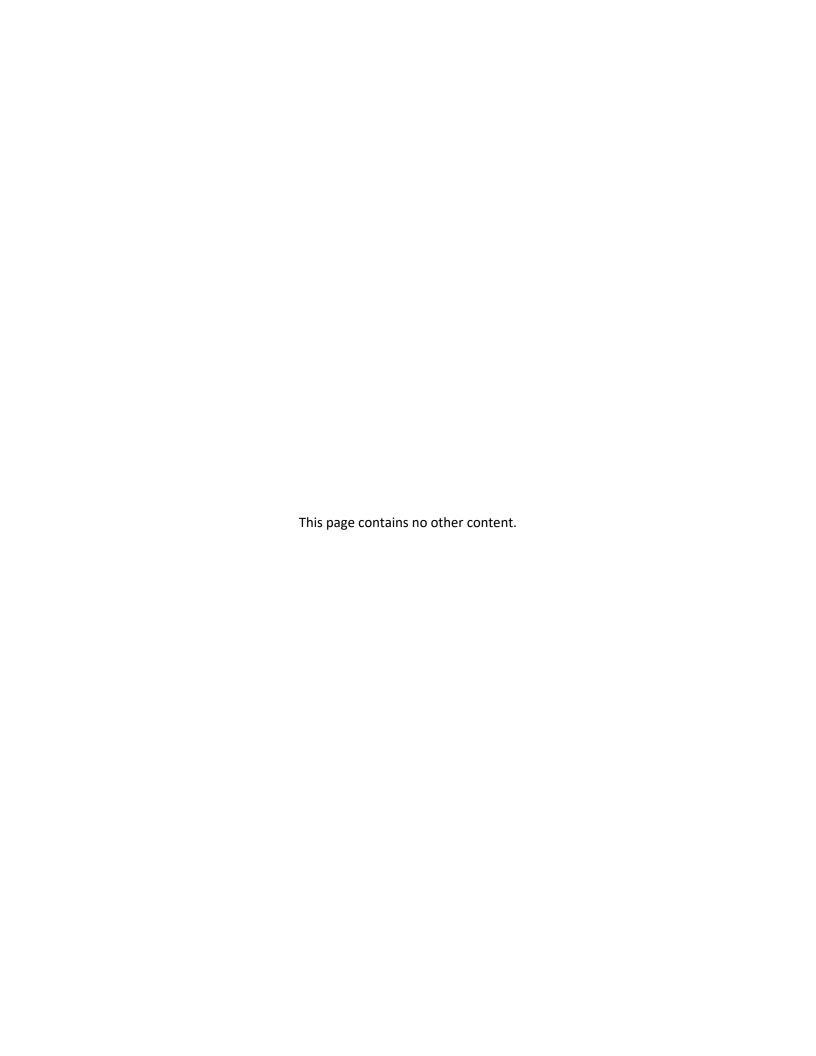
Financial Statements South Carolina Retirement Systems Year Ended June 30, 2020

Administered by the South Carolina Public Employee Benefit Authority Columbia, South Carolina





October 15, 2020

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, 2020, was issued by CliftonLarsonAllen, LLP, Certified Public Accountants, under contract with the South Carolina Office of the State Auditor.

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

Respectfully submitted,

George L. Kennedy, III, CPA

George & Kennedy, III

State Auditor

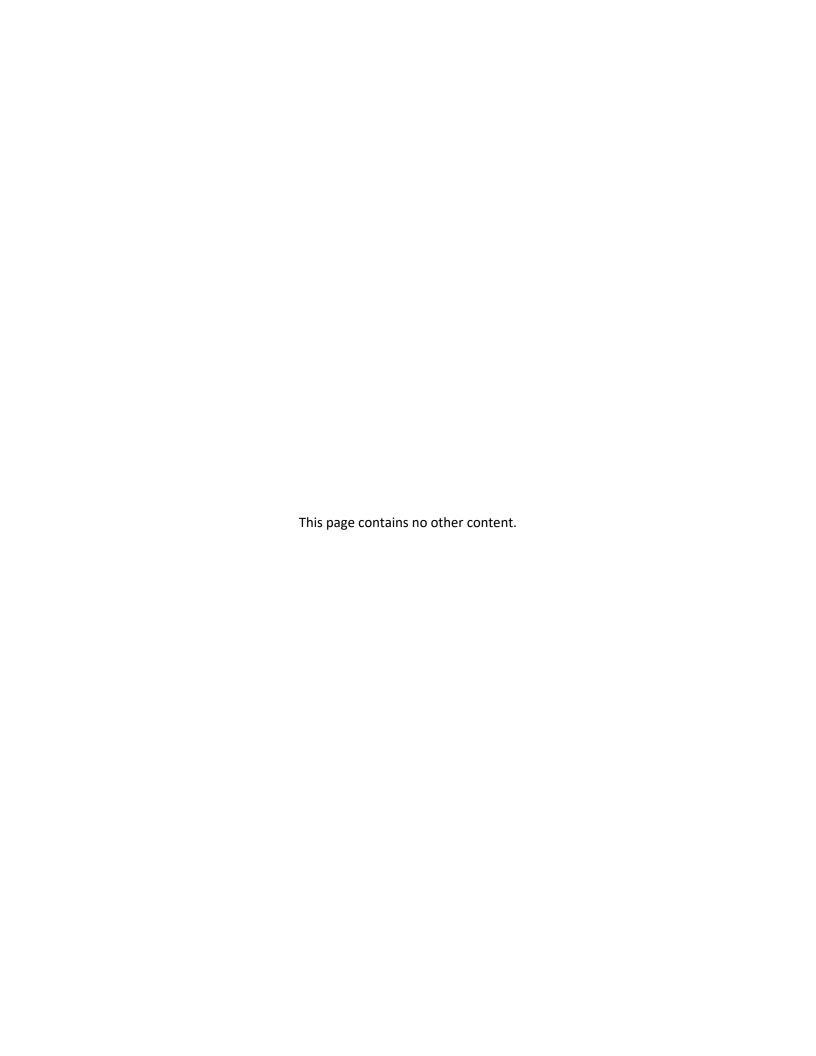
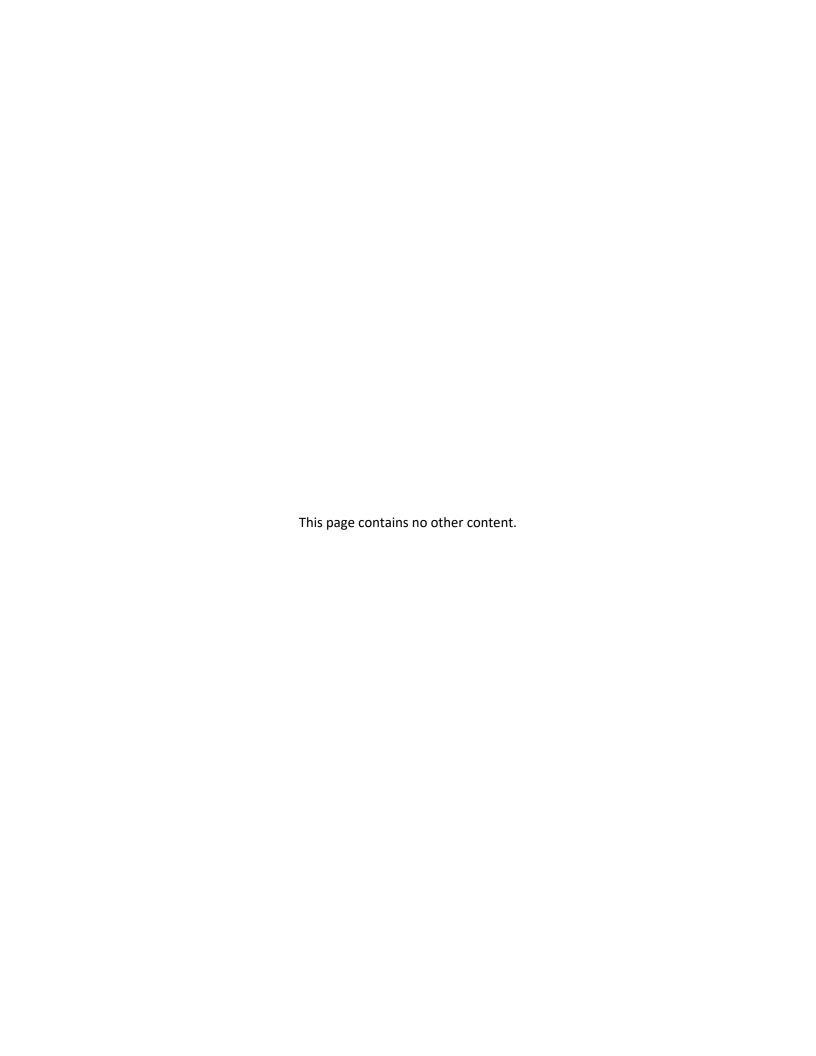


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INDEPENDENT AUDITORS' REPORT

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, 2020, 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.



The Honorable Henry D. McMaster, Governor Mr. George L. Kennedy, CPA, State Auditor, and Board of Directors
South Carolina Public Employee Benefit Authority

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, 2020, 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.

Other Matters

Prior-Year Comparative Information

We have previously audited the Systems' 2019 financial statements, and we expressed an unmodified audit opinion on those audited financial statements in our report dated October 15, 2019. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2019, is consistent, in all material respects, with the audited financial statements from which it has been derived.

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' and nonemployer's 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.

The Honorable Henry D. McMaster, Governor Mr. George L. Kennedy, CPA, State Auditor, and Board of Directors
South Carolina Public Employee Benefit Authority

We also previously audited, in accordance with auditing standards generally accepted in the United States of America, the financial statements of the Systems as of and for the year ended June 30, 2019 (not presented herein), and have issued our report thereon dated October 15, 2019, which contained an unmodified opinion on the financial statements. The summarized comparative information included in the other supplementary information, as listed in the table of contents, for the year ended June 30, 2019 is presented for purposes of additional analysis and is not a required part of the financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the 2019 financial statements. The 2019 summarized comparative information has been subjected to the auditing procedures applied in the audit of the 2019 financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare those financial statements or to those financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the 2019 summarized comparative information is fairly stated in all material respects in relation to the financial statements as a whole for the year ended June 30, 2019.

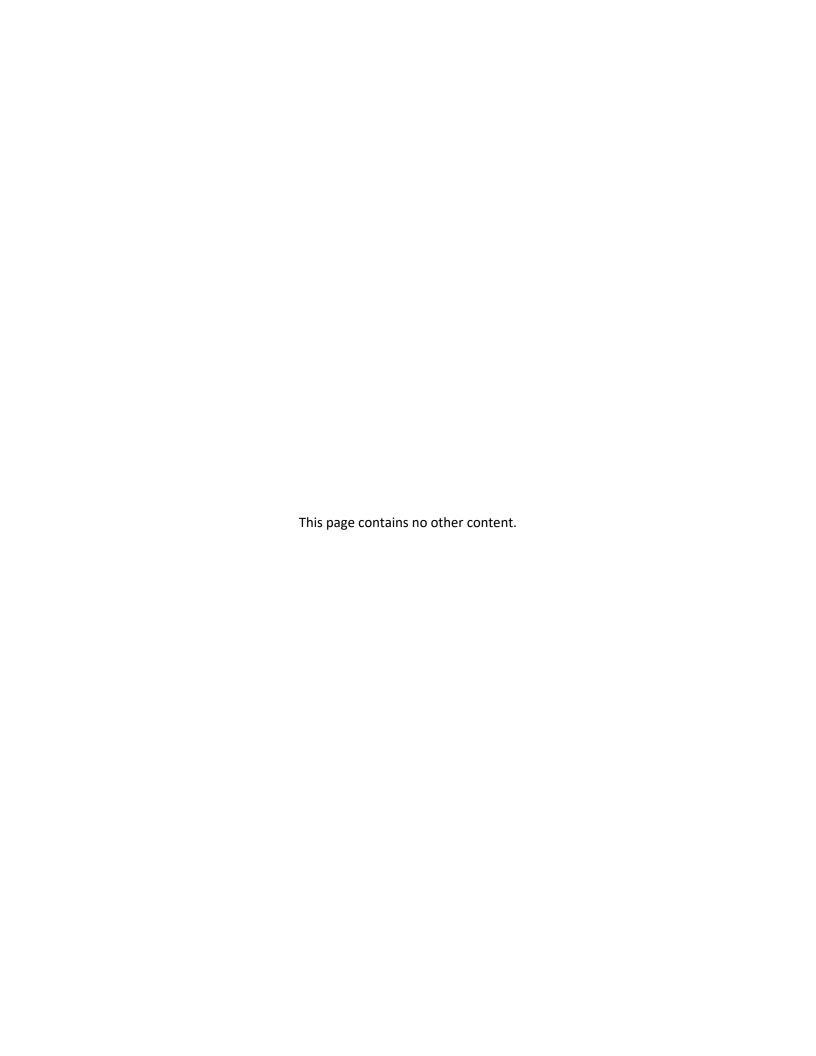
Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated October 15, 2020 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

Clifton Larson Allen LLP

Baltimore, Maryland October 15, 2020



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, 2020, 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.

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:

- The South Carolina Retirement System (SCRS) A member contributory multiple-employer plan covering teachers, as well as state and municipal employees;
- The 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 of the State of South Carolina (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 of the State of South Carolina (JSRS) A member contributory plan covering Judges, Solicitors, Public Defenders and Administrative Law Judges; and
- The 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. The South Carolina Public Employee Benefit Authority (PEBA) was created July 1, 2012 and operates a Retirement Division to administer the various retirement systems and retirement programs. PEBA has an 11-member Board of Directors, appointed by the Governor and General Assembly leadership, which serves as custodian, co-trustee and co-fiduciary of the Systems and the assets of the retirement trust funds. The Retirement System Investment Commission (Commission as the governing body, RSIC as the agency), created by the General Assembly in 2005, has exclusive authority to invest and manage the retirement trust funds' assets. The Commission, an eight-member board, serves as co-trustee and co-fiduciary for the assets of the retirement trust funds. By law, the State Fiscal Accountability Authority (SFAA), which consists of five elected officials, also reviews certain PEBA Board decisions regarding the actuary of the Systems.

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, 2020, with combined total comparative information for the fiscal year ended June 30, 2019:

- 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 members, employers, nonemployer and state appropriated contributions 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' and nonemployer's contributions, and the money-weighted rate of return on investments. These schedules are intended to provide additional information useful in evaluating the condition of the Systems.

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

Financial Highlights

- Total fiduciary net position for all five defined benefit plans of the Systems combined, decreased by \$1.033 billion, which was over three percent from the prior fiscal year ended June 30, 2019. The net position of the plans is impacted by contributions paid into the plans, investment performance, and benefits paid out of the system. The plans are in a net cash outflow position with benefit payments exceeding contributions received; therefore, investment performance must first make up this gap before fiduciary net position can grow. Although increased contributions generated net cash outflow improvements, investment underperformance contributed to the plan's net position decline from \$32.3 billion to \$31.3 billion.
- For the fiscal year ended June 30, 2020, investment performance, net of fees, on a time-weighted basis reported by the custodial bank, the Bank of New York Mellon (BNYM), was negative 1.58 percent. The net rate of 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 expenses. This fiscal year's negative performance was much lower than the prior year's positive return of 5.84 percent; and additionally, since the actuarial assumed rate of return is 7.25 percent, the plan experienced actuarial losses in both fiscal years. 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 reasonably consistent with fair 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.

