

Quality rating	Forwards	Swaps	Options[1]	Total
Aa2	$ 2	$ -	$ -	$ 2
Aa3	468	(6,836)		(6,368)
A1	(8,104)	(2,991)	764	(10,331)
A2	350	(397)		(47)
A3	(104)		82	(22)
Baa1	(3)		745	742
Baa2	(1)			(1)
Not rated by Moody's; rated A by Fitch	369			369
Total subject to credit risk	$ (7,023)	$ (10,224)	$ 1,591	$ (15,656)
Centrally cleared:				
Chicago Mercantile Exchange Inc.	$ -	$ 1,768	$ -	$ 1,768
Chicago Board Options Exchange			(8,538)	(8,538)
Intercontinental Exchange		(1,223)		(1,223)
LCH Ltd		2,463		2,463
Total not subject to credit risk	$ -	$ 3,008	$ (8,538)	$ (5,530)
Totals	$ (7,023)	$ (7,216)	$ (6,947)	$ (21,186)

[1] *Options held in commingled accounts are not included in this table.*

At June 30, 2017, 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	Fair Value[1]	Gain/Loss Since Trade
Bank of America	Russell 2000 Proxy	Russell 2000 Index Total Return	3M T Bill - 29 bps	3/29/2018	$ (232,592)	$ 25	$ (5,592)
Barclays	Barclays US Agg Proxy	1M US Dollar + 10 bps	LBUSTRUU Index	2/28/2018	357,207	(359)	7,207
Barclays	Barclays US Agg Proxy	1M US Dollar - 8 bps	LBUSTRUU Index	9/29/2017	495,155	(497)	(4,845)
Barclays	Barclays US Credit Proxy	1M US Dollar - 15 bps	LUCRTRUU Index	9/29/2017	200,399	397	399
BNP	Russell 2000 Proxy	Russell 2000 Index Total Return	3M T Bill - 27 bps	4/30/2018	(65,000)	(580)	(0)
Goldman Sachs	BCOM F3 Preroll w/Gemini Micro	45 bps	ABGS1006 Index	8/30/2017	110,764	(868)	10,764
Goldman Sachs	BCOM F3 Preroll w/Gemini Micro	45 bps	ABGS1006 Index	9/5/2017	82,537	(4,079)	7,536
JP Morgan	JPM Enhanced Beta + SSP Proxy	3MT-Bill + 46.9 bps	JMABEBSP Index	8/31/2017	217,766	(557)	3,205
JP Morgan	JPM Palmetto Equinox Proxy TR	46.9 bps	JMABEQXT Index	9/29/2017	101,132	(938)	1,132
JP Morgan	Bloomberg Select Petroleum	9.97 bps	BCOMRPE Index	5/31/2018	49,814	(1,830)	(186)
JP Morgan	JPM Palmetto Equinox Proxy TR	3MT-Bill + 46.9 bps	JMABEQXT Index	5/31/2018	64,478	(340)	648
Societe Generale	SocGen Congestion Commodities	19 bps	SGCOP26E Index	3/29/2018	221,530	(397)	(6,347)
					$ 1,603,190	$ (10,023)	$ 13,921

Counterparty	Fixed Income Swaps	SCRS Pays	SCRS Receives	Maturity Date	Current Notional	Fair Value[1]
Credit Suisse AG	Credit Default Swaps	Variable Rate	Fixed Rate	9/17/2058	$ 12,500	$ (171)
JPMorgan Chase Bank	Credit Default Swaps	Variable Rate	Fixed Rate	9/17/2058	2,200	(30)
					$ 14,700	$ (201)
Chicago Mercantile Exchange	Credit Default and Interest Rate Swaps	Fixed / Variable Rate	Fixed / Variable Rate	various	$ 547,287	$ 1,768
Intercontinental Exchange	Credit Default Swaps	Variable Rate	Fixed Rate	various	136,186	2,463
LCH Ltd	Interest Rate Swaps	Fixed	Variable Rate	various	128,221	(1,223)
					$ 811,694	$ 3,008

[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, 2017, the Systems had the following option positions (amounts expressed in thousands):

Option Contracts	Underlying Security	Expiration	Quantity	Fair Value[1]
Put July 17 001.263 ED 07/03/17	USD/GBP SPOT OPTION 2017	July 2017	(3,100,000)	$ (19)
Put July 17 001.264 ED 07/03/17	USD/GBP SPOT OPTION 2017	July 2017	(800,000)	(5)
Call Mar 18 098.75 ED 03/19/18	90DAY EURODOLLAR FUTURE MAR 18	March 2018	(444)	(17)
Put Dec 19 097.625 ED 12/16/19	90DAY EURODOLLAR FUT DEC 19	December 2019	1,229	745
Put Mar 18 098.250 ED 03/19/18	90DAY EURODOLLAR FUTURE MAR 18	March 2018	444	36
Total Cash & Cash Equivalents				740
Put July 17 101.87109375 ED70617	COMMIT TO PUR FNMA SF MTG	July 2017	(20,000,000)	(1)
Put Aug 18 002.800 ED 082018	IRS P USD 5Y 22BPS R 2.8%	August 2018	(21,600,000)	(99)
Put Aug 18 002.905 ED 082018	IRS P USD 30Y 98BPS R 2.905%	August 2018	4,900,000	181
Put Aug 18 002.800 ED 08/20/18	IRS P USD 5Y 22BPS R 2.8%	August 2018	(6,900,000)	(31)
Put Aug 18 002.940 ED 08/20/18	IRS P USD 30Y 97BPS R 2.94%	August 2018	1,600,000	55
Put Sept 17 084.000 ED 09/15/17	ISHARES IBOXX USD HIGH YIELD	September 2017	7,494	307
Call Sept 17 127.000 ED 091517	ISHARES 20+ YEAR TREASURY BO	September 2017	6,358	846
Call Sept 17 130.000 ED 091517	ISHARES 20+ YEAR TREASURY BO	September 2017	(6,358)	(407)
Total Fixed Income				851
Put July 17 2435.000 ED 070717	S&P 500 INDEX SPX	July 2017	(370)	(618)
Put July 17 2420.000 ED 072117	S&P 500 INDEX (SPX)	July 2017	(1,129)	(2,077)
Put July 17 2430.000 ED 071417	S&P 500 INDEX SPX	July 2017	(371)	(686)
Put July 17 2435.000 ED 072817	S&P 500 INDEX SPX	July 2017	(371)	(1,013)
Call Aug 17 2420.000 ED 083117	S&P 500 INDEX SPX	August 2017	(1,120)	(4,144)
Total Equity				(8,538)
Total				$ (6,947)