- Since March 2020, COVID-19 has continued to have an impact not only on the defined benefit pension plans, but also on PEBA's day to day operations. The pandemic has severely affected the global economy, with the volatility in global financial markets negatively impacting investment performance. Locally, many participating employers furloughed or reduced their workforce as a result of the impacts of COVID-19. The Systems' actuaries will take those workforce changes into account and will continue to monitor the Systems' payroll data to evaluate whether those workforce changes will result in a longerterm effect on covered wages and corresponding contributions to the plans. In light of potential budget volatility as a result of the pandemic, the South Carolina General Assembly adopted a continuing resolution to largely maintain the state budget for the 2021 fiscal year at the same rate as the 2020 fiscal year. Because the General Assembly did not adopt any budget increases for FY 2021, the General Assembly also postponed the one percent increase in the SCRS and PORS employer contribution rates that was scheduled to go into effect beginning July 1, 2020. In other legislative action, the earnings limit applicable to certain retired members who returned to covered employment was temporarily lifted for any member who returned to covered employment specifically to participate in the state's public health preparedness and response to the COVID-19 virus. As a temporary measure with limited scope, the impact of this relief on the plans is expected to be minimal. At the administrative level, PEBA's automated systems were modified to comply with provisions of the CARES Act that granted tax relief for certain pension distributions. From an operational perspective, PEBA's Visitor Center remains closed and in-person consultations and training sessions have been postponed or canceled; however, we have utilized technology to increase phone and video consultations, as well as implemented online presentations and videos, to ensure that we continue to provide service to our members and employers. We have also strongly encouraged employers and members to utilize our online secure portals for prompt and efficient service. The vast majority of PEBA's workforce has converted to a remote work environment and the number of staff physically working in the office has been significantly reduced. We are very fortunate in that we have continued to successfully provide critical business operations without interruption.
- Liability calculations for financial reporting purposes for each of the five defined benefit plans were performed and certified by Gabriel Roeder Smith & Company (GRS) in the GASB No. 67 Accounting Valuation Report as of June 30, 2020. The calculations presented in the accounting valuation report are not applicable for other purposes, such as determining the plans' funding requirements. The total pension liability, net pension liability, and sensitivity information for each plan are based on the actuarial valuations performed as of July 1, 2019. The total pension liability for each plan was rolled-forward from the valuation date to the plans' fiscal year ending June 30, 2020, using generally accepted actuarial principles. The Notes and Required Supplementary Information (RSI) sections of the Financial Statements include disclosures required by GASB No. 67.
- Cash and cash equivalents, receivables, and prepaid expenses reported on the condensed Statement of
 Fiduciary Net Position increased over 21 percent from fiscal year 2019. Although there was a sizeable
 decrease from \$991 million to \$107 million in the dollar amount of cash equivalents at June 30, 2020,
 the overall increase in this line item was primarily due to higher cash balances maintained by investment
 managers and investments in sweep vehicles.
- Other liabilities reported on the condensed Statement of Fiduciary Net Position increased substantially
 compared to the prior year as a result of accounts payable-unsettled investment purchases increasing
 due to timing in trading activity from \$1.281 million the prior year to \$2.535 billion as of June 30, 2020.
- The Changes in Fiduciary Net Positions reports increases in both the dollar amounts of employee and employer contributions. The rise is primarily attributable to increased employer contribution rates as well as some limited payroll growth. For fiscal year 2020, employee rates remained capped at a rate of 9.00 percent for SCRS and 9.75 percent for PORS: however, employer contribution rates for both SCRS

and PORS increased by 1 percent of pay to 15.56 percent and 18.24 percent, respectively. These employer rates are inclusive of contributions for the death benefit plan, which are only applicable to employers participating in that benefit. On May 18, 2020, Governor Henry McMaster signed H.3411, a continuing resolution, into law which includes a provision that suspends the statutory employer contribution rate increase for SCRS and PORS for Fiscal Year 2021; therefore, the employer contribution rates will remain 15.56 percent and 18.24 percent for SCRS and PORS, respectively. The employee rates will not change. In accordance with the legislative funding schedule, employer contribution rates will continue to increase by a minimum of 1 percentage point each year in accordance with state statute, and may be increased 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.

- In an effort to help offset a portion of the increased contribution requirements for employers, the General Assembly again provided nonemployer contributions to PEBA. Based on the criteria provided in the South Carolina 2019-2020 Appropriations Act, Part IB, Section 117.131, PEBA issued credit invoices to certain SCRS and PORS employers for fiscal year 2020 who then applied the credit invoices towards contributions otherwise due to the Systems. The amount of credit invoices issued in fiscal year 2020 totaled \$88.7 million and \$12.5 million for SCRS and PORS respectively. The nonemployer contributions are the same dollar amount as the prior year. The South Carolina 2019-2020 Appropriations Act, Part IA, Section 108 also provided \$2.9 million in nonemployer contributions to JSRS.
- Annuity benefits for the five defined benefit plans, taken as a whole, increased 2.8 percent from the
 prior fiscal year. Among other factors, the increase resulted from the annual benefit adjustment equal to
 the lesser of 1 percent or \$500 granted to eligible SCRS and PORS annuity recipients effective July 1,
 2019, and a slight increase in the number of annuitants. The increase also reflects the 35.8 percent
 increase in the monthly retirement benefits for retirees in JSRS beginning July 1, 2019.
- The Systems' investment portfolio participates in a securities lending program, managed by BNYM, 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. Securities lending revenue, net of borrower rebates, was \$2.75 million, a decrease from \$3.05 million in the prior year. As reported by BNYM, at June 30, 2020, the fair value of securities on loan was \$63.37 million, the fair value of the invested cash collateral was \$20.45 million, and the securities lending obligations were \$65.02 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 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 Retirement Systems 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 as mentioned above, affords flexibility to quickly react to changes in market conditions. The policy allocation, including target weights, ranges and benchmarks for each asset class, was adopted by the Commission on April 12, 2018 for the fiscal year beginning July 1, 2018 and continued into fiscal year 2020 with no amendments.

- In accordance with SC State Statute, the Commission has exclusive authority to select the custodial bank, with PEBA as a third-party beneficiary of the contract with full rights to information. The Commission contracts 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 from the trust fund. The securities lending revenue account of the pension trust fund is the initial source from which such costs are paid to the custodial agent.
- All investment manager fees, whether directly invoiced or deducted from the fund 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 takes responsibility for validating non-invoiced fees throughout the year and reports information to PEBA on an annual basis so that amounts can be reclassified and reported in the Systems' financial statements. Investment manager fees reported include management fees, performance fees and carried interest (accrued during the fiscal year), and other expenses. 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 2020 were \$217.6 million, which includes both directly invoiced amounts and amounts deducted on a net of fee basis, but excludes bank fees and other miscellaneous investment expenses. Investment manager fees for the prior fiscal year 2019 totaled \$310.2 million, so this change equates to a fee reduction of more than 40 percent. The decrease is largely attributed to lower performance fees as a result of generally lower market returns for the fiscal year in the asset classes that incur performance fees; however, the RSIC successfully renegotiated some investment manager contracts to include lower fee schedules so this also helped reduce overall fees.
- PEBA is the governing body responsible for administration of both the state's retirement plans and
 employee insurance programs. The proportion of administrative costs allocated for retirement
 operations are funded from the retirement trust funds. Administrative expenses for fiscal year 2020
 decreased 8.3 percent from the prior year. This decrease resulted largely from costs associated with
 building and facilities maintenance and lower management professional services expenses.
- Gabriel, Roeder, Smith & Co. (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 that an experience study be conducted at least once in each five-year period. The most recent valuation reports were issued in December 2019 reflecting the valuation of the Systems as of July 1, 2019. In late February 2020, GRS also completed an actuarial experience study on the Systems for the period ending June 30, 2019. The study was received by the PEBA Board as information at its meeting on March 4, 2020, and the Board is expected to take action on the recommendations made therein at its scheduled meeting in December 2020. This action will include adoption of a proposed assumed annual rate of return to submit to the General Assembly for consideration prior to January 1, 2021, as required by Section 9-16-335 of the Code of Laws. The experience study recommends minor adjustments to the actuarial assumptions including a decrease in payroll growth from 3.00 percent to 2.70 percent, an increase in the probabilities of retirement and turnover, an updated mortality assumption and a decrease in the probabilities of disability incidence. The experience study also recommends a decrease in the nominal investment return assumption from 7.25 percent to 7 percent for 2021 and beyond. The assumed rate of return was reduced from 7.50 to 7.25 percent effective July 1, 2017 as part of the Retirement System Funding and Administration Act of 2017. By statute, the 7.25 percent assumed rate of return is scheduled to expire on July 1, 2021, and every four

- years thereafter; prior to the expiration of the assumed rate of return, the PEBA Board, in consultation with the Commission, must submit to the General Assembly for consideration a proposed assumed annual rate of return based on recommendations of the Systems' actuary. Once formally adopted, the recommended assumption and method changes will be incorporated into future valuations.
- As a cost-sharing multiple-employer defined benefit pension plan, PEBA works closely with our
 consulting actuary and external audit firm to ensure employers are provided with pension information
 needed to prepare their GAAP based financial statements in compliance with Governmental Accounting
 Standards Board (GASB), specifically Statements No. 68, 71 and 82. PEBA's public website includes a
 dedicated GASB section where information is 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.
- 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 any member who returns 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. As of June 30, 2019, the actuarial valuations for SCRS and PORS collectively reported that over 16,000 retired members were working for a covered employer while receiving monthly retirement benefits, thereby making up almost 6 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 may return to covered employment after retirement. However, members who retired after January 1, 2013 and who had not reached age 62 (SCRS) or age 57 (PORS) at retirement, are subject to an earnings limit of \$10,000 each calendar year on wages earned from covered employment. Additionally, all retired members must have been retired a minimum of 30 calendar days before returning to work for a participating employer.
- Qualified Excess Benefit Arrangement (QEBA) trust funds are maintained for each of the plans administered by the Retirement Division of PEBA (excluding SCNG). 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.
- 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 SC 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 monthly service retirement benefits, disability benefits and death benefits to eligible members and/or their surviving beneficiaries.

The Systems' principal sources of revenue are employee contributions, employer contributions and investment earnings. In addition, for fiscal year 2020, the General Assembly provided funds to PEBA through legislative appropriations that are classified as non-employer contributions by the Systems. A portion of the appropriated funds were made available for PEBA to distribute to participating employers in the form of a credit to be used towards contributions due to SCRS and PORS and a portion of the funds were appropriated as additional contributions to JSRS. Required annual contributions for the SCNG are also 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 that employers may elect to participate in which provides benefits for both active and retired members and PORS also includes an accidental death plan that provides benefits for members of PORS.

PEBA sponsors the State ORP which is a defined contribution plan administered by four different third-party service providers. State ORP is an alternative plan available to newly hired employees of state agencies, higher education institutions, 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 Program, which offers 401(k) and 457 plans, and is administered by a third-party record keeper. Both State ORP and Deferred Compensation assets are not considered part of the Retirement Systems for financial statement purposes. 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)

			Increase /	% Increase /
Assets	2020	2019	(Decrease)	(Decrease)
Cash and cash equivalents, receivables,				
and prepaid expenses	\$ 5,249,820	\$ 4,323,924	\$ 925,896	21.41%
Investments, at fair value	28,875,414	29,547,472	(672,058)	(2.27%)
Securities lending cash collateral invested	20,452	41,327	(20,875)	(50.51%)
Capital assets, net of accumulated depreciation	2,156	2,232	(76)	(3.41%)
Total assets	34,147,842	33,914,955	232,887	0.69%
Liabilities				
Deferred retirement benefits		70	(70)	(100.00%)
Obligations under securities lending	20,452	41,327	(20,875)	(50.51%)
Other liabilities	2,874,001	1,587,595	1,286,406	81.03%
Total liabilities	2,894,453	1,628,992	1,265,461	77.68%
Net Position Restricted for Pensions	\$ 31,253,389	\$ 32,285,963	\$ (1,032,574)	(3.20%)

Changes in Fiduciary Net Position

Years Ended June 30 (Amounts expressed in thousands)

			l I	ncrease /	% Increase /
Additions	2020	2019	1)	Decrease)	(Decrease)
Employee contributions	\$ 1,079,562	\$ 1,028,413	\$	51,149	4.97%
Employer contributions	1,936,319	1,705,663		230,656	13.52%
Nonemployer contributions	104,076	101,176		2,900	2.87%
State appropriated contributions	5,290	5,290		-	0.00%
Net investment income (loss)	(523,842)	1,776,400		(2,300,242)	(129.49%)
Other income	 1,862	 1,577		285	18.07%
Total additions	2,603,267	4,618,519		(2,015,252)	(43.63%)
Deductions					
Annuity benefits	3,451,616	3,356,747		94,869	2.83%
Refunds	140,534	139,692		842	0.60%
Death benefits	25,324	23,717		1,607	6.78%
Administrative and other expenses	 18,367	 19,504		(1,137)	(5.83%)
Total deductions	3,635,841	3,539,660		96,181	2.72%
Net increase (decrease) in Net Position	(1,032,574)	1,078,859		(2,111,433)	(195.71%)
Net Position Restricted for Pensions					
Beginning of year	 32,285,963	 31,207,104		1,078,859	3.46%
End of year	\$ 31,253,389	\$ 32,285,963	\$	(1,032,574)	(3.20%)

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

On a combined basis, the defined benefit plans' fiduciary net position was \$31.3 billion at June 30, 2020. This represents a decrease of more than three percent from the previous fiscal year-end. As explained in the financial highlights section, the fiduciary net position went down primarily due to poor investment performance. Although increased contributions generated improvements in net cash outflows, investment underperformance contributed to the plan's net position declining from \$32.3 billion in the prior fiscal year.

During fiscal year 2020, the total dollar amount of contributions added to the plans increased because of higher employer contribution rates and additional non-employer funding provided. Amounts paid out of the plans also increased marginally compared with the previous year because of an increase in regular monthly annuity benefits paid. There was a minimal increase in the number of annuitants but more predominantly, the increase was the result of the annual benefit adjustment equal to the lesser of 1 percent or \$500 that was granted to eligible SCRS and PORS annuity recipients effective July 1, 2019.

Net of fee performance return, on a time-weighted basis was negative 1.58 percent for the fiscal year. Relative to the policy benchmark, which returned 0.13 percent, the Plan underperformed by 171 basis points. Additionally, the Plan fell short of the actuarial assumed rate of return of 7.25 percent by 883 basis points.

The Core Fixed Income and the TIPS asset classes were the highest performing asset classes on an absolute basis returning 8.49 percent and 7.97 percent. They both trailed their benchmarks by 25 basis points and 31 basis points respectively. Private Real Estate was the next highest performer returning 3.43 percent versus a benchmark return of 2.33 percent while Public Real Estate outperformed its benchmark by 516 basis points with a return of negative 7.88 percent. The Global Public Equity asset class, the largest allocation in the Plan at 43.5 percent, returned 0.68 percent slightly trailing its benchmark by 16 basis points. The Portable Alpha Hedge Funds excess return over three-month LIBOR was a negative 0.98 percent and underperformed its benchmark return of 2.50 percent. Both Public Infrastructure and Private Infrastructure were negative performers at negative 0.97 percent and negative 1.82 percent but outperformed their benchmarks by 502 basis points and 417 basis points respectively. The High Yield/Bank Loans asset class returned negative 1.07 percent versus its benchmark return of negative 1.00 percent. The Equity Options asset class outperformed its benchmark by 759 basis points with a return of negative 1.63 percent. The Emerging Markets Debt and GTAAN asset classes returned negative 4.31 percent versus a negative 1.10 percent benchmark return and negative 5.49 percent versus a 0.89 percent benchmark return, respectively. Private Debt exceeded its benchmark by 202 basis points with a return of negative 5.64 percent. The Private Equity asset class returned negative 6.75 percent beating its benchmark by 43 basis points. The Other Opportunistic asset class was the lowest performing asset class both on an absolute and relative basis returning negative 22.45 percent versus a benchmark return of 0.89 percent. Asset class returns include the impact of synthetic returns generated from the overlay portfolio.

Actuarial Valuations and Funding Progress

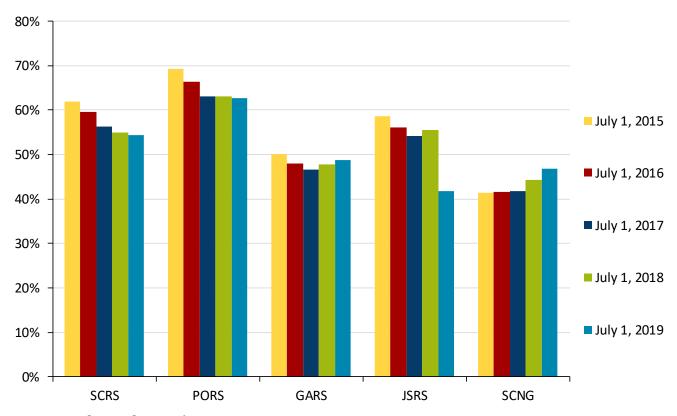
Actuarial valuations are performed annually by an external consulting actuary for each of the five defined benefit plans to ensure applicable contribution rates satisfy the funding parameters specified in Title 9 of the South Carolina Code of Laws. Under these provisions, SCRS and PORS contribution requirements 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 the number of years scheduled in state statute. Additionally, the Board is prohibited from decreasing the SCRS and PORS contribution rates until the funded ratio is at least 85 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 8 years to 20 years. 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 improve significantly.

For purposes of developing the actuarially determined contribution rate, the most recently completed valuations prepared as of July 1, 2019, recognized investment performance using the smoothing method, which recognizes each year's investment gain or loss, determined on a fair 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 accounting valuation report determines the plan fiduciary net position for the purpose of providing accounting information under GASB Statement No. 67, which uses a fair value basis. Since the valuation report prepared for accounting purposes uses the fair value of assets rather than the actuarial value of assets, the ratio of plan fiduciary net position to the total pension liability can result in significant short-term volatility.

Actuarial valuations are prepared for funding purposes and 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 multiyear 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, 2019, showed a slight decrease in funded status for SCRS and PORS while the funded ratios for GARS and SCNG showed slight improvements. With regard to JSRS, in an effort to attract and retain judges in the state, the General Assembly approved a 35.8 percent salary increase for judges and certain other JSRS members effective July 1, 2019. Although this salary increase and corresponding benefit adjustment for retired members and beneficiaries resulted in a decrease in the funded status for JSRS to 41.8 percent, the General Assembly made a commitment to sufficiently fund the plan and these benefit improvements by increasing the employer contribution rate from 52.49 percent to 62.94 percent, effective July 1, 2019, and by appropriating additional funding of \$2.9 million per year as nonemployer contributions. The changes in funded ratios do not affect the availability of funds or resources for future use, and considering scheduled contributions, 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 63.

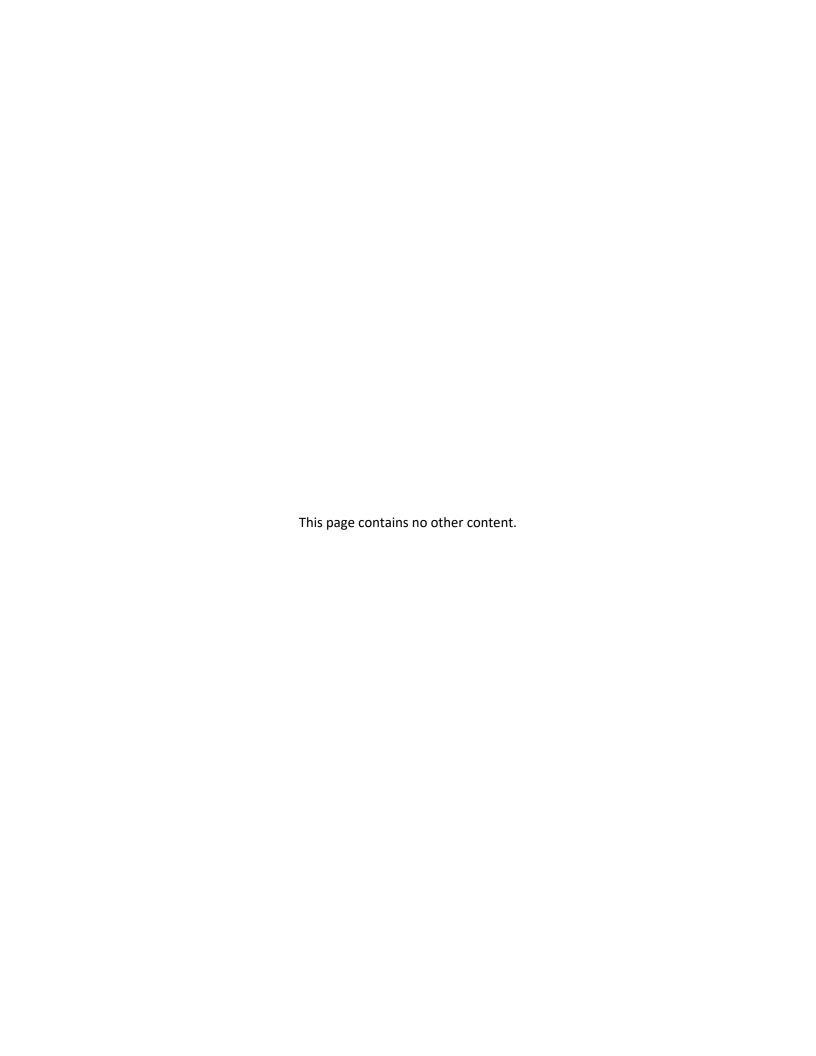
Actuarial Funded Ratios

(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, 2020

With summarized comparative totals for June 30, 2019 (Amounts expressed in thousands)

	SCRS	PORS	GARS JSRS		JSRS SCNG		2019 TOTAL
Assets							
Cash and cash equivalents	\$ 2,933,744	\$ 536,560	\$ 6,566	\$ 23,387	\$ 7,495	\$ 3,507,752	\$ 2,518,227
Receivables							
Due from other systems	48	96				144	119
Employee and employer contributions	259,921	29,406	15	1,487		290,829	337,077
Accrued investment income	34,588	6,217	42	210	36	41,093	49,015
Unsettled investment sales	1,185,716	213,103	1,425	7,182	1,207	1,408,633	1,411,101
Other investment receivables	486	87	1	3	1	578	4,510
Total receivables	1,480,759	248,909	1,483	8,882	1,244	1,741,277	1,801,822
Investments, at fair value							
Short-term securities	272,550	48,984	328	1,651	277	323,790	402,848
Fixed Income	3,207,714	576,508	3,856	19,429	3,265	3,810,772	4,619,478
Global Public Equity	11,678,233	2,098,875	14,039	70,734	11,888	13,873,769	11,641,619
Opportunistic	191,951	34,499	231	1,163	195	228,039	2,725,271
Alternatives	8,955,407	1,609,513	10,766	54,242	9,116	10,639,044	10,158,256
Total investments	24,305,855	4,368,379	29,220	147,219	24,741	28,875,414	29,547,472
Securities lending cash collateral invested	17,216	3,094	21	104	17	20,452	41,327
Prepaid expenses	674	111	1	4	1	791	3,875
Capital assets, net of accumulated depreciation	1,938	203	6	9		2,156	2,232
Total assets	28,740,186	5,157,256	37,297	179,605	33,498	34,147,842	33,914,955
Liabilities							
Due to other systems	96			48		144	119
Accounts payable - unsettled investment purchases	2,133,526	383,449	2,565	12,922	2,172	2,534,634	1,281,247
Investment fees payable	6,557	1,178	8	40	7	7,790	11,558
Obligations under securities lending	17,216	3,094	21	104	17	20,452	41,327
Deferred retirement benefits						-	70
Due to Employee Insurance Program	78,835	1,447				80,282	73,901
Benefits payable	5,144	421	2		2	5,569	5,287
Other liabilities	206,394	37,492	247	1,241	208	245,582	215,483
Total liabilities	2,447,768	427,081	2,843	14,355	2,406	2,894,453	1,628,992
Net Position Restricted for Pensions	\$ 26,292,418	\$ 4,730,175	\$ 34,454	\$ 165,250	\$ 31,092	\$ 31,253,389	\$ 32,285,963

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, 2020 With summarized comparative totals for the year ended June 30, 2019 (Amounts expressed in thousands)

	SCRS	PORS	GARS	JSRS	SCNG	TOTAL	2019 TOTAL
Additions							
Contributions							
Employee	\$ 922,539	\$ 151,835	\$ 222	\$ 4,966		\$ 1,079,562	\$ 1,028,413
Employer	1,647,757	263,135	6,329	19,098		1,936,319	1,705,663
Nonemployer	88,706	12,470		2,900		104,076	101,176
State appropriated					5,290	5,290	5,290
Total contributions	2,659,002	427,440	6,551	26,964	5,290	3,125,247	2,840,542
Investment income							
Net appreciation (depreciation)							
in fair value of investments	(762,375)	(136,295)	(908)	(4,575)	(769)	(904,922)	1,487,314
Interest and dividend income	513,357	91,666	695	3,375	613	609,706	617,578
Investment expense	(194,878)	(34,890)	(233)	(1,175)	(198)	(231,374)	(331,539)
Net income (loss) from investing activities	(443,896)	(79,519)	(446)	(2,375)	(354)	(526,590)	1,773,353
From securities lending activities:							
Securities lending income	2,167	386	3	13	2	2,571	3,342
Securities lending borrower rebates	149	27		1		177	(295)
Net income from securities lending activities	2,316	413	3	14	2	2,748	3,047
Total net investment income (loss)	(441,580)	(79,106)	(443)	(2,361)	(352)	(523,842)	1,776,400
Supplemental retirement benefits funded by the State	291	10				301	333
Transfers of contributions from other Systems		998		563		1,561	1,244
Total additions	2,217,713	349,342	6,108	25,166	4,938	2,603,267	4,618,519
Deductions							
Refunds of contributions to members	117,860	22,492		182		140,534	139,692
Transfers of contributions to other Systems	1,547	14				1,561	1,244
Regular retirement benefits	3,007,545	405,790	6,323	24,845	4,514	3,449,017	3,354,605
Deferred retirement benefits				456		456	
Supplemental retirement benefits	291	10				301	333
Death benefits	22,750	2,359	25	190		25,324	23,717
Accidental death benefits		1,842				1,842	1,809
Depreciation	146	18		1		165	171
Administrative expenses	14,072	2,451	18	85	15	16,641	18,089
Total deductions	3,164,211	434,976	6,366	25,759	4,529	3,635,841	3,539,660
Net increase (decrease) in Net Position	(946,498)	(85,634)	(258)	(593)	409	(1,032,574)	1,078,859
Net Position Restricted for Pensions							
Beginning of year	27,238,916	4,815,809	34,712	165,843	30,683	32,285,963	31,207,104
End of year	\$ 26,292,418	\$ 4,730,175	\$ 34,454	\$ 165,250	\$ 31,092	\$ 31,253,389	\$ 32,285,963

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 nonrepresentative 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 nonrepresentative 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 four years, on a staggered schedule 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.

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 employers and members follows (dollar amounts expressed in thousands). This information was reported in the most recent actuarial valuation as of July 1, 2019.

	State	School	Other	Total
SCRS	2.4	110	F70	720
Number of Employers ¹ Application Of Employers Companyation for Active Members	34	118	578 \$2,479,354	730 \$8,889,144
Annualized Prior Year Compensation for Active Members	\$2,634,376	\$3,775,414	\$2,479,354	\$8,889,144
Average Number of:				
Active Contributing Members	54,180	89,477	56,607	200,264
Retirees and beneficiaries currently receiving benefits				144,292
Terminated members entitled to but not yet receiving benefits ²				191,113
Total SCRS Membership				535,669
PORS				
Number of Employers ¹	22	3	287	312
Annualized Prior Year Compensation for Active Members	\$409,165		\$904,019	\$1,313,184
Average Number of:				
Active Contributing Members	9,077		18,320	27,397
Retirees and beneficiaries currently receiving benefits				19,094
Terminated members entitled to but not yet receiving benefits ²				17,944
Total PORS Membership				64,435
GARS				
Number of Employers	1			1
Annualized Prior Year Compensation for Active Members	\$1,570			\$1,570
Average Number of:				
Active Members	88			88
Retirees and beneficiaries currently receiving benefits	345			345
Terminated members entitled to but not yet receiving benefits	36			36
Total GARS Membership	469			469
JSRS				
Number of Employers	1			1
Annualized Prior Year Compensation for Active Members	\$30,346			\$30,346
Average Number of:				
Active Members (160 positions)	160			160
Retirees and beneficiaries currently receiving benefits ³	218			218
Terminated members entitled to but not yet receiving benefits	6			6
Total JSRS Membership	384			384
SCNG				
Number of Employers	1			1
Annualized Prior Year Compensation for Active Members ⁴	N/A			N/A
Average Number of:				
Active Members	12,100			12,100
Retirees and beneficiaries currently receiving benefits	4,923			4,923
Terminated members entitled to but not yet receiving benefits	1,823			1,823
Total SCNG Membership	18,846			18,846

¹ Although there are 86 SCRS, 25 PORS, 2 GARS and 4 JSRS state agencies that report separately, the State is considered the primary government and therefore, all state agencies are included as a single employer. Institutions of Higher Education and Quasi-State Agencies are counted as separate employers and included within the "State" category. This schedule includes only employers that submitted contributions for an active member during the fiscal year.

² Employee Class not determinable from data.

³ Count includes 21 retired-in-place members as of July 1, 2019

⁴ Annualized Prior Year Compensation 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 service providers. The Retirement Systems assumes no liability for State ORP benefits. Rather, the benefits are the liability of the four third-party service providers. 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 (9 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 (10.41 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, 2020 (Dollar amounts expressed in thousands)

Active Contributing Participants	33,295
Compensation of Participants	\$1,754,009
Employer Contributions Retained	
by SCRS	\$182,215
Death Benefit Contributions	
Retained by SCRS	\$2,628
Employee Contributions to	
Investment Providers	\$157,861
Employer Contributions to	
Investment Providers	\$87,700

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.

Comparative Totals

The basic financial statements include certain prioryear summarized comparative information in total but not at the level of detail required for a presentation in accordance with generally accepted accounting principles. Accordingly, such information should be read in conjunction with the Systems' financial statements for the year ended June 30, 2019, from which the summarized information was derived.

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, nonemployer 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, has exclusive authority for investing and managing all assets held in trust for the South Carolina Retirement Systems. The Commission serves as cotrustee and co-fiduciary for the assets of the 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. The Commission is an eight member board 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.

As mandated by Section 9-16-340 of the South Carolina Code of Laws, the Commission is given the authority for establishing and amending investment policies including asset allocation policies. The Commission has adopted a Statement of Investment Objectives and Policies (SIOP) which establishes investment and performance objectives, policies and guidelines, roles, responsibilities and delegation of authority for the investment and management of assets of the Systems. As mandated by Section 9-16-340 (B), the SIOP is reviewed by the Commission at least annually to determine its continued applicability at which time changes may be made to investment policy including asset allocation. 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 in order to change investment policy including asset allocation. There have been no significant investment policy changes during the reporting period.

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.

The asset allocation process is paramount to the development of the AIP. Based on the Capital Market Expectations provided by the Commission's Investment Consultant, the Commission comes to a consensus and establishes the Policy Portfolio expected to achieve a 20-year annualized rate of return that meets its investment objective with an expected volatility acceptable to the Commission. The Commission recognizes that the CIO and investment staff may add value by structuring the Actual Portfolio in a manner that deviates from the Policy Portfolio target weights or may also pursue a strategy that causes the composition of an asset class to differ from the policy benchmark. As a result, the Commission provides the CIO and the investment staff with the discretion to structure the portfolio within the asset class and sub-asset class ranges. The asset allocation is reviewed on an ongoing (typically weekly) basis by Staff and the CIO to ensure that the Portfolio is within its allocation ranges. When an asset class reaches its minimum or maximum allocation, Staff will initiate rebalancing transactions to keep allocations within the approved ranges. Otherwise, Staff must seek Commission approval to remain outside the range.

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, 2019.