[1] Options held in commingled accounts are not included in this table.

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, 2017, 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	$ 4,082,263	$ 3,354,186	$ 728,077
Private Debt	4,918,202	3,262,094	1,656,108
Real Estate	3,224,963	2,412,972	811,991
Real Assets	30,000	29,377	623
Totals	$ 12,255,428	$ 9,058,629	$ 3,196,799
Limited Partnerships Euros			
Private Equity	€ 345,750	€ 213,146	€ 132,604
Totals	€ 345,750	€ 213,146	€ 132,604
Limited Partnerships AUD			
Private Equity	$ 100,000	$ 44,600	$ 55,400
Totals	$ 100,000	$ 44,600	$ 55,400

Securities Lending

The Systems' investment portfolio currently participates in a securities lending program, managed by BNYM ("Securities Lending Program"), whereby securities are loaned for the purpose of generating additional income. BNYM 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 fair value of the required cash collateral must initially meet or exceed 102.0 percent of the fair value of the securities loaned for U. S. securities and 105.0 percent for Non-U. S. securities, providing a margin against a decline in the fair 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 fair 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, 2017 included U.S. Government securities, U.S. Government agencies, Corporate bonds, Non-U. S. Fixed Income and Non-U. S. equities. The contractual agreement in place at fiscal year-end between the State Treasurer as custodian and BNYM 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. Indemnification is also provided if the investment of cash collateral results in investment loss. 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, 2017, the fair value of securities on loan was $164.65 million. The fair value of the invested cash collateral was $123.27 million, securities lending obligations were $170.46 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 $773 thousand, a decrease from $946 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 three days. At June 30, 2017, 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, 2017:

	SCRS	PORS	GARS	JSRS	SCNG	06/30/17 TOTALS	06/30/16 TOTALS
Securities lent for cash collateral							
Corporate bonds	$ 13,085	$ 2,166	$ 15	$ 76	$ 12	$ 15,354	$ 25,808
Global Public Equity	121,287	20,076	141	702	111	142,317	75,368
Global Fixed Income	5,950	985	7	34	6	6,982	
Total	$ 140,322	$ 23,227	$ 163	$ 812	$ 129	$ 164,653	$ 101,176
Securities lent for non-cash collateral							
Corporate Bonds	$ 6,347	$ 1,050	$ 7	$ 37	$ 6	$ 7,447	$ -
Global Public Equity	79,848	13,217	93	462	73	93,693	45,003
Total	$ 86,195	$ 14,267	$ 100	$ 499	$ 79	$ 101,140	$ 45,003
Cash collateral invested as follows							
Repurchase agreements	$ 105,059	$ 17,390	$ 122	$ 608	$ 96	$ 123,275	$ 55,737
Total	$ 105,059	$ 17,390	$ 122	$ 608	$ 96	$ 123,275	$ 55,737
Securities received as collateral							
U.S. Government securities	$ 88,525	$ 14,653	$ 103	$ 513	$ 81	$ 103,875	$ 45,287
Total	$ 88,525	$ 14,653	$ 103	$ 513	$ 81	$ 103,875	$ 45,287

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, 2017, were as follows (amounts expressed in thousands):

Transfers from:	Transfers to: SCRS	PORS	GARS	JSRS	SCNG	Total
SCRS	$ -	$1,278	$ 19	$253	$ -	$1,550
PORS						-
GARS						-
JSRS						-
SCNG						-
Total	$ -	$1,278	$ 19	$253	$ -	$1,550

The following schedule reflects amounts due to or due from other systems as of June 30, 2017, (amounts expressed in thousands):

Due from:	Due to: SCRS	PORS	GARS	JSRS	SCNG	Total
SCRS	$ -	$ 397	$ -	$ -	$ -	$ 397
PORS						-
GARS						-
JSRS						-
SCNG						-
Total	$ -	$ 397	$ -	$ -	$ -	$ 397

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 33 percent of combined contribution revenues. In addition, the Systems received custodial and related services from the Office of the South Carolina State Treasurer through FY 2017. The Retirement System Funding and Administration Act of 2017 designated the PEBA Board rather than the State Treasurer as custodian effective July 1, 2017.

At June 30, 2017, liabilities of approximately $63.9 million were due to the Employee Insurance Program. Employee and employer contributions receivable of approximately $50 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 $9 million were made to the Commission during the fiscal year.

VI. Deferred Retirement Option Plans

The 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 their 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.

Legislation enacted in 2012 closes the TERI program to all members effective June 30, 2018.