Asset Class	Policy Allocation	Minimum	Maximum
Global Equity	51.0%	31.0%	59.0%
Global Public	35.0%	22.0%	50.0%
Equity ¹			
Private Equity ^{1,2}	9.0%	5.0%	13.0%
Equity Options	7.0%	5.0%	9.0%
Strategies			
Real Assets	12.0%	7.0%	17.0%
Real Estate	9.0%	5.0%	13.0%
Real Estate-REITs ¹	1.0%	0.0%	13.0%
Real Estate-	8.0%	0.0%	13.0%
Private ^{1,2}			
Infrastructure	3.0%	1.0%	5.0%
Infrastructure -	1.0%	0.0%	5.0%
Public ^{,1}			
Infrastructure -	2.0%	0.0%	5.0%
Private ^{1,2}			
Credit	15.0%	10.0%	20.0%
High Yield/Bank	4.0%	0.0%	8.0%
Loans ³			
Private Debt ^{1,2}	7.0%	3.0%	11.0%
Emerging Markets	4.0%	2.0%	6.0%
Debt			
Rate Sensitive	14.0%	4.0%	24.0%
Core Fixed	13.0%	6.0%	20.0%
Income ¹			
Cash and Short	1.0%	0.0%	7.0%
Duration (Net)			
Opportunistic	18.0%	2.00/	44.00/
	1.0%	0.0%	3.0%
	10.0%	0.0%	12 00/
	10.0%	0.0%	12.0%
GTAA Other Opportunistic Strategies Portable Alpha Hedge Funds ^{3,4}	7.0% 1.0% 10.0%	3.0% 0.0% 0.0%	11.0% 3.0% 12.0%

¹The target weights to Private Equity, Private Debt, Private Real Estate and Private Infrastructure will be equal to their actual weights as of prior month end. Private Equity and Public Equity will combine for 44% of the entire portfolio. Private Debt and High Yield/Bank Loans will combine for 11% of the entire portfolio. Private Real Estate and Real Estate (REITs) will combine for 9% of the entire portfolio. Private Infrastructure and Public Infrastructure will combine for 3% of the entire portfolio.

At June 30, 2020, the Systems held no investments (other than those issued or explicitly guaranteed by the U.S. government) in any one organization that represent five percent or more of the plans' fiduciary net position.

For the year ended June 30, 2020, the annual money weighted rate of return on plan investments was (1.57%) percent net of fees. The money

² RSIC staff and Consultant will notify the Commission if Private Markets assets exceed 25% of total assets.

³ RSIC staff and Consultant will notify the Commission if Hedge Fund assets exceed 20% of total assets.

⁴ Portable Alpha Hedge Funds are expressed as gross exposure but, as collateral supporting the Overlay program, net to zero when calculating total Plan market value. For benchmarking purposes, there is a 10% weight assigned to it in the Policy benchmark.

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, 2020, 150 legal agreements were in place with 85 investment managers.

The PEBA Board serves as custodian and co-trustee of the assets of the retirement trust funds. The Commission is also co-trustee of the assets of the retirement trust funds and has exclusive authority to select the custodial bank with PEBA as a third-party beneficiary of the contract, 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 reflect 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 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, private real estate and private infrastructure, 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, 2020. 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 process that consists of the collection, aggregation, and reasonableness testing, RSIC is able 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 contributions on the basis of the actuarial valuations. If the scheduled employee and employer contributions provided in statute or the rates last adopted by the board are insufficient to maintain a 27-year amortization schedule of the unfunded liabilities of the plans, the board shall increase the contribution rates for the employer as necessary to maintain the amortization period.

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 85 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 85 percent. 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 85 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 85 percent.

The Retirement System Funding and Administration Act established a ceiling on employee contribution rates at 9 percent and 9.75 percent for SCRS and PORS respectively. The employer contribution rates were scheduled to increase annually by 1 percent in accordance with state statute. The legislation's ultimate scheduled employer rate is 18.56 percent for SCRS and 21.24 percent for PORS. On May 18, 2020, Governor Henry McMaster signed H.3411, a continuing resolution, into law which includes a provision that suspends the statutory employer contribution rate increase for SCRS and PORS for Fiscal Year 2021; therefore, the employer contribution rates will remain 15.56 percent and 18.24 percent for SCRS and PORS, respectively. The employee rates will not change. The amortization period is scheduled to be reduced one year for each of the next 8 years to a 20-year amortization schedule.

Following are the employee and employer contribution rates applicable for fiscal year 2020 (amounts expressed in thousands):

System	Employee Rate	Employer Rate
SCRS	9%	15.56% ¹
PORS	9.75%	18.24% ²
GARS	11%	\$6,329³
JSRS	10%	62.94%³
SCNG	Non-contributory	\$5,290 ⁴

¹ Includes incidental death benefit contribution rate of 0.15%
² Includes incidental death benefit and accidental death benefit

In an effort to help offset a portion of the increased contribution requirements for employers, the General Assembly again provided nonemployer contributions to PEBA. Based on the criteria provided in the South Carolina 2019-2020 Appropriations Act, Part IB, Section 117.131, PEBA issued credit invoices to certain SCRS and PORS employers for fiscal year 2020 who then applied the credit invoices towards contributions otherwise due to the Systems. The amount of credit invoices issued in fiscal year 2020 totaled \$88.7 million and \$12.5 million for SCRS and PORS respectively. The South Carolina 2019-2020 Appropriations Act, Part IA, Section 108 also provided \$2.9 million in nonemployer contributions to JSRS.

Employer contributions for 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, for fiscal year 2020 an additional employer contribution surcharge of 6.25 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 benefits and is not a part of the actuarially established contribution rates for retirement funding purposes. Functioning as a collecting agent, SCRS and PORS collected and remitted these funds to the South Carolina Retiree Health Insurance Trust Fund. (amounts expressed in thousands):

	Retiree Insurance
	Surcharge
SCRS	\$441,967
State ORP	108,591
PORS	28,281
Total	\$578,839

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

The **Employer Fund** is credited with all employer and nonemployer 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

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

⁴The contributions for SCNG determined by the Systems' actuary were \$5,262 however, the contributions provided by state appropriations were \$5,290

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, 2020, were as follows (amounts expressed in thousands):

	SCRS	PORS	GARS	JSRS	SCNG	Total
Employee Fund	\$ 9,714,420	\$ 1,265,088	\$ 7,046	\$ 33,153	\$ -	\$ 11,019,707
Employer Fund	16,456,998	3,348,223	27,408	132,097	31,092	19,995,818
Death Benefit Fund	121,000	49,602				170,602
Accidental Death Fund		67,262				67,262
QEBA Fund						
Totals	\$ 26,292,418	\$ 4,730,175	\$ 34,454	\$ 165,250	\$ 31,092	\$ 31,253,389

III. Deposits and Investments

Deposit and Investment Risk Disclosures

The tables presented on pages 38-41 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

The Systems' deposits at June 30, 2020, were as follows (amounts expressed in thousands):

	Carrying Amount
SCRS	\$50,016
PORS	5,646
GARS	115
JSRS	263
SCNG	107
Total	\$56,147

Custodial credit risk for deposits is the risk that in the event of a bank failure, the Systems' deposits may not be recovered. Deposits are insured by the Federal Deposit Insurance Corporation (FDIC) up to \$250,000; however, amounts in excess of \$250,000 are uninsured and uncollateralized. The Commission has a formal Counterparty Policy which covers policies and procedures related to oversight and management of Counterparty Risk, including the custodial bank. To monitor custodial credit risk, the

credit quality of financial institutions at which deposits are held are periodically reviewed using internal analysis and rating agencies' reports.

As of June 30, 2020, actual bank balances totaled \$33.9 million. Amounts in excess of \$250,000 were uninsured and uncollateralized.

As of June 30, 2020, cash held by the custodian, in broker and strategic partnerships accounts as well as forward contracts and foreign currencies totaled \$446.4 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 as outlined by Section 9-1-1310(B) of the South Carolina Code of Laws.

The following table presents the fair value of investments:

Statement of Invested Assets

June 30, 2020

(Amounts expressed in thousands)

Investment Type	Fair Value	Investment Type	F	air Value
Short Term Investments		Fixed Income Allocation		
Short Term Investment Funds (U.S. Regulated) \$ 2,915,829	U.S. Government		
Repurchase Agreements	32,688	U.S. Government Treasuries ¹	\$	92,914
Commercial Paper	116,649	U.S. Government Agencies		267,169
U. S. Government Agency	30,020	Mortgage Backed		
U. S. Treasury Bills	229,850	Government National Mortgage Association		45,889
Municipals	1,190	Federal National Mortgage Association		14,420
Corporate Bonds	2,750	Federal Home Loan Mortgage Association (Multiclass))	3,608
Total Short Term Investments	\$ 3,328,976	Collateralized Mortgage Obligations		1,509
		Municipals		10,593
		Corporate		
Equity Allocation		Corporate Bonds		1,333,738
Global Public Equity ²		Convertible Corporate Bonds		326
Common Stocks	\$12,889,255	High Yield/Bank Loans		16,685
Real Estate Investment Trusts	660,750	Asset Backed Securities		248,261
Preferred	3,236	Private Placements		859,936
Options - Equity	36,268	Emerging Debt		915,584
Swaps - Equity	284,260	Options - Fixed Income		(15)
Total Global Public Equity	\$13,873,769	Futures - Fixed Income		437
	+ ==/=:=/:==	Swaps - Fixed Income		(282)
		Total Fixed Income	\$	3,810,772
Opportunistic				,
Global Tactical Asset Allocation	\$ 3,845			
Other Opportunistic	224,194			
Total Opportunistic	\$ 228,039			
Alternatives				
Hedge Funds	\$ 3,300,578			
Private Equity Limited Partnerships	2,261,270			
Private Debt	2,201,697			
Private Real Estate	2,529,751			
Private Infrastructure	345,748			
Total Alternative Investments	\$10,639,044			
Total	nvested Assets	\$31,880,600		
				
Invested Securities Len	iuilig Collateral	\$ 20,452		
Reconciliation of Statement of Invested Assets	(listed above)	to the Statement of Fiduciary Net Position		
Total Invested Assets			\$	31,880,600
Short Term Investments classified as Cash & C	Cash Equivalent	s on Statement of Fiduciary Net Position		
Short Term Investment Funds (U.S. Regulated)			(2,915,829)
Repurchase Agreements				(32,688)
Commercial Paper				(25,949)
U. S. Government Agency				(30,020)
U. S. Treasury Bills			_	(700)
Total Investments on Statement of Fiduciary	Net Position		\$	28,875,414

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

² RSIC's Public Equity benchmark as of 6/30/2020 is the weighted average of regional sub-asset class targets in the Policy Portfolio. The Benchmark is comprised of 56.9% MSCI U. S. IMI Index for U.S. Equity, 31.1% MSCI World ex-U.S. IMI Index for Developed Market Equity (non-U.S.), and 12.0% MSCI Emerging Markets IMI Index for Emerging Market Equity. As of June 30, 2020, RSIC had a NAV of \$6,716,106,699 in Global Equity managers that invest to the MSCI World. The MSCI World is comprised of 65.5% MSCI U.S. and 34.5% 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: Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs are observable.

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, 2020 (amounts in thousands):

Investments by Fair Value Level Act 6/30/2020					Fair Va	lue M	leasurements Us	ing	
Investments by Fair Value Level A 6/30/2020 (Level 1) (Level 2) (Level 3)				Quo					gnificant
Investments by Fair Value Level 3				Activ	e Markets for	Oth	ner Observable	Und	bservable
Short Term Investment Funds (U. S. Regulated)				Ide	ntical Assets		Inputs		Inputs
South Performance State South Performanc	Investments by Fair Value Level	At	6/30/2020		(Level 1)		(Level 2)	(1	Level 3)
Repurchase Agreements									
Comment Agency 116,649 229,850 30,020	Short Term Investment Funds (U. S. Regulated)	\$		\$	2,915,829	\$	-	\$	-
1. S. Covernment Agency 30,020 1,190 1	-		-						
1, 19a 1	•								
Municipals - 1 year or less			-		000.050		30,020		
Capacita Bonds					229,850		4 400		
Total Flower Tota	•								
Column		<u> </u>	_	<u> </u>	2 145 670	<u> </u>		Ċ	
Common Stocks	Total Short Term investments	<u>, , </u>	3,328,370	-	3,143,073	<u>, , </u>	103,237	-	
Common Stocks S	Equity Allocation								
Real Extate Investment Trusts 660,750 660,750 3.236 Total Global Public Equity 3.236 3.236 3.236 3.236 5 Total Global Public Equity \$1,932,649 \$1,929,413 \$3,236 \$ - Fixed Income Allocation U.S. Government Treasuries \$92,914 \$92,914 \$92,914 \$1,620	Global Public Equity								
Preferred 3,236 3,236 3,236 5 1,20 1,	Common Stocks	\$	1,268,663	\$	1,268,663	\$	-	\$	-
Total Global Public Equity					660,750				
D. S. Government C. S. Gover									
U.S. Government Section Sectio	Total Global Public Equity	\$	1,932,649	\$	1,929,413	\$	3,236	\$	-
U.S. Government Treasuries	Fixed Income Allocation								
U.S. Government Agencies	U. S. Government								
Mortgage Backed Square S	U.S. Government Treasuries	\$	92,914	\$	92,914	\$	-	\$	-
Federal National Mortgage Association	U.S. Government Agencies		267,169				267,169		
Federal Home Loan Mortgage Association 14,420 14,420 14,420 14,420 14,420 14,600 1,509	Mortgage Backed								
Rederal Home Loan Mortgage Association (Multiclass) 3,608 1,509	Government National Mortgage Association		45,889				45,889		
Collateralized Mortgage Obligations 1,509	Federal National Mortgage Association		14,420				14,420		
Municipals	Federal Home Loan Mortgage Association (Multiclass)		3,608				3,608		
Corporate Bonds	Collateralized Mortgage Obligations		1,509				1,509		
Corporate Bonds	Municipals		10,593				10,593		
Convertible Corporate Bonds	Corporate								
Asset Backed Securities	•		1,333,738		21,526		1,159,829		152,383
Private Placements	Convertible Corporate Bonds		326				326		
Total Fixed Income	Asset Backed Securities		248,261				248,261		
Total Investments by Fair Value Level \$ 8,139,988 \$ 5,189,532 \$ 2,798,073 \$ 152,383							859,936		
State Stat	Total Fixed Income	\$	2,878,363	\$	114,440	\$	2,611,540	\$	152,383
Silvate Silv	Total Investments by Fair Value Level	\$	8,139,988	\$	5,189,532	\$	2,798,073	\$	152,383
Global Tactical Asset Allocation 3,845	Investments measured at the net asset value (NAV)								
Other Opportunistic 224,194 High Yield/Bank Loans 16,685 Emerging Debt 915,584 Hedge Funds 3,300,578 Private Equity 2,261,270 Private Debt 2,201,697 Private Real Estate 2,529,751 Private Infrastructure 345,748 Total investments measured at the NAV \$ 23,419,944 Total investments measured at fair value \$ 31,559,932 Investment derivative instruments Equity Investments Options - Equity \$ 36,268 \$ 10,188 \$ 26,080 \$ - Swaps - Equity 284,260 284,260 284,260 Fixed Income Investments (15) (6) (9) Futures - Fixed Income (15) (6) (9) Futures - Fixed Income (282) (282) Total investment derivative instruments \$ 320,668 \$ 10,337 \$ 310,331 \$ -	Global Equity	\$	11,620,592						
High Yield/Bank Loans	Global Tactical Asset Allocation		3,845						
Emerging Debt	Other Opportunistic		224,194						
Hedge Funds 3,300,578	High Yield/Bank Loans		16,685						
Private Equity 2,261,270 Private Debt 2,201,697 Private Real Estate 2,529,751 Private Infrastructure 345,748 Total investments measured at the NAV \$ 23,419,944 Total investments measured at fair value \$ 31,559,932 Investment derivative instruments Equity Investments Options - Equity \$ 36,268 \$ 10,188 \$ 26,080 \$ - Swaps - Equity 284,260 284,260 284,260 Fixed Income Investments Options - Fixed Income (15) (6) (9) Fixed Income Investments Swaps - Fixed Income 437 437 437 437 437 5 5 10,337 \$ 310,331 \$ - 5 10,337 \$ 310,331 \$ - 5 - Total investment derivative instruments \$ 320,668 \$ 10,337 \$ 310,331 \$ -	Emerging Debt		915,584						
Private Debt 2,201,697 Private Real Estate 2,529,751 Private Infrastructure 345,748 Total investments measured at the NAV \$ 23,419,944 Total investments measured at fair value \$ 31,559,932 Investment derivative instruments Equity Investments Options - Equity \$ 36,268 \$ 10,188 \$ 26,080 \$ - Swaps - Equity 284,260 284,260 284,260 5 (6) (9) Fixed Income Investments (15) (6) (9) <t< td=""><td>Hedge Funds</td><td></td><td>3,300,578</td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	Hedge Funds		3,300,578						
Private Real Estate 2,529,751 Private Infrastructure 345,748 Total investments measured at the NAV \$ 23,419,944 Total investments measured at fair value \$ 31,559,932 Investment derivative instruments Equity Investments Options - Equity \$ 36,268 \$ 10,188 \$ 26,080 \$ - Swaps - Equity 284,260 284,260 284,260 Fixed Income Investments (15) (6) (9) Futures - Fixed Income 437 437 437 Swaps - Fixed Income (282) (282) (282) Total investment derivative instruments \$ 320,668 \$ 10,337 \$ 310,331 \$ -	Private Equity		2,261,270						
Private Infrastructure	Private Debt		2,201,697						
Total investments measured at the NAV \$ 23,419,944 Total investments measured at fair value \$ 31,559,932 Investment derivative instruments Equity Investments Equity Investments \$ 36,268 \$ 10,188 \$ 26,080 \$ - Swaps - Equity 284,260 284,260 \$ 284,260 \$ 284,260 \$ 284,260 \$ 10,188 \$ 26,080 \$ - \$ 26,080 \$ - \$ 26,080 \$ - \$ 26,080 \$ - \$ 284,260	Private Real Estate		2,529,751						
Total investments measured at fair value	Private Infrastructure		345,748						
Investment derivative instruments Equity Investments	Total investments measured at the NAV	\$	23,419,944						
Equity Investments Options - Equity \$ 36,268 \$ 10,188 \$ 26,080 \$ - Swaps - Equity 284,260 284,260 284,260 Fixed Income Investments Options - Fixed Income (15) (6) (9) Futures - Fixed Income 437 437 Swaps - Fixed Income (282) (282) Total investment derivative instruments \$ 320,668 \$ 10,337 \$ 310,331 \$ -	Total investments measured at fair value	\$	31,559,932						
Equity Investments Options - Equity \$ 36,268 \$ 10,188 \$ 26,080 \$ - Swaps - Equity 284,260 284,260 284,260 Fixed Income Investments Options - Fixed Income (15) (6) (9) Futures - Fixed Income 437 437 Swaps - Fixed Income (282) (282) Total investment derivative instruments \$ 320,668 \$ 10,337 \$ 310,331 \$ -	Investment derivative instruments								
Options - Equity \$ 36,268 \$ 10,188 \$ 26,080 \$ - Swaps - Equity 284,260 284,260 284,260 - <									
Swaps - Equity 284,260 284,260 Fixed Income Investments (15) (6) (9) Options - Fixed Income 437 437 437 Swaps - Fixed Income (282) (282) (282) Total investment derivative instruments \$ 320,668 \$ 10,337 \$ 310,331 \$ -	• •	\$	36,268	\$	10,188	\$	26,080	\$	-
Fixed Income Investments Options - Fixed Income (15) (6) (9) Futures - Fixed Income 437 437 Swaps - Fixed Income (282) (282) Total investment derivative instruments \$ 320,668 \$ 10,337 \$ 310,331 \$ -							284,260		
Futures - Fixed Income 437 437 Swaps - Fixed Income (282) (282) Total investment derivative instruments \$ 320,668 \$ 10,337 \$ 310,331 \$ -	Fixed Income Investments								
Futures - Fixed Income 437 437 Swaps - Fixed Income (282) (282) Total investment derivative instruments \$ 320,668 \$ 10,337 \$ 310,331 \$ -	Options - Fixed Income		(15)		(6)		(9)		
Total investment derivative instruments \$ 320,668 \$ 10,337 \$ 310,331 \$ -	Futures - Fixed Income		437		437				
<u> </u>	Swaps - Fixed Income		(282)		(282)				
Total Invested Assets \$ 31,880,600	Total investment derivative instruments	\$	320,668	\$	10,337	\$	310,331	\$	-
	Total Invested Assets	\$	31,880,600						