As of June 30, 2017, a total of 7,210 members were actively participating in the TERI program and the benefits held in trust totaled $643,050,425.

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, 2017, the benefits held in trust totaled $208,045.

VII. Capital Assets

Capital assets at June 30, 2017, consist of the following amounts (expressed in thousands).

	Beginning Balances 7/1/2016	Additions	Deletions	Ending Balances 6/30/2017
Asset Class (at Cost)				
Land	$ 582	$ -	$ -	$ 582
Building	4,749			4,749
Equipment	2,005	65		2,070
Total Capital Assets	7,336	65	-	7,401
Accumulated Depreciation				
Building	2,823	119		2,942
Equipment	1,772	150		1,922
Total Accumulated Depreciation	4,595	269	-	4,864
Capital Assets, Net	$ 2,741	$ (204)	$ -	$ 2,537

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, 2017, the total amount accrued for unused annual leave for PEBA's Retirement Division employees was $919,033, 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, 2017, PEBA's actual contributions to the South Carolina Retirement System (SCRS) for Retirement Division staff were $972,651.

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, 2016, projected forward to the end of the fiscal year, and financial information as of June 30, 2017, using generally accepted actuarial procedures. Information included in the following schedule is based on the certification provided by our consulting actuary, Gabriel Roeder Smith & Company. A Schedule of 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 the 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 Statement No. 67 less the fiduciary net position) as of June 30, 2017, 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	$ 48,244,437	$ 25,732,829	$ 22,511,608	53.3%
PORS	7,013,684	4,274,123	2,739,561	60.9%
GARS	74,728	31,789	42,939	42.5%
JSRS	299,039	152,151	146,888	50.9%
SCNG	67,222	26,036	41,186	38.7%

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 to calculate the Total Pension Liability as of June 30, 2017. Please note, the Total Pension Liability as of June 30, 2017, is based on the July 1, 2016, actuarial valuation, with the exception of the use of a 7.25 percent assumed rate of return. A 7.25 percent assumed rate of return was used to determine the Total Pension Liability as of June 30, 2017, as a result of the enactment of the Retirement System Funding and Administration Act of 2017, which included a provision to reduce the assumed rate of return from 7.50 percent to 7.25 percent effective July 1, 2017.

	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]	7.25%	7.25%	7.25%	7.25%	7.25%
Projected salary increases	3.0% to 12.5% (varies by service)[1]	3.5% to 9.5% (varies by service)[1]	None	2.75%[1]	None
Benefit adjustments	lesser of 1% or $500 annually	lesser of 1% or $500 annually	None	2.75%	None

[1]Includes inflation at 2.25%

The post-retiree mortality assumption is dependent upon the member's job category and gender. The base mortality assumption, the 2016 Public Retirees of South Carolina Mortality table (2016 PRSC), was developed using the System's mortality experience. These base rates are adjusted for future improvement in mortality using published Scale AA projected from the year 2016.

Former Job Class	Males	Females
Educators and Judges	2016 PRSC Males multiplied by 92%	2016 PRSC Females multiplied by 98%
General Employees and Members of the General Assembly	2016 PRSC Males multiplied by 100%	2016 PRSC Females multiplied by 111%
Public Safety, Firefighters and members of the South Carolina National Guard	2016 PRSC Males multiplied by 125%	2016 PRSC Females multiplied by 111%

The long-term expected rate of return on pension plan investments is based upon 30 year capital market assumptions. 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 target asset allocation adopted at the beginning of the 2017 fiscal year. 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 on the following page. For actuarial purposes, the 7.25 percent assumed annual investment rate of return used in the calculation of the total pension liability includes a 5.00 percent real rate of return and a 2.25 percent inflation component.

Allocation / Exposure	Policy Target	Expected Arithmetic Real rate of Return	Long Term Expected Portfolio Real Rate of Return
Global Equity	**45.0%**		
Global Public Equity[1,2]	31.0%	6.72%	2.08%
Private Equity[2,3]	9.0%	9.60%	0.86%
Equity Options Strategies	5.0%	5.91%	0.30%
Real Assets	**8.0%**		
Real Estate (Private)[2,3]	5.0%	4.32%	0.22%
Real Estate (REITs)[2]	2.0%	6.33%	0.13%
Infrastructure	1.0%	6.26%	0.06%
Opportunistic	**17.0%**		
GTAA/Risk Parity[1]	10.0%	4.16%	0.42%
Hedge Funds (non-PA)[1]	4.0%	3.82%	0.15%
Other Opportunistic Strategies[1]	3.0%	4.16%	0.12%
Diversified Credit	**18.0%**		
Mixed Credit[1,2]	6.0%	3.92%	0.23%
Emerging Markets Debt[1]	5.0%	5.01%	0.25%
Private Debt[1,2,3]	7.0%	4.37%	0.31%
Conservative Fixed Income	**12.0%**		
Core Fixed Income	10.0%	1.60%	0.16%
Cash and Short Duration (Net)	2.0%	0.92%	0.02%
Total Expected Return	100.0%		5.31%
Inflation for Actuarial Purposes			2.25%
			7.56%

[1]Portable Alpha Strategies will be capped at 12% of total assets; and Hedge funds (including all hedge funds used in portable alpha implementation) would be capped at 20% of total assets.

[2]The target weights to Private Equity, Private Debt and Real Estate will be equal to their actual weights as of prior month end. Private Equity and Public Equity will combine for 40 percent of entire portfolio. Private Debt and Mixed Credit will combine for 13 percent of the entire portfolio. Private Real Estate and Real Estate (REITs) will combine for 7 percent of the entire portfolio.