The investments that are measured at the Net Asset Value (NAV) are noted below (amounts in thousands).

				Redemption	Redemption
	Fair Value		Unfunded	Frequency	Notice
	at 6/30/20	C	Commitments ¹	(if Currently Eligible)	Period
Global Equity	\$ 11,620,592	\$	-	Daily/Monthly	5 - 30 days
Global Tactical Asset Allocation	3,845			Monthly	5 - 14 days
Other Opportunistic	224,194		33,559	Monthly	5 - 30 days
High Yield/Bank Loans	16,685			Monthly	5 - 30 days
Emerging Debt	915,584			Daily/Monthly	10 - 15 days
Hedge Funds	3,300,578			Monthly/Quarterly	2 - 90 days
Private Equity	2,261,270		2,903,289	Illiquid	Illiquid
Private Debt	2,201,697		2,016,391	Illiquid	Illiquid
Private Real Estate	2,529,751		1,101,802	Illiquid	Illiquid
Private Infrastructure	 345,748		149,067	Illiquid	Illiquid
Total investments measured at the NAV	\$ 23,419,944	\$	6,204,108		

¹ For purposes of this table, amounts are reported in US Dollars. The Private Equity Category includes £75,000,000, €162,943,134 and AUD \$47,849,906 that have been converted to USD. The Private Infrastructure category includes €26,244,224 that has been converted to USD.

Global Equity Funds. This investment type includes 14 funds that invest primarily in global developed and emerging equity public markets instruments with one of the funds invested in an equity options strategy. The fair values of the investments in this asset type have been determined using NAV per share of the investments or percent ownership of the NAV of the fund and reported by the Investment Managers. Redemptions are generally allowed monthly, provided adequate notice.

Global Tactical Asset Allocation Funds. This investment type includes one fund 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 asset type have been determined using NAV per share of the investments or percent ownership of the NAV of the fund and reported by the Investment Managers. Redemptions are allowed monthly, provided adequate notice.

Other Opportunistic Funds. This investment type includes three funds all of which are strategic partnership investments. The objective of this asset class is to identify investments that, while they may not fit into other asset classes, still offer compelling opportunities for the Portfolio. These investments may offer either high returns, diversifying returns, or both. Examples of potential investments include, but are not limited to, commodities, CTAs, TIPS, and insurance strategies. This allocation also includes risk parity investments. The fair values of two investments in this asset type are valued in good faith based upon the most recent financial information available for the underlying companies. These are reported by the Investment Managers at the measurement date, adjusted for subsequent cash flow activities through the year-end reporting date. The fair value of one investment in this asset type have been determined using NAV per share of the investments or percent ownership of the NAV of the fund and reported by the Investment Manager. Redemptions are generally allowed monthly, provided adequate notice.

High Yield/Bank Loan 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 asset type have been determined using NAV per share of the investments or percent ownership of the NAV of the fund and reported by the Investment Manager. Redemptions are generally allowed monthly, provided adequate notice.

Emerging Debt Funds. This investment type includes three funds that generally invest in debt securities issued in any currency and may hold foreign currency. The fair values of the investments in this asset type have been determined using NAV per share of the investments or percent ownership of the NAV of the fund and reported

by the Investment Managers. Redemptions are generally allowed monthly, provided adequate notice, and one fund charges a redemption fee.

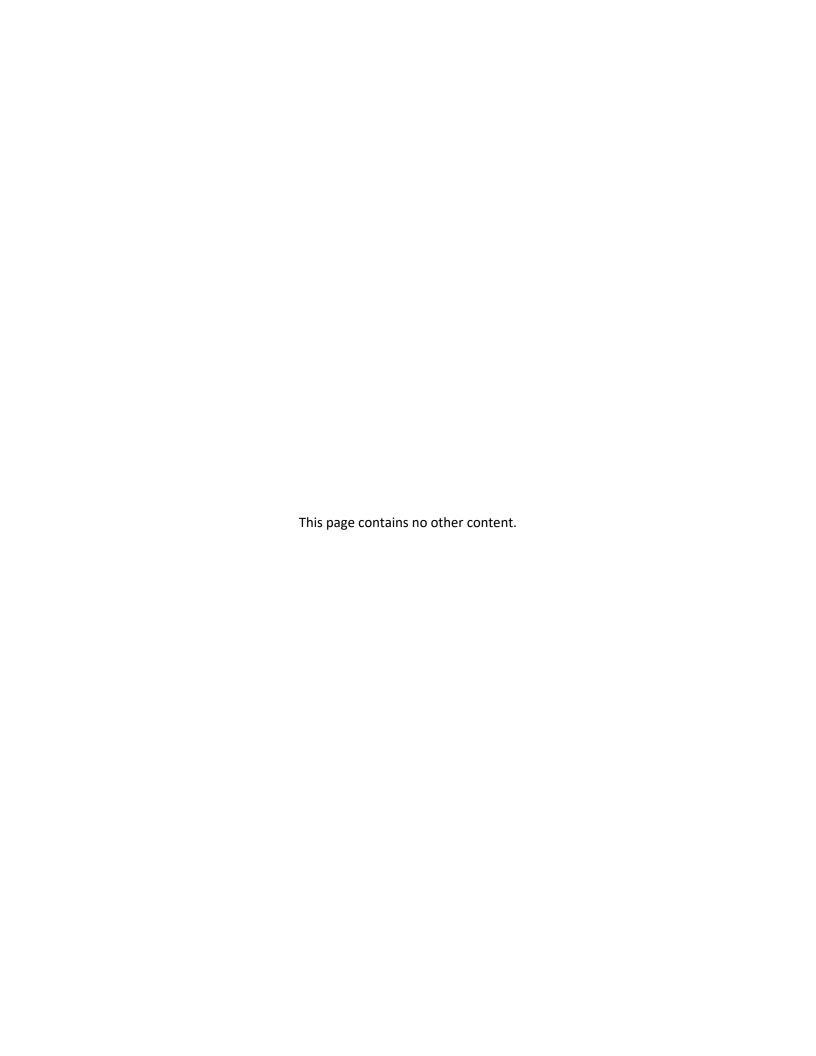
Hedge Funds. This investment type includes 19 funds that generally invest in hedge fund strategies that seek alpha in equity or credit markets or seek to minimize embedded market beta. There are 14 of these funds invested through strategic partnership investments which may consist of underlying investments in more than one hedge fund. The fair values of the investments in this asset type have been determined using NAV per share of the investments or percent ownership of the NAV of the fund and reported by the Investment Managers. 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 to mitigate any detrimental impact to the fund.

Private Equity Funds. This investment type includes 55 funds that consist of investments in limited partnerships or co-investments and five funds within 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 asset type is that distributions are received through the liquidation of the underlying assets of the fund. The fair values of the investments in this asset type are valued in good faith based upon the most recent financial information available for the underlying companies. These are reported by the Investment Managers at the measurement date, adjusted for subsequent cash flow activities through the year-end reporting date. The estimated fair value of these investments may differ from values that would have been used had a ready market existed.

Private Debt Funds. This investment type includes 32 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 asset type is that distributions are received through investment generated income and the liquidation of the underlying assets of the fund. The fair values of the investments in this asset type are valued in good faith based upon the most recent financial information available for the underlying companies. These are reported by the Investment Managers at the measurement date, adjusted for subsequent cash flow activities through the year-end reporting date. The estimated fair value of these investments may differ from values that would have been used had a ready market existed.

Private Real Estate Funds. This investment type includes 28 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 asset type is that distributions are received through investment generated income and the liquidation of the underlying assets of the fund. The fair values of the investments in this asset type are valued in good faith based upon the most recent financial information available for the underlying companies. These are reported by the Investment Managers at the measurement date, adjusted for subsequent cash flow activities through the year-end reporting date. The estimated fair value of these investments may differ from values that would have been used had a ready market existed.

Private Infrastructure Funds. This investment type includes four funds that consist of investments in limited partnerships. Common types of infrastructure investments are in transportation, energy, telecommunications, water supply, sewage, or hospitals. These assets tend to benefit from a rising inflation environment. Infrastructure is considered an illiquid investment strategy as funds generally have a life span of 20 years. The nature of investments in this asset type is that distributions are received through investment generated income and the liquidation of the underlying assets of the fund. The fair values of the investments in this asset type are valued in good faith based upon the most recent financial information available for the underlying companies. These are reported by the Investment Managers at the measurement date, adjusted for subsequent cash flow activities through the year-end reporting date. The estimated fair value of these investments may differ from values that would have been used had a ready market existed.



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, 2020, are noted below (amounts expressed in thousands).

		Fair Value		air Value ration Not		Fair Value Duration	Effective Duration
Investment Time		Total		vailable		Available	(option adjusted duration)
Investment Type Short Term Investments		Iotai		Wallable		Available	duration
Short Term Investment Funds (U.S. Regulated)	\$	2,915,829	\$	_	\$	2,915,829	0.08
Invested Securities Lending Collateral	Y	20,452	Y	20,452	Y	2,313,023	0.00
Repurchase Agreements		32,688		20,432		32,688	
Commercial Paper		116,649		7,000		109,649	0.39
U. S. Government Agency		30,020		7,000		30,020	0.01
U. S. Treasury Bills		229,850				229,850	0.28
Municipals - 1 year or less		1,190				1,190	0.28
Corporate Bonds		2,750				2,750	0.08
Total Short Term Investments	Ś	3,349,428	\$	27,452	\$	3,321,976	0.08
	٠,	3,343,426	٠,	27,432	٠,	3,321,970	
Equity Allocation Preferred		3,236		2,323		913	7.27
	<u>_</u>				_		7.27
Total Equity Investments	\$	3,236	\$	2,323	\$	913	
Fixed Income Allocation							
U. S. Government		92,914				92,914	13.90
U.S. Government Treasuries		267,169		7,174		•	1.38
U. S. Government Agencies		267,169		7,174		259,995	1.38
Mortgage Backed		45.000		4 5 4 0		44 270	2.04
Government National Mortgage Association		45,889		4,510		41,379	2.84
Federal National Mortgage Association		14,420				14,420	2.42
Federal Home Loan Mortgage Association (FHLMC Multiclass)		3,608				3,608	2.39
Collateralized Mortgage Obligations		1,509		740		1,509	2.75
Municipals		10,593		718		9,875	3.89
Corporate		4 222 722		407.404		1 206 617	2.44
Corporate Bonds		1,333,738		127,121		1,206,617	3.44
Convertible Corporate Bonds		326				326	2.21
High Yield/Bank Loans		16,685				16,685	2.00
Asset Backed Securities		248,261		34,097		214,164	2.04
Private Placements		859,936		66,023		793,913	1.31
Emerging Debt		915,584		620,727		294,857	8.61
Options - Fixed Income		(15)		(9)		(6)	(1,366.77)
Futures - Fixed Income		437				437	7.53
Swaps - Fixed Income		(282)				(282)	29.29
Total Fixed Income	\$	3,810,772	\$	860,361	\$	2,950,411	
Mixed Credit Hedge Fund Allocation							
Mixed Credit Hedge Funds		21,111				21,111	0.02
Total Mixed Credit Hedge Funds	\$	21,111	\$	-	\$	21,111	
Total Invested Assets	\$	7,184,547	\$	890,136	\$	6,294,411	

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, 2020, were rated by Moody's and are presented below.

Credit Risk

(Amounts expressed in thousands)

Investment Type and Fair Value	AAA	 AA	 Α	_	ВАА	BA		 В
Short Term Investments								
Short Term Investment Funds (U. S. Regulated)	\$ 2,915,829	\$ -	\$ -	\$	-	\$	-	\$ -
Repurchase Agreements								
Invested Securities Lending Collateral								
Commercial Paper		69,231			39,543			
Municipals	1,190							
Corporate Bonds								
Equity Investments								
Preferred			2,317					
Fixed Income Allocation ²								
Mortgage Backed:								
Federal National Mortgage Association	14,420							
Federal Home Loan Mortgage Association (Multiclass)	3,608							
Collateralized Mortgage Association	1,509							
Municipals		1,897	1,980					
Corporate:								
Corporate Bonds	36,048	63,678	253,742		229,579		195,121	199,866
Convertible Corporate Bonds								308
High Yield/Bank Loans								
Asset Backed Securities	40,345	6,265	17,365		67,369		46,558	12,650
Private Placements	48,164	78,243	95,131		165,834		77,648	70,481
Emerging Debt								
Options - Fixed Income								
Futures - Fixed Income								
Swaps - Fixed Income								
Totals	\$ 3,061,113	\$ 219,314	\$ 370,535	\$	502,325	\$	319,327	\$ 283,305

Chart continued on next page

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

²U.S. Treasury Bills, Notes and Bonds, Agencies and Government National Mortgage Association securities with a fair value of \$495.9 million are not included because they are not subject to credit risk.

Credit Risk (cont.)

(Amounts expressed in thousands)

								Not	Rated			
	CAA		CA		С	Comm or held	l and EMD ingled Funds d in Strategic tnerships	Rated by S&P not by Moody's				TOTAL
\$	_	\$	_	\$	_	\$	_	\$	_	\$	_	\$ 2,915,829
7		Y		Y		Y		Y		Y	32,688	32,688
											20,452	20,452
									875		7,000	116,649
									0,5		7,000	1,190
											2,750	2,750
											919	3,236
												14,420
												3,608
												1,509
									6,716			10,593
	36,968		16,979		1,026				136,630		164,101	1,333,738
											18	326
											16,685	16,685
	2,917		13,942						37,720		3,130	248,261
	18,788		2,282						199,040		104,325	859,936
							915,584					915,584
											(15)	(15)
											437	437
											(282)	(282)
\$	58,673	\$	33,203	\$	1,026	\$	915,584	\$	380,981	\$	352,208	\$ 6,497,594

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, 2020, there is no single issuer exposure within the portfolio that comprises five 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, 2020, (amounts expressed in thousands):

	Cas	h & Cash	F	orward	Fu	tures	Private	Private			Fixed		
Currency	Εqι	uivalents	C	ontracts	Coi	ntracts	Equity	Infr	astructure	structure Income		Equity	Total
Australian Dollar	\$	(356)	\$	37,451	\$	-	\$ 26,705	\$	-	\$	1,915	\$ 25,917	\$ 91,632
Canadian Dollar		(29)		53,248								55,665	108,884
Danish Krone		26										6,641	6,667
Euro Currency		16,387		(37,720)		9,285	120,719		106,730		222,486	59,599	497,486
Hong Kong Dollar		25		23,154								22,101	45,280
Japanese Yen		2,296		133,620							(347)	11,547	147,116
Mexican Peso		363											363
New Zealand Dollar		36										4,216	4,252
Pound Sterling		1,632		68,813		12					18,667	32,529	121,653
Russian Ruble				8									8
Singapore Dollar		11										1,563	1,574
South African Rand		1											1
Swedish Krona				14,670								193	14,863
Swiss Franc		29										17	46
Totals	\$	20,421	\$	293,244	\$	9,297	\$147,424	\$	106,730	\$	242,721	\$ 219,988	\$ 1,039,825

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 \$197.5 and \$242.1 million, respectively, were held in trust by the clearing brokers on June 30, 2020. The Systems' derivatives, consisting of futures, options, forward contracts and swaps are presented in the tables on pages 42-47. Investments in limited partnerships and commingled funds may include derivatives that are not shown in the derivative totals.

The RSIC works with their overlay provider to utilize derivatives primarily to facilitate changes to the asset allocation of the total plan and take

advantage of their low cost of implementation. Derivatives are utilized 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, 2020, (amounts expressed in thousands):

		Changes in rail value											
	Clas	sifica	ation	Gaiı	1								
Futures Contracts	Net a	ppre	ciation	\$ (2	25,497)								
Forward Contracts	Net a	ppre	ciation		(7,476)								
Swaps	Net a	ppre	ciation	26	53,536								
Options	Net a	ppre	ciation	(12	23,231)								
			Fair \	Value									
	Forward												
	Contracts	Fu	tures	Options ¹	Swaps								
Cash and Cash Equivalents	\$ (7,968)												
Fixed Income			437	(15)	(282)								
Global Public Equity				120,747	284,260								
Totals	\$ (7,968)	\$	437	\$120,732	\$283,978								
					· · · · · · · · · · · · · · · · · · ·								

Changes in Fair Value

 $^{^{1}}$ Includes options held in commingled accounts with fair value of \$84,479 (in thousands).

At June 30, 2020, the Systems had the following exposure via futures contracts (dollar amounts expressed in thousands):

				Notional	
Futures Contracts	Expiration	Long/Short	Quantity	Value ¹	Fair Value
EURO-BUND Future (EUX)	September 2020	Long	31	6,146	39
EURO-BUXL 30Y BND Future (EUX)	September 2020	Long	17	4,200	75
LONG GILT Future (ICF)	September 2020	Short	(31)	(5,272)	12
US LONG BOND Future (CBT)	September 2020	Long	2,194	391,766	56
US 10YR NOTE Future (CBT)	September 2020	Long	285	39,664	80
US 10YR NOTE Future (CBT)	September 2020	Long	2,063	287,112	(15)
US 5YR NOTE Future (CBT)	September 2020	Long	705	88,648	198
US 5YR NOTE Future (CBT)	September 2020	Long	2,339	294,111	(8)
US 2YR NOTE Future (CBT)	September 2020	Long	2,391	528,000	
Totals				\$ 1,634,375	\$ 437

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, 2020, the Systems had the following forward exposures, listed by counterparty (amounts expressed in thousands):

Profession	81-41	I W-l	-		Counterparty
Broker		onal Value		ir Value	Exposure
Bank of America	\$	2,297	\$	36	0.24%
Bank of New York Mellon		330,046		(2,527)	34.04%
BNP Paribas Securities Corporation		2,092		31	0.22%
Citibank		122,920		(1,164)	12.68%
Citigroup Global Markets		529		10	0.05%
Goldman Sachs Bank USA/New York NY		35,111		(43)	3.62%
Goldman Sachs International		20,775		996	2.14%
HSBC Bank		20,192		1	2.08%
JPMorgan Chase Bank NA		148,378		(1,378)	15.30%
Morgan Stanley & Co International Ltd		18,072		(644)	1.86%
Morgan Stanley Capital Services LLC		2,049		(84)	0.21%
Royal Bank of Canada		111,913		(1,746)	11.54%
Standard Chartered Bank		111,772		(1,605)	11.53%
State Street Boston Capital Markets		43,477		149	4.49%
Totals	\$	969,623	\$	(7,968)	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, 2020, for currency forwards, swap agreements, and options (amounts expressed in thousands):

Quality rating	Forwards	Swaps	Options ¹	Total
Aa2	\$ (3,868)	\$ 9	\$ 17,884	\$ 14,025
Aa3	(1,133)	208,922	(24,512)	183,277
A1	(1,221)	75,223	42,881	116,883
A2	(1,746)	5		(1,741)
Total subject to credit risk	\$ (7,968)	\$ 284,159	\$ 36,253	\$ 312,444
Centrally cleared:				
Chicago Mercantile Exchange		\$ 511		\$ 511
Intercontinental Exchange		(140)		(140)
LCH Ltd		(552)		(552)
Total not subject to credit risk	\$ -	\$ (181)	\$ -	\$ (181)
Totals	\$ (7,968)	\$ 283,978	\$ 36,253	\$ 312,263

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

At June 30, 2020, the Systems held swaps as shown in the tables below (amounts expressed in thousands):

					Maturity	С	urrent			Gaiı	n/Loss
Counterparty	Total R	eturn Swaps	SCRS Pays	SCRS Receives	Date	N	otional	Fa	ir Value ¹	Since	Trade
Barclays Bank PLC	Barclays A	gg Proxy	Variable Rate	Fixed Rate	6/30/2021	\$	400,000	\$	1	\$	-
Barclays Bank PLC	Barclays A	gg Proxy	Variable Rate	Fixed Rate	5/28/2021		301,891		1,749		1,738
Barclays Bank PLC	Barclays A	gg Proxy	Variable Rate	Fixed Rate	10/30/2020		212,014		1,268		9,889
Barclays Bank PLC	Barclays A	gg Proxy	Variable Rate	Fixed Rate	7/31/2020		267,997		1,588		16,898
Barclays Bank PLC	Barclays U	IS Agg Proxy	Variable Rate	Fixed Rate	9/30/2020		560,196		3,315		26,645
Barclays Bank PLC	Barclays A	gg Proxy	Variable Rate	Fixed Rate	4/30/2021		151,648		1,575		1,472
BNP Paribas SA	MSCI Wor	ld Swap Proxy	Variable Rate	Fixed Rate	10/30/2020		553,485		41,861		(6,410)
BNP Paribas SA	MSCI Wor	ld Swap Proxy	Variable Rate	Fixed Rate	9/30/2020	:	1,040,701		167,061	2	38,698
Credit Suisse AG	MSCI Wor	ld Swap Proxy	Variable Rate	Fixed Rate	9/30/2020		392,092		62,933		91,313
Societe Generale	Barclays U	IS Agg Proxy	Variable Rate	Fixed Rate	9/30/2020		106,326		627		5,068
Societe Generale	Barclays A	gg Proxy	Variable Rate	Fixed Rate	10/30/2020		106,007		630		4,952
Societe Generale	Barclays A	gg Proxy	Variable Rate	Fixed Rate	4/30/2021		151,648		901		1,502
Societe Generale	Barclays A	gg Proxy	Variable Rate	Fixed Rate	6/30/2021		250,000		1		
Societe Generale	Barclays A	gg Proxy	Variable Rate	Fixed Rate	6/30/2021		100,000		1		
Societe Generale	Barclays A	gg Proxy	Variable Rate	Fixed Rate	6/30/2021		200,806		749		745
						\$	4,794,811	\$	284,260	\$	392,510
			•	6606.0	conc n		Market D		Current	-	
Counterparty		Fixed Income S		SCRS Pays	SCRS Rece		Maturity D		Notional		ir Value ¹
Bank of America		Credit Default	•	Variable Rate			6/20/202		\$ 2,000	\$	9
Goldman Sachs HSBC Securities Inc		Credit Default Credit Default		Variable Rate Variable Rate			various 6/20/202		3,300 1,200		(116) 6
nabe securities inc	•	Credit Delauit	. Swaps	variable Rate	rixeu na	te	0/20/202		\$ 6,500		(101)
								•	ψ 0,550		(202)
Chicago Mercantile	Exchange	Cleared Intere	est Rate Swaps	Fixed/Variable	e Fixed/Vari	able	various		\$ 72,100	\$	511
IntercontinentalExc	change	Cleared Credit	t Default Swaps	Variable Rate	Fixed Ra	te	various		28,921		(140)
LCH Ltd		Cleared Intere	est Rate Swaps	Fixed/Variable	e Fixed/Vari	able	various		219,196		(552)
									\$ 320,217	\$	(181)

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, 2020, the Systems had the following option positions (dollar amounts expressed in thousands):

Option Contracts	Underlying Security	Expiration	Quantity	Fair Value ¹
Put Aug 20 171.500 07/24/20	EURO-BUND FUTURE SEP 20	September 2020	(39)	\$ (1)
Put Aug 20 172.500 07/24/20	EURO-BUND FUTURE SEP 20	September 2020	(39)	(3)
Put Aug 20 135.500 07/24/20	US 10YR NOTE FUTURE SEP 20	September 2020	(58)	(2)
Put Aug 20 100.641 080620	COMMITMENT TO PURCHASE FNMA	August 2020	(1,800,000)	(2)
Put Aug 20 102.421875 080620	COMMIT TO PUR FNMA SF MTG OTC	August 2020	(8,000,000)	(6)
Put Aug 20 102.078125 080620	COMMIT TO PUR FNMA SF OTC	August 2020	(2,800,000)	(1)
Total Fixed Income			(, = = = , = = = ,	(15)
Call Mar 21 5760.120 033121	ASX S&P/ASX 200 INDEX (OTC)	March 2021	3,884	1,319
Call Sept 20 6688.300 093020	ASX S&P/ASX 200 INDEX (OTC) ASX S&P/ASX 200 INDEX (OTC)	September 2020	3,971	1,319 85
Call Dec 20 6804.900 123020	ASX S&P/ASX 200 INDEX (OTC)	December 2020	3,789	191
Put Mar 21 5760.120 033121	ASX S&P/ASX 200 INDEX (OTC)	March 2021	(2,513)	(828)
Put Sept 20 6688.300 093020	ASX S&P/ASX 200 INDEX (OTC)	September 2020	(2,213)	(1,311)
Put Dec 20 6804.900 123020	ASX S&P/ASX 200 INDEX (OTC) ASX S&P/ASX 200 INDEX (OTC)	December 2020	(2,213)	(1,511)
Call Dec 20 416.170 123020	STOXX EUROPE 600 PRICE IND OTC	December 2020	266,900	763
Put Dec 20 416.170 12/30/20	STOXX EUROPE 600 PRICE IND OTC	December 2020	(135,605)	(9,468)
Put Sept 20 3569.450 093020	EURO STOXX 50 P INDEX (OTC)	September 2020	(20,311)	(8,792)
Call Sept 20 3569.450 093020	EURO STOXX 50 P INDEX (OTC)	September 2020	37,576	1,403
Call Mar 21 19429.210 033121	NIKKEI 225 (OTC)	March 2021	246,753	
Call Sept 20 21755.840 093020	NIKKEI 225 (OTC)	September 2020	256,672	3,359
Call Dec 20 23656.620 123020	NIKKEI 225 (OTC)	December 2020	185,071	1,290
Put Mar 21 19429.210 033121	NIKKEI 225 (OTC)	March 2021	(183,279)	(1,641)
Put Sept 20 21755.840 093020	NIKKEI 225 (OTC)	September 2020	(178,625)	(1,527)
Put Dec 20 23656.620 123020	NIKKEI 225 (OTC)	December 2020	(133,250)	(2,862)
Call Mar 21 5926.630 033121	FTSE 100 INDEX (OTC)	March 2021	4,733	3,426
Call Sept 20 7408.210 093020	FTSE 100 INDEX (OTC)	September 2020	5,214	12
Call Dec 20 7587.050 123020	FTSE 100 INDEX (OTC)	December 2020	4,747	65
Put Mar 21 5926.630 033121	FTSE 100 INDEX (OTC)	March 2021	(3,102)	(1,734)
Put Sept 20 7408.210 093020	FTSE 100 INDEX (OTC)	September 2020	(2,744)	(4,358)
Put Dec 20 7587.050 123020	FTSE 100 INDEX (OTC)	December 2020	(2,511)	(4,648)
Call July 22 000.395 072922	2Y-10 CMS CAP	July 2022	1,339,000	411
Call July 22 000.605 072922	2Y-10 CMS CAP	July 2022	87,000	17
Call July 22 000.395 072922	2Y-10 CMS CAP	July 2022	1,122,000	
Call July 22 000.395 072922	2Y-10 CMS CAP	, July 2022	249,000	77
Call Mar 21 3142.120 033121	S & P 500 INDEX (OTC)	March 2021	(81,653)	(18,477)
Call Mar 21 2755.590 033121	S & P 500 INDEX (OTC)	March 2021	163,306	79,792
Put Mar 21 2747.55 03/31/21	S & P 500 INDEX (OTC)	March 2021	(54,594)	(6,698)
Call Mar 21 2823.11 033121	S & P 500 INDEX (OTC)	March 2021	54,594	23,994
Call Mar 21 3138.620 033121	S & P 500 INDEX (OTC)	March 2021	(81,653)	(18,647)
Put Mar 21 2755.590 033121	S & P 500 INDEX (OTC)	March 2021	(54,435)	(7,617)
Put Mar 21 2617.810 033121	S & P 500 INDEX (OTC)	March 2021	(54,435)	(7,648)
Call July 22 000.605 072922	2Y-10 CMS CAP	July 2022	813,000	162
Call Mar 20 334.390 033121	EURO STOXX 50 FUTURE (OTC)	March 2021	299,650	13,863
Put Mar 20 334.390 03/31/21	EURO STOXX 50 FUTURE (OTC)	March 2021	(197,919)	(4,687)
Total Equity				36,268
Total				\$ 36,253
				,

 $^{^{\}rm 1}$ 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, private real estate and private infrastructure.