[3]Staff and Consultant will notify the Commission if Private Markets assets exceed 25% of total assets.

The discount rate used to measure the total pension liability was 7.25 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 which include the change in funding in future years as a result of the enactment of the Retirement System Funding and Administration Act of 2017. 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 Statement No. 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 7.25 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 (6.25 percent) or 1.00 percent higher (8.25 percent) than the current rate.

Discount Rate Sensitivity Analysis

(Amounts expressed in thousands)

	1% Decrease (6.25%)	Current Discount Rate (7.25%)	1% Increase (8.25%)
SCRS	$ 29,014,371	$ 22,511,608	$ 18,565,959
PORS	3,698,928	2,739,561	1,983,880
GARS	49,589	42,939	37,535
JSRS	180,690	146,888	120,045
SCNG	50,043	41,186	34,443

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

An incidental death benefit is payable upon the death of an SCRS, State ORP or PORS contributing member who worked for a participating employer at the time of death. The member must have been in service and had at least one full year of membership or must have died as a result of an injury arising in the course of performing his duties regardless of length of membership. The incidental death benefit is equal to the annual earnable compensation of the member at the time of death and 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, 2016 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.

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.

XIII. Pension Reform Legislation

The Retirement System Funding and Administration Act of 2017 was signed into law April 25, 2017, by Governor Henry McMaster. The Act became effective on July 1, 2017. A summary of the legislation is below.

This legislation represents the culmination of many individual's and organization's efforts, as well as the ongoing work of the General Assembly's Joint Committee on Pension Systems Review. It is designed to accelerate the state's ability to fully fund the unfunded liabilities of its retirement systems. It is also intended to create a cushion against adverse investment experience in the future.

The legislation lowered the retirement systems' assumed rate of return from 7.5 percent to 7.25 percent and reduced the maximum amortization period for the retirement systems from 30 years to 20 years over a ten-year schedule. The legislation also increased contribution rates for employees and employers, with employee contribution rates capped. SCRS employee contributions rose from 8.66 percent to 9 percent and PORS contribution rates rose from 9.24 to 9.75 percent.

The SCRS employer contribution rate rose from 11.56 to 13.56 percent, and the PORS employer rate rose from 14.24 percent to 16.24 percent. Following this two-percent increase, the employer rates for each of these systems will rise 1 percent every year until July 1, 2022. The scheduled final employer rates are 18.56 percent for SCRS and 21.24 percent for PORS.

Finally, the legislation addressed various governance issues including the assignment of the PEBA Board as custodian of the Retirement Trust Funds and assignment of RSIC and PEBA as co-trustees.

The Joint Committee on Pension Systems Review has publicly stated that they will continue their work during fiscal year 2018 by evaluating plan design. PEBA will continue to work with the Joint Committee during its evaluation.

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			
	2017	2016	2015	2014	2017	2016	2015	2014
Total pension liability								
Service Cost	$ 804,057	$ 763,357	$ 744,197	$ 739,021	$ 166,682	$ 156,567	$ 154,102	$ 149,606
Interest	3,318,051	3,231,572	3,148,090	3,021,004	473,059	453,696	435,329	417,950
Benefit Changes								-
Difference between actual and expected experience	54,584	46,714	(44,636)	638,745	5,044	11,582	6,771	64,336
Assumption Changes	1,746,649				333,190			
Benefit Payments	(3,035,119)	(2,782,738)	(2,705,547)	(2,571,049)	(376,801)	(360,656)	(344,410)	(331,783)
Net Change in Total Pension Liability	2,888,222	1,258,905	1,142,104	1,827,721	601,174	261,189	251,792	300,109
Total Pension Liability - Beginning	45,356,215	44,097,310	42,955,206	41,127,485	6,412,510	6,151,321	5,899,529	5,599,420
Total Pension Liability - Ending (a)	$ 48,244,437	$ 45,356,215	$ 44,097,310	$ 42,955,206	$ 7,013,684	$ 6,412,510	$ 6,151,321	$ 5,899,529
Plan Fiduciary Net Position								
Contributions - Employer	$ 1,168,847	$ 1,072,659	$ 1,022,478	$ 962,798	$ 192,006	$ 175,223	$ 166,451	$ 155,608
Contributions - Member	826,543	754,153	716,107	652,631	127,840	115,188	106,854	96,004
Refunds of contributions to members	(105,169)	(93,694)	(95,104)	(90,250)	(19,964)	(19,178)	(17,453)	(16,184)
Retirement benefits	(2,907,273)	(2,668,385)	(2,590,299)	(2,461,559)	(352,986)	(337,928)	(323,252)	(311,593)
Death benefits	(22,677)	(20,659)	(20,144)	(19,240)	(3,852)	(3,550)	(3,705)	(4,007)
Net Investment Income	2,791,215	(165,394)	374,152	3,517,324	455,914	(24,636)	58,705	538,386
Administrative Expense	(13,469)	(13,149)	(12,554)	(11,765)	(2,149)	(2,055)	(1,938)	(1,820)
Net transfers to affiliated systems	(1,550)	(997)	(1,329)	(2,470)	1,278	1,147	1,061	2,260
Net Change in Plan Fiduciary Net Position	1,736,467	(1,135,466)	(606,693)	2,547,469	398,087	(95,789)	(13,277)	458,654
Plan Fiduciary Net Position - Beginning	23,996,362	25,131,828	25,738,521	23,191,052	3,876,036	3,971,825	3,985,102	3,526,448
Plan Fiduciary Net Position - Ending (b)	$ 25,732,829	$ 23,996,362	$ 25,131,828	$ 25,738,521	$ 4,274,123	$ 3,876,036	$ 3,971,825	$ 3,985,102
Net Pension Liability - Ending (a) - (b)	$ 22,511,608	$ 21,359,853	$ 18,965,482	$ 17,216,685	$ 2,739,561	$ 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.*