Private equity, private debt, private real estate and private infrastructure 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 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, private real estate and private infrastructure investments. At June 30, 2020, the Systems' commitments, including commitments within Strategic Partnerships, are shown in the following table (amounts expressed in thousands):

						Remaining
		Total	An	nount Funded		Unfunded
	C	Commitment		to Date		mmitment ¹
Limited Partnerships USD						
Private Equity	\$	6,115,916	\$	3,521,243	\$	2,594,673
Private Debt		6,162,802		4,146,411		2,016,391
Private Real Estate		4,192,365		3,090,563		1,101,802
Private Infrastructure		360,000		240,408		119,592
Other Opportunistic		80,237		46,678		33,559
Totals	\$	16,911,320	\$	11,045,303	\$	5,866,017
Limited Partnerships EUR						
Private Equity	€	308,330	€	145,387	€	162,943
Private Infrastructure		125,000		98,756		26,244
Totals	€	433,330	€	244,143	€	189,187
Limited Partnerships AUD						
Private Equity	\$	100,000	\$	52,150	\$	47,850
Totals	\$	100,000	\$	52,150	\$	47,850
Harted Barbarahias CDB						
Limited Partnerships GBP	•	75.000	•		•	75.000
Private Equity	<u>£</u>	75,000	£	-	£	75,000
Totals	£	75,000	£	-	£	75,000

¹ For purposes of this table, amounts are reported separately by currency.

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 to various third party broker-dealers and financial institutions and collecting cash and noncash collateral. The fair value of the required collateral must initially meet or exceed 102 percent of the fair value of the securities loaned for U.S. securities, 105 percent for cross currency securities and 107 percent for equity securities, providing a margin against a decline in the fair value of collateral. If the collateral value falls below 102 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, 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 reinvestment 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, 2020 included U.S. Government securities, U. S. Government agencies, Corporate bonds, Non-U. S. Sovereign debt and Global equities. The contractual agreement between the RSIC 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, U. S. Government securities, Corporate securities, Assetbacked securities and Global equities 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, 2020, the fair value of securities on loan was \$63.37 million. The fair value of the invested cash collateral was \$20.45 million, securities lending obligations were \$65.02 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 \$2.7 million, a decrease from \$3.0 million in the prior year.

With regard to counterparty credit risk, the Systems' cash collateral invested is held by the counterparty and is uninsured. All securities loaned can be terminated on demand by either the Systems or the borrower. At year end the average number of days the loans were outstanding was one day. The average weighted maturity of investments made with cash collateral was one day. At June 30, 2020, 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, 2020:

						06/30/20	06/30/19
	SCRS	PORS	GARS	JSRS	SCNG	TOTALS	TOTALS
Securities lent for cash collateral							
U. S. Government	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 994
Corporate bonds	18,115	3,256	22	110	18	21,521	7,210
Global Public Equity	35,226	6,331	42	213	36	41,848	75,043
Total	\$ 53,341	\$ 9,587	\$ 64	\$ 323	\$ 54	\$ 63,369	\$ 83,247
Securities lent for non-cash collater	al						
U. S. Government securities	\$ 54,489	\$ 9,793	\$ 66	\$ 330	\$ 55	\$ 64,733	\$ 275,689
Corporate Bonds	339	61		2		402	2,093
Global Public Equity	348,802	62,689	419	2,113	355	414,378	755,068
Total	\$ 403,630	\$ 72,543	\$ 485	\$2,445	\$ 410	\$ 479,513	\$ 1,032,850
Cash collateral invested as follows							
Repurchase agreements	\$ 17,216	\$ 3,094	\$ 21	\$ 104	\$ 17	\$ 20,452	\$ 41,327
Total	\$ 17,216	\$ 3,094	\$ 21	\$ 104	\$ 17	\$ 20,452	\$ 41,327
Securities received as collateral							
U.S. Government securities	ć 102 201	\$ 18,547	\$ 124	\$ 625	\$ 105	\$ 122,602	\$ 292,378
	\$ 103,201	. ,	T :		•	, ,	+,
Global Public Equity	322,057	57,882	387	1,951	328	382,605	789,540
Global Fixed Income	10,386	1,867	13	63	10	12,339	32,516
Total	\$ 435,644	\$ 78,296	\$ 524	\$2,639	\$ 443	\$ 517,546	\$ 1,114,434

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, 2020, were as follows (amounts expressed in thousands):

Transfers										
from:					Tra	nsf	ers to:			
	SCI	RS	P	ORS	GA	RS	JSRS	SCI	NG	Total
SCRS	\$	-	\$	998	\$	-	\$549	\$	-	\$1,547
PORS							14			14
GARS										-
JSRS										-
SCNG										-
Total	\$	-	\$	998	\$	-	\$563	\$	-	\$1,561

The following schedule reflects amounts due to or due from other systems as of June 30, 2020, (amounts expressed in thousands):

Due from:						Due	to:					
	SC	CRS	PC	ORS	GA	RS	JSI	RS	SCI	NG	T	otal
SCRS	\$	-	\$	96	\$	-	\$	-	\$	-	\$	96
PORS												-
GARS												-
JSRS		48										48
SCNG												-
Total	\$	48	\$	96	\$	-	\$	-	\$	-	\$	144

V. Related Party Transactions

The pension plans provide pension and other benefits to employees of all state agencies. Revenues received from these agencies are recorded in the financial statements as employee and employer contributions and constitute approximately 33 percent of combined contribution revenues.

At June 30, 2020, liabilities of approximately \$80.3 million were due to the Employee Insurance Program. Employee and employer contributions receivable of approximately \$81.5 million were due from state agencies, institutions of higher education and quasi-state agencies.

The SCNG Supplemental Retirement Plan received state appropriated contributions in the amount of \$5.3 million during the fiscal year.

The General Assembly appropriated \$101 million for SCRS and PORS collectively to help offset the increased contribution requirements for employers. Based on the criteria provided in the South Carolina

2019-2020 Appropriations Act, Part IB, Section 117.131, PEBA issued credit invoices to certain SCRS and PORS employers for fiscal year 2020 who then applied the credit invoices towards contributions otherwise due to the Systems. The amount of credit invoices issued in fiscal year 2020 totaled \$88.7 million and \$12.5 million for SCRS and PORS respectively. Funds appropriated in future years will be reduced by the excess funds received. The South Carolina 2019-2020 Appropriations Act, Part IA, Section 108 also provided \$2.9 million in nonemployer contributions to JSRS.

The Retirement System Investment Commission is a separate state agency; however, the administrative costs of the RSIC are funded by transfers from the Systems' trust funds. Transfers in the amount of approximately \$11.5 million were made to the RSIC during the fiscal year.

VI. Deferred Retirement Option Plan

A deferred retirement option plan continues to exist under 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, 2020, there were no participants in the JSRS deferred retirement option plan and no benefits were held in trust.

VII. Capital Assets

Capital assets at June 30, 2020, consist of the following amounts (expressed in thousands).

	Ва	ginning lances 80/2019	Add	Additions Deletions				Ending Balances 6/30/2020		
Asset Class (at Cost)										
Land	\$	582	\$	-	\$	-	\$	582		
Building		4,749						4,749		
Equipment		2,134		89				2,223		
Total Capital Assets		7,465		89		-		7,554		
Accumulated Depreciation										
Building		3,180		119				3,299		
Equipment		2,053		46				2,099		
Total Accumulated Depreciation		5,233		165				5,398		
Capital Assets, Net	\$	2,232	\$	(76)	\$	-	\$	2,156		

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, 2020, the total amount accrued for unused annual leave for PEBA's Retirement Division employees was \$1.01 million 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 (SCRS) or the State Optional Retirement Program (ORP) 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, 2020, PEBA's contributions to SCRS for Retirement Division staff were \$1.34 million of which \$80 thousand represented the nonemployer contribution that was applied as a legislatively appropriated credit.

X. Net Pension Liability of Employers

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, 2019 projected forward to the end of the fiscal year, and financial information as of June 30, 2020, 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, 2020, is as follows (dollar amounts expressed in thousands):

	Total Pension	Plan Fiduciary	Employers' Net	Plan Fiduciary Net Position as a %
	Liability	Net Position	Pension Liability	of the Total Pension Liability
SCRS	\$ 51,844,188	\$ 26,292,418	\$ 25,551,770	50.7%
PORS	8,046,387	4,730,175	3,316,212	58.8%
GARS	71,074	34,454	36,620	48.5%
JSRS	411,367	165,250	246,117	40.2%
SCNG	67,501	31,092	36,409	46.1%

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 for the period ending June 30, 2019.

The following table provides a summary of the actuarial assumptions and methods used to calculate the total pension liability for each plan as of June 30, 2020. The total pension liability for each plan is based on the actuarial valuations performed as of July 1, 2019 and rolled-forward from the valuation date to the plans' fiscal year ending June 30, 2020, using generally accepted actuarial principles.

	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 Systems' 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	2016 PRSC Males multiplied by 100%	2016 PRSC Females multiplied by 111%
Assembly		
Public Safety, Firefighters		
and members of the South	2016 PRSC Males multiplied by 125%	2016 PRSC Females multiplied by 111%
Carolina National Guard		

The long-term expected rate of return on pension plan investments is based upon 20-year capital market assumptions. The long-term expected rates of return 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 2020 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 below. 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.

	Policy	Expected Arithmetic	Long Term Expected Portfolio Real Rate
Allocation / Exposure	Target	Real rate of Return	of Return
Global Equity	51.0%		
Global Public Equity ^{1,2}	35.0%	7.81%	2.73%
Private Equity ^{2,3}	9.0%	8.91%	0.80%
Equity Options Strategies ¹	7.0%	5.09%	0.36%
Real Assets	12.0%		
Real Estate (Private) ^{2,3}	8.0%	5.55%	0.44%
Real Estate (REITs) ²	1.0%	7.78%	0.08%
Infrastructure (Private) ^{2,3}	2.0%	4.88%	0.10%
Infrastructure (Public) ²	1.0%	7.05%	0.07%
Opportunistic	8.0%		
Global Tactical Asset Allocation ¹	7.0%	3.56%	0.25%
Other Opportunistic Strategies	1.0%	4.41%	0.04%
Credit	15.0%		
High Yield Bonds/ Bank Loans ^{1,2}	4.0%	4.21%	0.17%
Emerging Markets Debt	4.0%	3.44%	0.14%
Private Debt ^{2,3}	7.0%	5.79%	0.40%
Rate Sensitive	14.0%		
Core Fixed Income ¹	13.0%	1.60%	0.21%
Cash and Short Duration (Net)	1.0%	0.56%	0.01%
Total Expected Return ⁴	100.0%		5.80%
Inflation for Actuarial Purposes			2.25%
·			8.05%

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

² The target weights to Private Equity, Private Debt, Private Infrastructure and Private Real Estate will be equal to their actual weights as of prior month end. Private Equity and Public Equity combine for 44 percent of entire portfolio. Private Debt and High Yield/Bank Loans combine for 11 percent of the entire portfolio. Private Infrastructure and Public Infrastructure combine for 3 percent of the entire portfolio. Private Real Estate and Real Estate (REITs) combine for 9 percent of entire portfolio.

³ RSIC staff and Consultant will notify the Commission if Private Markets assets exceed 25% of total assets.

⁴ The expected return for each of the Portable Alpha asset classes includes the expected return attributed to the Overlay Program. For benchmarking purposes there is a 10% weight assigned to Portable Alpha Hedge Funds in the Policy Benchmark.

The discount rate used to measure the total pension liability of each plan 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	l% Decrease (6.25%)	rrent Discount Rate (7.25%)	1% Increase (8.25%)			
SCRS	\$	31,668,285	\$ 25,551,770	\$	20,444,405		
PORS		4,390,106	3,316,212		2,453,944		
GARS		42,751	36,620		31,329		
JSRS		290,327	246,117		208,661		
SCNG		44,834	36,409		29,504		

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, multipleemployer 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 statesponsored death benefit program. Upon the death of a retired member, the beneficiary of a nonworking 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 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 valuations, including the incidental death benefit program for SCRS, PORS, GARS and JSRS. The July 1, 2019 actuarial valuations reflect the inclusion of the assets and liabilities of the incidental death benefit program and accidental death benefits for PORS.

XII. Litigation

The following claim against SCRS has been dismissed by the court, however the case remains active due to remaining claims against other defendants, the appeals process, and a related matter on appeal to the Supreme Court.

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.

Schedule of Changes in the Employers' Net Pension Liability¹

SCRS Pension Trust Fund Years Ended June 30 (Amounts expressed in thousands)

	2020	2019	2018	2017	2016	2015	2014
Total Pension Liability							
Service cost	\$ 975,416	\$ 967,897	\$ 910,846	\$ 804,057	\$ 763,357	\$ 744,197	\$ 739,021
Interest	3,551,535	3,463,073	3,401,588	3,318,051	3,231,572	3,148,090	3,021,004
Benefit changes							
Difference between actual and							
expected experience	392,332	(101,351)	(172,340)	54,584	46,714	(44,636)	638,745
Assumption changes				1,746,649			
Benefit payments	(3,148,155)	(3,078,289)	(3,562,801)	(3,035,119)	(2,782,738)	(2,705,547)	(2,571,049)
Net Change in Total Pension Liability	1,771,128	1,251,330	577,293	2,888,222	1,258,905	1,142,104	1,827,721
Total Pension Liability - Beginning	50,073,060	48,821,730	48,244,437	45,356,215	44,097,310	42,955,206	41,127,485
Total Pension Liability - Ending (a)	\$51,844,188	\$50,073,060	\$48,821,730	\$48,244,437	\$ 45,356,215	\$44,097,310	\$42,955,206
Plan Fiduciary Net Position							
Employer contributions	\$ 1,647,757	\$ 1,450,308	\$ 1,300,477	\$ 1,168,847	\$ 1,072,659	\$ 1,022,478	\$ 962,798
Nonemployer contributions	88,706	88,706	104,974				
Employee contributions	922,539	880,664	868,681	826,543	754,153	716,107	652,631
Refunds of contributions to members	(117,860)	(118,067)	(113,867)	(105,169)	(93,694)	(95,104)	(90,250)
Annuity benefits	(3,007,545)	(2,938,416)	(3,426,650)	(2,907,273)	(2,668,385)	(2,590,299)	(2,461,559)
Death benefits	(22,750)	(21,806)	(22,284)	(22,677)	(20,659)	(20,144)	(19,240)
Net investment income (loss)	(441,580)	1,499,391	1,986,948	2,791,215	(165,394)	374,152	3,517,324
Administrative expenses	(14,218)	(15,536)	(14,658)	(13,469)	(13,149)	(12,554)	(11,765)
Net transfers to other systems	(1,547)	(1,244)	(1,534)	(1,550)	(997)	(1,329)	(2,470)
Net Change in Plan Fiduciary Net Position	(946,498)	824,000	682,087	1,736,467	(1,135,466)	(606,693)	2,547,469
Plan Fiduciary Net Position - Beginning	27,238,916	26,414,916	25,732,829	23,996,362	25,131,828	25,738,521	23,191,052
Plan Fiduciary Net Position - Ending (b)	\$ 26,292,418	\$27,238,916	\$ 26,414,916	\$ 25,732,829	\$ 23,996,362	\$ 25,131,828	\$ 25,738,521
Not Dengion Linkility Funding (a) (b)	¢ 3F FF1 770	¢ 22 024 144	¢ 22 40¢ 04 4	Ć 22 F11 C00	¢ 24 250 052	¢ 10 0CF 402	¢ 17 216 605
Net Pension Liability - Ending (a) - (b)	\$ 25,551,770	\$ 22,834,144	\$22,406,814	\$22,511,608	\$ 21,359,853	\$18,965,482	\$17,216,685

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

Schedule of Changes in the Employers' Net Pension Liability¹

PORS Pension Trust Fund Years Ended June 30 (Amounts expressed in thousands)