South Carolina Retirement Systems
Required Supplementary Information (continued)

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

Years Ended June 30

(Amounts expressed in thousands)

	GARS				JSRS			
	2017	2016	2015	2014	2017	2016	2015	2014
Total pension liability								
Service Cost	$ 488	$ 493	$ 553	$ 572	$ 6,186	$ 5,886	$ 5,760	$ 5,571
Interest	5,293	5,301	5,380	5,437	20,404	20,022	19,440	18,857
Benefit Changes							666	
Difference between actual and expected experience	(348)	798	(294)	(2,585)	(995)	(3,085)	(1,138)	(3,240)
Assumption Changes	2,330				13,790			
Benefit Payments	(6,737)	(6,656)	(6,660)	(6,861)	(18,602)	(17,191)	(16,836)	(16,684)
Net Change in Total Pension Liability	1,026	(64)	(1,021)	(3,437)	20,783	5,632	7,892	4,504
Total Pension Liability - Beginning	73,702	73,766	74,787	78,224	278,256	272,624	264,732	260,228
Total Pension Liability - Ending (a)	$ 74,728	$ 73,702	$ 73,766	$ 74,787	$ 299,039	$ 278,256	$ 272,624	$ 264,732
Plan Fiduciary Net Position								
Contributions - Employer	$ 4,539	$ 4,501	$ 4,275	$ 4,063	$ 10,534	$ 10,202	$ 10,109	$ 9,659
Contributions - Member	468	292	369	384	2,928	2,303	3,153	2,448
Refunds of contributions to members		(22)		(41)	(629)	(60)		
Retirement benefits	(6,678)	(6,625)	(6,639)	(6,799)	(17,679)	(16,989)	(16,832)	(16,675)
Death benefits	(59)	(9)	(21)	(20)	(293)	(143)	(4)	(10)
Net Investment Income	3,329	(266)	500	4,545	16,399	(871)	2,216	19,962
Administrative Expense	(17)	(18)	(18)	(17)	(79)	(75)	(71)	(68)
Net transfers to affiliated systems	19	(147)	(18)	15	253	(3)	286	195
Net Change in Plan Fiduciary Net Position	1,601	(2,294)	(1,552)	2,130	11,434	(5,636)	(1,143)	15,511
Plan Fiduciary Net Position - Beginning	30,188	32,482	34,034	31,904	140,717	146,353	147,496	131,985
Plan Fiduciary Net Position - Ending (b)	$ 31,789	$ 30,188	$ 32,482	$ 34,034	$ 152,151	$ 140,717	$ 146,353	$ 147,496
Net Pension Liability - Ending (a) - (b)	$ 42,939	$ 43,514	$ 41,284	$ 40,753	$ 146,888	$ 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.*

South Carolina Retirement Systems
Required Supplementary Information (continued)

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

Years Ended June 30

(Amounts expressed in thousands)

	SCNG			
	2017	2016	2015	2014
Total pension liability				
Service Cost	$ 696	$ 689	$ 690	$ 697
Interest	4,589	4,594	4,481	4,417
Benefit Changes				
Difference between actual and expected experience	(843)	(992)	612	(262)
Assumption Changes	4,161			
Benefit Payments	(4,426)	(4,310)	(4,249)	(4,248)
Net Change in Total Pension Liability	4,177	(19)	1,534	604
Total Pension Liability - Beginning	63,045	63,064	61,530	60,926
Total Pension Liability - Ending (a)	$ 67,222	$ 63,045	$ 63,064	$ 61,530
Plan Fiduciary Net Position				
Contributions - Employer	$ 4,591	$ 4,591	$ 4,591	$ 4,586
Contributions - Member				
Refunds of contributions to members				
Retirement benefits	(4,425)	(4,310)	(4,249)	(4,248)
Death benefits				
Net Investment Income	2,533	(121)	313	2,806
Administrative Expense	(13)	(12)	(11)	(10)
Net transfers to affiliated systems				
Net Change in Plan Fiduciary Net Position	2,686	148	644	3,134
Plan Fiduciary Net Position - Beginning	23,350	23,202	22,558	19,424
Plan Fiduciary Net Position - Ending (b)	$ 26,036	$ 23,350	$ 23,202	$ 22,558
Net Pension Liability - Ending (a) - (b)	$ 41,186	$ 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 Payroll[2]	Net Pension Liability as a Percentage of Covered Payroll
SCRS						
6/30/2017	$ 48,244,437	$ 25,732,829	22,511,608	53.3%	$ 8,213,042	274.1%
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						
6/30/2017	7,013,684	4,274,123	2,739,561	60.9%	1,187,195	230.8%
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						
6/30/2017	74,728	31,789	42,939	42.5%	2,316	1,853.7%
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						
6/30/2017	299,039	152,151	146,888	50.9%	21,958	668.9%
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						
6/30/2017	67,222	26,036	41,186	38.7%	Not Applicable[3]	Not Applicable[3]
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 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.*

South Carolina Retirement Systems
Required Supplementary Information (continued)

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 Payroll[3]	Percentage of Contributions to Covered Payroll
SCRS					
6/30/2017	$ 1,168,847	$ 1,168,847	$ -	$ 8,213,042	14.2%
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%
PORS					
6/30/2017	192,006	192,006		1,187,195	16.2%
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%
GARS[4]					
6/30/2017	4,539	4,539		2,316	196.0%
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%

Schedule of Employers' Contributions continued on next page

South Carolina Retirement Systems
Required Supplementary Information (continued)

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 Payroll[3]	Percentage of Contributions to Covered Payroll
JSRS					
6/30/2017	$ 10,534	$ 10,534	$ -	$ 21,958	48.0%
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%
SCNG[5]					
6/30/2017	4,509	4,591	(82)	Not Applicable	Not Applicable
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

[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. Includes employer contributions on employee payroll of members in TERI as well as contributions remitted to SCRS on the payroll of employees participating in State ORP.

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

[3] Projected covered 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.

South Carolina Retirement Systems
Required Supplementary Information (continued)

Schedule of Investment Returns[1]

Fiscal Year Ending June 30	Annual Money Weighted Rate of Return, Net of Investment Expense
2017	11.88%
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	07/01/14	07/01/14	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 of pay	Level percent of pay	Level dollar	Level percent of pay	Level dollar
Amortization period	30 years variable, but not to exceed 30 years [2]	27 years variable, but not to exceed 30 years [2]	13 years, closed	28 years variable, but not to exceed 30 years	17 years, closed
Asset Valuation method	5-Year Smoothed	5-Year Smoothed	5-Year Smoothed	5-Year Smoothed	5-Year Smoothed
Actuarial assumptions:					
Inflation rate	2.75%	2.75%	2.75%	2.75%	2.75%
Projected salary increases	3.5% plus step-rate increases for members with less than 25 years of service[1]	4.0% plus step-rate increases for members with less than 12 years of service[1]	None	3.00%[1]	None
Investment rate of return	7.50%[2]	7.50%[2]	7.50%[2]	7.50%[2]	7.50%[2]
Benefit adjustments	lesser of 1% or $500 annually	lesser of 1% or $500 annually	None	3.00%	None

[1]Includes inflation at 2.75%.

[2] Pension reform legislation enacted effective July 1, 2017 lowered the investment rate of return from 7.50 to 7.25 percent and schedules the amortization period to be reduced one year for each of the next 10 years, to 20 years.

South Carolina Retirement Systems
Schedule of Changes in Fiduciary Net Position

SCRS Pension Trust Fund

Year Ended June 30, 2017

With comparative totals for the year ended June 30, 2016

(Amounts expressed in thousands)

	EMPLOYEE FUND	EMPLOYER FUND	DEATH BENEFIT FUND	QEBA FUND	TOTAL	2016 TOTAL
Additions						
Employee contributions						
State department employees	$ 222,319	$ 28,492	$ -	$ -	$ 250,811	$ 231,688
Public school employees	312,382	40,239			352,621	323,222
Other political subdivision employees	208,323	14,788			223,111	199,243
Employer contributions						
State department employees		383,187	5,665	642	389,494	353,805
Public school employees		482,692	6,604		489,296	454,782
Other political subdivision employees		286,799	3,258		290,057	264,072
Total contributions	743,024	1,236,197	15,527	642	1,995,390	1,826,812
Investment Income						
Net appreciation (depreciation) in fair value of investments		2,628,819	12,984		2,641,803	(279,345)
Interest and dividend income		414,880	2,045		416,925	337,913
Investment expense		(266,855)	(1,318)		(268,173)	(224,772)
Net income (loss) from investing activities		2,776,844	13,711		2,790,555	(166,204)
From securities lending activities:						
Securities lending income		486	2		488	161
Securities lending borrower rebates		172			172	649
Net income from securities lending activities		658	2		660	810
Total net investment income (loss)		2,777,502	13,713		2,791,215	(165,394)
Supplemental retirement benefits funded by the State		393			393	434
Transfers of contributions from other Systems						177
Total additions	743,024	4,014,092	29,240	642	4,786,998	1,662,029
Deductions						
Refunds of contributions to members	105,169				105,169	93,694
Transfers of contributions to other Systems	1,055	495			1,550	1,174
Regular retirement benefits		2,574,217		642	2,574,859	2,473,541
Deferred retirement benefits		332,414			332,414	194,844
Supplemental retirement benefits		393			393	434
Death Benefits		(96)	22,773		22,677	20,659
Depreciation		235	1		236	271
Administrative expenses		13,168	65		13,233	12,878
Total deductions	106,224	2,920,826	22,839	642	3,050,531	2,797,495
Interfund transfers according to statutory requirements						
Contributions by members at retirement	(404,589)	404,589				
Interest credited to members' accounts	259,197	(259,197)				
Net interfund transfers	(145,392)	145,392				
Net increase (decrease) in Net Position	491,408	1,238,658	6,401		1,736,467	(1,135,466)
Net Position Restricted for Pensions						
Beginning of year	7,447,442	16,430,986	117,934		23,996,362	25,131,828
End of year	$ 7,938,850	$ 17,669,644	$ 124,335	$ -	$ 25,732,829	$ 23,996,362

South Carolina Retirement Systems
Schedule of Changes in Fiduciary Net Position

PORS Pension Trust Fund

Year Ended June 30, 2017

With comparative totals for the year ended June 30, 2016

(Amounts expressed in thousands)

	EMPLOYEE FUND	EMPLOYER FUND	DEATH BENEFIT FUND	ACCIDENTAL DEATH FUND	QEBA FUND	TOTAL	2016 TOTAL
Additions							
Employee contributions							
State department employees	$ 37,885	$ 2,049	$ -	$ -	$ -	$ 39,934	$ 35,606
Public school employees	27	409				436	8,605
Other political subdivision employees	78,733	8,737				87,470	70,977
Employer contributions							
State department employees		58,069	838	$ 838	2	59,747	54,366
Public school employees		655	9	9		673	604
Other political subdivision employees		128,107	1,789	1,690		131,586	120,253
Total contributions	116,645	198,026	2,636	2,537	2	319,846	290,411
Investment Income							
Net appreciation (depreciation) in fair value of investments		421,961	4,231	5,661		431,853	(42,672)
Interest and dividend income		66,700	667	892		68,259	54,003
Investment expense		(43,291)	(434)	(581)		(44,306)	(36,096)
Net income (loss) from investing activities		445,370	4,464	5,972		455,806	(24,765)
From securities lending activities:							
Securities lending income		78	1	1		80	26
Securities lending borrower rebates		28				28	103
Net income from securities lending activities		106	1	1		108	129
Total net investment income (loss)		445,476	4,465	5,973		455,914	(24,636)
Supplemental retirement benefits funded by the State		15				15	18
Transfers of contributions from other Systems	783	495				1,278	1,174
Total additions	117,428	644,012	7,101	8,510	2	777,053	266,967
Deductions							
Refunds of contributions to members	19,964					19,964	19,178
Transfers of contributions to other Systems							27
Regular retirement benefits		352,984			2	352,986	337,928
Supplemental retirement benefits		15				15	18
Death Benefits			2,104			2,104	1,960
Accidental death benefits				1,748		1,748	1,590
Depreciation		32				32	37
Administrative expenses		2,068	21	28		2,117	2,018
Total deductions	19,964	355,099	2,125	1,776	2	378,966	362,756
Interfund transfers according to statutory requirements							
Contributions by members at retirement	(66,252)	66,252					
Interest credited to members' accounts	34,615	(34,615)					
Net interfund transfers	(31,637)	31,637					
Net increase (decrease) in Net Position	65,827	320,550	4,976	6,734		398,087	(95,789)
Net Position Restricted for Pensions							
Beginning of year	968,722	2,818,531	37,980	50,803		3,876,036	3,971,825
End of year	$ 1,034,549	$ 3,139,081	$ 42,956	$ 57,537	$ -	$ 4,274,123	$ 3,876,036

South Carolina Retirement Systems
Schedule of Changes in Fiduciary Net Position

GARS Pension Trust Fund
Year Ended June 30, 2017
With comparative totals for the year ended June 30, 2016
(Amounts expressed in thousands)

	EMPLOYEE FUND	EMPLOYER FUND	TOTAL	2016 TOTAL
Additions				
Contributions				
Employee contributions - State departments	$ 468	$ -	$ 468	$ 292
Employer contributions - State departments		4,539	4,539	4,501
Total contributions	468	4,539	5,007	4,793
Investment Income				
Net appreciation (depreciation) in fair value of investments		3,130	3,130	(422)
Interest and dividend income		510	510	420
Investment expense		(312)	(312)	(265)
Net income (loss) from investing activities		3,328	3,328	(267)
From securities lending activities:				
Securities lending income		1	1	
Securities lending borrower rebates				1
Net income from securities lending activities		1	1	1
Total net investment income (loss)		3,329	3,329	(266)
Transfers of contributions from other Systems	19		19	
Total additions	487	7,868	8,355	4,527
Deductions				
Refunds of contributions to members				22
Transfers of contributions to other Systems				147
Regular retirement benefits		6,678	6,678	6,625
Death benefits		59	59	9
Depreciation				1
Administrative expenses		17	17	17
Total deductions		6,754	6,754	6,821
Interfund transfers according to statutory requirements				
Contributions by members at retirement	(1,167)	1,167		
Interest credited to members' accounts	198	(198)		
Net interfund transfers	(969)	969		
Net increase (decrease) in Net Position	(482)	2,083	1,601	(2,294)
Net Position Restricted for Pensions				
Beginning of year	7,334	22,854	30,188	32,482
End of year	$ 6,852	$ 24,937	$ 31,789	$ 30,188

South Carolina Retirement Systems
Schedule of Changes in Fiduciary Net Position

JSRS Pension Trust Fund

Year Ended June 30, 2017

With comparative totals for the year ended June 30, 2016

(Amounts expressed in thousands)

	EMPLOYEE FUND	EMPLOYER FUND	QEBA FUND	TOTAL	2016 TOTAL
Additions					
Contributions					
Employee contributions - State departments	$ 2,641	$ 287	$ -	$ 2,928	$ 2,303
Employer contributions - State departments		10,381	153	10,534	10,202
Total contributions	2,641	10,668	153	13,462	12,505
Investment Income					
Net appreciation (depreciation) in fair value of investments		15,462		15,462	(1,577)
Interest and dividend income		2,488		2,488	2,000
Investment expense		(1,555)		(1,555)	(1,299)
Net income (loss) from investing activities		16,395		16,395	(876)
From securities lending activities:					
Securities lending income		3		3	1
Securities lending borrower rebates		1		1	4
Net income from securities lending activities		4		4	5
Total net investment income (loss)		16,399		16,399	(871)
Transfers of contributions from other Systems	253			253	27
Total additions	2,894	27,067	153	30,114	11,661
Deductions					
Refunds of contributions to members	629			629	60
Transfer of contributions to other Systems					30
Regular retirement benefits		17,526	153	17,679	16,989
Deferred retirement benefits					
Death benefits		293		293	143
Depreciation		1		1	1
Administrative expenses		78		78	74
Total deductions	629	17,898	153	18,680	17,297
Interfund transfers according to statutory requirements					
Contributions by members at retirement	(1,601)	1,601			
Interest credited to members' accounts	957	(957)			
Net interfund transfers	(644)	644			
Net increase (decrease) in Net Position	1,621	9,813		11,434	(5,636)
Net Position Restricted for Pensions					
Beginning of year	25,082	115,635		140,717	146,353
End of year	$ 26,703	$ 125,448	$ -	$ 152,151	$ 140,717

South Carolina Retirement Systems
Schedule of Changes in Fiduciary Net Position

SCNG Pension Trust Fund
Year Ended June 30, 2017
With comparative totals for the year ended June 30, 2016
(Amounts expressed in thousands)

	2017 Total	2016 Total
Additions		
Contributions		
State appropriated contributions	$ 4,591	$ 4,591
Total contributions	4,591	4,591
Investment Income		
Net appreciation (depreciation)		
in fair value of investments	2,384	(220)
Interest income	395	295
Investment expense	(246)	(197)
Net Income (loss) from investing activities	2,533	(122)
From securities lending activities:		
Securities lending income		
Securities lending borrower rebates		1
Net income from securities lending activities		1
Total net investment income (loss)	2,533	(121)
Total additions	7,124	4,470
Deductions		
Regular retirement benefits	4,425	4,310
Administrative expenses	13	12
Total deductions	4,438	4,322
Net increase in Net Position	2,686	148
Net Position Restricted for Pensions		
Beginning of year	23,350	23,202
End of year	$ 26,036	$ 23,350

South Carolina Retirement Systems
Schedule of Administrative Expenses

Year Ended June 30, 2017

(Amounts expressed in thousands)

	SCRS	PORS	GARS	JSRS	SCNG	TOTAL
Personal Services						
Salaries and Wages	$ 7,435	$ 1,190	$ 10	$ 44	$ 7	$ 8,686
Employee Benefits	2,569	411	3	15	3	3,001
Contractual Services						
Information Technology	836	133	1	5	1	976
Medical & Health Services	375	60	1	2	1	439
Financial Audit	161	26		1		188
Actuarial Services	415	66	1	2	1	485
Other Professional Services	332	53		2		387
Legal Services	31	5				36
Operating Expenses						
Facilities Management	232	38		1		271
Telephone	132	21		1		154
Insurance	187	30		1		218
Postage	102	16		1		119
Supplies	78	12		1		91
Other Miscellaneous Expenses	348	56	1	2		407
Total Administrative Expenses	$ 13,233	$ 2,117	$ 17	$ 78	$ 13	$ 15,458

South Carolina Retirement Systems
Schedule of Professional and Consultant Fees[1,2]

Year Ended June 30, 2017

(Amounts expressed in thousands)

Professional / Consultant Type	Nature of Service Provided	Amounts Paid
Information Technology (IT)		
Data Network Solutions	IT Maintenance and Support	$ 19
eGroup Holding Company	IT Security Maintenance and Support	36
OPTIV Security	IT Security Consulting Services	49
Ram Technologies	IT and Phone Services	12
SAP Public Services	IT Maintenance and Support	10
SunGard Availability Services	IT Disaster Recovery	159
Tapfin	Application Development Resources	168
Legal		
Ice Miller	IRC Consulting Services	14
Sowell Gray Robinson	Legal Services	16
Management		
CEM Benchmarking	Benchmarking Service	45
CliftonLarsonAllen	Audit	188
Gabriel Roeder Smith & Company	Actuary Services	360
Segal Consulting	Actuarial Audit	125
Summit Strategies	Optional Retirement Plan Consultants	115
Team IA	Imaging Maintenance/Auditing	157
USC Department of Internal Medicine	Disability Review	130
Vocational Rehabilitation	Disability Review	309
		$ 1,912

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

[2] Vendor payments less than $10,000 are excluded from this schedule.

South Carolina Retirement Systems
Schedule of Investment Fees and Expenses

Year Ended June 30, 2017

(Amounts expressed in thousands)

	SCRS	PORS	GARS	JSRS	SCNG	TOTALS[1]
Short Term	$ 2,093	$ 345	$ 2	$ 12	$ 2	$ 2,454
Fixed Income:						
Core Fixed Income	3,063	504	3	18	3	3,591
Mixed Credit	8,421	1,388	10	49	8	9,876
Emerging Market Debt	5,802	956	7	34	5	6,804
Global Public Equity	21,530	3,545	25	126	20	25,246
Equity Options Strategy	3,115	512	4	18	3	3,652
Infrastructure	1,270	209	2	7	1	1,489
Global Tactical Asset Allocation	8,612	1,422	10	50	8	10,102
Alternatives:						
Hedge Funds	57,754	9,560	66	334	53	67,767
Private Debt	35,983	5,956	42	208	33	42,222
Private Equity	65,414	10,828	76	379	60	76,757
Real Estate	35,406	5,858	41	205	32	41,542
Strategic Partnerships[2]	8,768	1,451	10	51	8	10,288
Beta Overlay	950	156	1	6	1	1,114
Total Investment Manager Fees	258,181	42,690	299	1,497	237	302,904
Bank Fees and Investment Expenses[3]	9,992	1,616	13	58	9	11,688
Total Investment Expenses	268,173	44,306	312	1,555	246	314,592
Securities Lending Expenses:						
Borrower Rebates	$ (172)	$ (28)	$ -	$ (1)	$ -	(201)
Total Securities Lending Expenses	$ (172)	$ (28)	$ -	$ (1)	$ -	$ (201)

[1] All investment manager fees, whether directly invoiced ($48,313) or deducted from the fund on a net basis ($254,591) 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.

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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 Henry D. McMaster, 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, 2017, 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 13, 2017.

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.

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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 13, 2017