	2020	2019	2018	2017	2016	2015	2014
Total Pension Liability							
Service cost	\$ 198,744	\$ 189,379	\$ 184,570	\$ 166,682	\$ 156,567	\$ 154,102	\$ 149,606
Interest	548,454	528,699	500,758	473,059	453,696	435,329	417,950
Benefit changes							-
Difference between actual and							
expected experience	49,922	(27,766)	102,882	5,044	11,582	6,771	64,336
Assumption changes				333,190			
Benefit payments	(432,483)	(412,535)	(397,921)	(376,801)	(360,656)	(344,410)	(331,783)
Net Change in Total Pension Liability	364,637	277,777	390,289	601,174	261,189	251,792	300,109
Total Pension Liability - Beginning	7,681,750	7,403,973	7,013,684	6,412,510	6,151,321	5,899,529	5,599,420
Total Pension Liability - Ending (a)	\$ 8,046,387	\$ 7,681,750	\$ 7,403,973	\$ 7,013,684	\$ 6,412,510	\$ 6,151,321	\$ 5,899,529
Plan Fiduciary Net Position							
Employer contributions	\$ 263,135	\$ 237,821	\$ 211,793	\$ 192,006	\$ 175,223	\$ 166,451	\$ 155,608
Nonemployer contributions	12,470	12,470	13,122	Ş 132,000	J 175,225	٦ 100, 4 31	J 133,000
Employee contributions	151,835	144,747	138,652	127,840	115,188	106,854	96,004
Refunds of contributions to members	(22,492)	(21,608)	(23,899)	(19,964)	(19,178)	(17,453)	(16,184)
Annuity benefits	(405,790)	(387,228)	(369,536)	(352,986)	(337,928)	(323,252)	(311,593)
Death benefits	(4,201)	(3,699)	(4,485)	(3,852)	(3,550)	(3,705)	(4,007)
Net investment income (loss)	(79,106)	264,323	331,529	455,914	(24,636)	58,705	538,386
Administrative expenses	(2,469)	(2,596)	(2,402)	(2,149)	(2,055)	(1,938)	(1,820)
Net transfers to other systems	984	1,148	1,534	1,278	1,147	1,061	2,260
Net Change in Plan Fiduciary Net Position	(85,634)	245,378	296,308	398,087	(95,789)	(13,277)	458,654
Plan Fiduciary Net Position - Beginning	4,815,809	4,570,431	4,274,123	3,876,036	3,971,825	3,985,102	3,526,448
Plan Fiduciary Net Position - Ending (b)	\$ 4,730,175	\$ 4,815,809	\$ 4,570,431	\$ 4,274,123	\$ 3,876,036	\$ 3,971,825	\$ 3,985,102
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Net Pension Liability - Ending (a) - (b)	\$ 3,316,212	\$ 2,865,941	\$ 2,833,542	\$ 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.

Schedule of Changes in the Employers' Net Pension Liability¹

GARS Pension Trust Fund Years Ended June 30 (Amounts expressed in thousands)

	2020	2019	2018	2017	2016	2015	2014
Total Pension Liability							
Service cost	\$ 358	\$ 440	\$ 464	\$ 488	\$ 493	\$ 553	\$ 572
Interest	5,003	5,149	5,200	5,293	5,301	5,380	5,437
Benefit changes							
Difference between actual and							
expected experience	60	(1,135)	138	(348)	798	(294)	(2,585)
Assumption changes				2,330			
Benefit payments	 (6,348)	(6,515)	 (6,468)	(6,737)	 (6,656)	(6,660)	 (6,861)
Net Change in Total Pension Liability	(927)	(2,061)	(666)	1,026	(64)	(1,021)	(3,437)
Total Pension Liability - Beginning	 72,001	 74,062	74,728	 73,702	 73,766	 74,787	78,224
Total Pension Liability - Ending (a)	\$ 71,074	\$ 72,001	\$ 74,062	\$ 74,728	\$ 73,702	\$ 73,766	\$ 74,787
Plan Fiduciary Net Position							
Employer contributions	\$ 6,329	\$ 5,804	\$ 5,428	\$ 4,539	\$ 4,501	\$ 4,275	\$ 4,063
Employee contributions	222	162	287	468	292	369	384
Refunds of contributions to members		(17)			(22)		(41)
Annuity benefits	(6,323)	(6,480)	(6,452)	(6,678)	(6,625)	(6,639)	(6,799)
Death benefits	(25)	(18)	(16)	(59)	(9)	(21)	(20)
Net investment income (loss)	(443)	1,887	2,376	3,329	(266)	500	4,545
Administrative expenses	(18)	(20)	(18)	(17)	(18)	(18)	(17)
Net transfers to other systems				19	(147)	(18)	15
Net Change in Plan Fiduciary Net Position	(258)	1,318	1,605	1,601	(2,294)	(1,552)	2,130
Plan Fiduciary Net Position - Beginning	34,712	33,394	31,789	30,188	32,482	34,034	31,904
Plan Fiduciary Net Position - Ending (b)	\$ 34,454	\$ 34,712	\$ 33,394	\$ 31,789	\$ 30,188	\$ 32,482	\$ 34,034
Net Pension Liability - Ending (a) - (b)	\$ 36,620	\$ 37,289	\$ 40,668	\$ 42,939	\$ 43,514	\$ 41,284	\$ 40,753

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

Schedule of Changes in the Employers' Net Pension Liability¹

JSRS Pension Trust Fund Years Ended June 30 (Amounts expressed in thousands)

	 2020	2019	 2018	 2017	 2016	 2015	 2014
Total Pension Liability							
Service cost	\$ 8,919	\$ 6,645	\$ 6,521	\$ 6,186	\$ 5,886	\$ 5,760	\$ 5,571
Interest	28,154	21,737	21,271	20,404	20,022	19,440	18,857
Benefit changes						666	
Difference between actual and							
expected experience	3,262	80,801	(3,548)	(995)	(3,085)	(1,138)	(3,240)
Assumption changes				13,790			
Benefit payments	(25,673)	(17,950)	 (17,811)	 (18,602)	 (17,191)	 (16,836)	 (16,684)
Net Change in Total Pension Liability	14,662	91,233	6,433	20,783	5,632	7,892	4,504
Total Pension Liability - Beginning	396,705	305,472	 299,039	 278,256	 272,624	 264,732	260,228
Total Pension Liability - Ending (a)	\$ 411,367	\$ 396,705	\$ 305,472	\$ 299,039	\$ 278,256	\$ 272,624	\$ 264,732
Plan Fiduciary Net Position							
Employer contributions	\$ 19,098	\$ 11,730	\$ 11,043	\$ 10,534	\$ 10,202	\$ 10,109	\$ 9,659
Nonemployer contributions	2,900						
Employee contributions	4,966	2,840	3,016	2,928	2,303	3,153	2,448
Refunds of contributions to members	(182)			(629)	(60)		
Annuity benefits	(25,301)	(17,947)	(17,655)	(17,679)	(16,989)	(16,832)	(16,675)
Death benefits	(190)	(3)	(156)	(293)	(143)	(4)	(10)
Net investment income (loss)	(2,361)	9,183	11,723	16,399	(871)	2,216	19,962
Administrative expenses	(86)	(92)	(86)	(79)	(75)	(71)	(68)
Net transfers to other systems	563	96		253	(3)	286	195
Net Change in Plan Fiduciary Net Position	(593)	5,807	7,885	11,434	(5,636)	(1,143)	15,511
Plan Fiduciary Net Position - Beginning	165,843	160,036	152,151	140,717	 146,353	147,496	131,985
Plan Fiduciary Net Position - Ending (b)	\$ 165,250	\$ 165,843	\$ 160,036	\$ 152,151	\$ 140,717	\$ 146,353	\$ 147,496
Net Pension Liability - Ending (a) - (b)	\$ 246,117	\$ 230,862	\$ 145,436	\$ 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.

Schedule of Changes in the Employers' Net Pension Liability¹

SCNG Pension Trust Fund Years Ended June 30 (Amounts expressed in thousands)

	 2020	2019	 2018	2017	2016	2015	 2014
Total Pension Liability							
Service cost	\$ 805	\$ 786	\$ 804	\$ 696	\$ 689	\$ 690	\$ 697
Interest	4,731	4,764	4,743	4,589	4,594	4,481	4,417
Benefit changes							
Difference between actual and							
expected experience	(627)	(1,501)	(767)	(843)	(992)	612	(262)
Assumption changes				4,161			
Benefit payments	 (4,514)	 (4,534)	 (4,411)	 (4,426)	(4,310)	(4,249)	 (4,248)
Net Change in Total Pension Liability	395	(485)	369	4,177	(19)	1,534	604
Total Pension Liability - Beginning	 67,106	 67,591	 67,222	 63,045	 63,064	 61,530	 60,926
Total Pension Liability - Ending (a)	\$ 67,501	\$ 67,106	\$ 67,591	\$ 67,222	\$ 63,045	\$ 63,064	\$ 61,530
Plan Fiduciary Net Position							
Employer contributions	\$ 5,290	\$ 5,290	\$ 4,814	\$ 4,591	\$ 4,591	\$ 4,591	\$ 4,586
Employee contributions							
Refunds of contributions to members							
Annuity benefits	(4,514)	(4,534)	(4,411)	(4,425)	(4,310)	(4,249)	(4,248)
Death benefits							
Net investment income (loss)	(352)	1,616	1,902	2,533	(121)	313	2,806
Administrative expenses	(15)	(16)	(14)	(13)	(12)	(11)	(10)
Net transfers to other systems							
Net Change in Plan Fiduciary Net Position	409	 2,356	 2,291	 2,686	148	644	 3,134
Plan Fiduciary Net Position - Beginning	30,683	28,327	26,036	23,350	23,202	22,558	19,424
Plan Fiduciary Net Position - Ending (b)	\$ 31,092	\$ 30,683	\$ 28,327	\$ 26,036	\$ 23,350	\$ 23,202	\$ 22,558
Net Pension Liability - Ending (a) - (b)	\$ 36,409	\$ 36,423	\$ 39,264	\$ 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 Liability¹

(Dollar amounts expressed in thousands)

				Plan Fiduciary Net Position as a		
			Employers' Net	Percentage of	Projected	Net Pension Liability
	Total Pension	Plan Fiduciary	Pension Liability	the Total Pension	Covered	as a Percentage of
	Liability	Net Position	(Asset)	Liability	Payroll ²	Covered Payroll
SCRS				/		
6/30/2020	\$ 51,844,188	\$ 26,292,418	\$ 25,551,770	50.7%	\$ 9,272,010	275.6%
6/30/2019	50,073,060	27,238,916	22,834,144	54.4%	9,183,081	248.7%
6/30/2018	48,821,730	26,414,916	22,406,814	54.1%	8,592,885	260.8%
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 PORS	42,955,206	25,738,521	17,216,685	59.9%	7,434,820	231.6%
6/30/2020	8,046,387	4,730,175	3,316,212	58.8%	1,378,255	240.6%
6/30/2019	7,681,750	4,815,809	2,865,941	62.7%	1,306,961	219.3%
6/30/2018	7,403,973	4,570,431	2,833,542	61.7%	1,263,314	224.3%
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	, ,	, ,	, ,		, ,	
6/30/2020	71,074	34,454	36,620	48.5%	1,570	2,332.1%
6/30/2019	72,001	34,712	37,289	48.2%	1,866	1,998.8%
6/30/2018	74,062	33,394	40,668	45.1%	1,961	2,074.3%
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						
6/30/2020	411,367	165,250	246,117	40.2%	30,346	811.0%
6/30/2019	396,705	165,843	230,862	41.8%	22,347	1,033.1%
6/30/2018	305,472	160,036	145,436	52.4%	22,347	650.8%
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						
6/30/2020	67,501	31,092	36,409	46.1%	Not Applicable ³	Not Applicable ³
6/30/2019	67,106	30,683	36,423	45.7%	Not Applicable ³	Not Applicable ³
6/30/2018	67,591	28,327	39,264	41.9%	Not Applicable ³	Not Applicable ³
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 Not Applicable Not Applicable	Not Applicable ³
6/30/2014	61,530	22,558	38,972	36.7%		• •
0/30/2014	01,530	22,338	30,372	30.770	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 the annualized, projected compensation for the following year and does not include payroll attributable to members in State ORP or working retirees.

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

Schedule of Employers' and Nonemployer's Contributions

(Dollar amounts expressed in thousands)

	Actuarially	Amount of	Difference Between Actuarially	Projected	Percentage of
	Determined	Contributions	Determined Contributions and	Covered	Contributions to Covered
	Contributions ³	Recognized ³	Contributions Recognized	Payroll ⁴	Payroll
SCRS ¹					
6/30/2020	\$ 1,736,463	\$ 1,736,463	\$ -	\$ 9,272,010	18.7%
6/30/2019	1,539,014	1,539,014		9,183,081	16.8%
6/30/2018	1,405,451	1,405,451		8,592,885	16.4%
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%
PORS ¹					
6/30/2020	275,605	275,605		1,378,255	20.0%
6/30/2019	250,291	250,291		1,306,961	19.2%
6/30/2018	224,915	224,915		1,263,314	17.8%
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%
GARS ⁵					
6/30/2020	6,329	6,329		1,570	403.1%
6/30/2019	5,804	5,804		1,866	311.0%
6/30/2018	5 <i>,</i> 428	5,428		1,961	276.8%
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%

Schedule of Employers' and Nonemployer's Contributions continued on next page

Schedule of Employers' and Nonemployer's Contributions (cont.)

(Dollar amounts expressed in thousands)

	Actuarially	Amount of	Difference Between Actuarially	Projected	Percentage of
	Determined	Contributions	Determined Contributions and	Covered	Contributions to Covered
	Contributions ³	Recognized ³	Contributions Recognized	Payroll ⁴	Payroll
JSRS ²					
6/30/2020	\$ 21,998	\$ 21,998	\$ -	\$ 30,346	72.5%
6/30/2019	11,730	11,730		22,347	52.5%
6/30/2018	11,044	11,044		22,347	49.4%
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%
SCNG ⁶					
6/30/2020	5,262	5,290	(28)	Not Applicable	Not Applicable
6/30/2019	5,290	5,290		Not Applicable	Not Applicable
6/30/2018	4,814	4,814		Not Applicable	Not Applicable
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

¹ The actual contribution rates and the actuarially determined contribution rates for SCRS and PORS are determined in accordance with Sections 9-1-1085 and 9-11-225 of the South Carolina Code, respectively. The SCRS and PORS employer contribution rates effective July 1, 2019, are 15.56 percent and 18.24 percent, respectively.

² The contribution rate for JSRS is based on the funding policy maintained by the SC Public Employee Benefit Authority. The JSRS employer contribution rate adopted by the PEBA Board effective July 1, 2019, is 62.94 percent and the remaining portion of the contribution effort is attributable to the \$2.9 million in non-payroll based appropriations.

³ Includes employer contributions on employee payroll and contributions remitted to SCRS on the payroll of employees participating in State ORP and working retirees. Total contributions for SCRS, PORS and JSRS also includes nonemployer contributions.

⁴ Projected covered payroll is the annualized, projected compensation for the following year and does not include payroll attributable to members in State ORP or working retirees.

⁵ GARS was closed to new members beginning with the 2012 general election. The actuarially determined contributions are based on the funding policy maintained by the SC Public Employee Benefit Authority.

⁶ Benefits for members in the SCNG are not a function of pay. The actuarially determined contributions are based on the funding policy maintained by the SC Public Employee Benefit Authority.

South Carolina Retirement Systems Required Supplementary Information (continued)

Schedule of Investment Returns¹

Fiscal Year Ending June 30	Annual Money Weighted Rate of Return, Net of Investment Expense
2020	(1.57)%
2019	5.80
2018	7.91
2017	11.88
2016	(0.47)
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 fiscal year 2020 for each of the individual plans administered by PEBA.

Summary of Actuarial Methods and Significant Assumptions¹

	SCRS	PORS	GARS	JSRS	SCNG
Valuation date	07/01/18	07/01/18	07/01/18	07/01/18	07/01/18
Actuarial cost method	Entry age normal	Entry age normal	Entry age normal	Entry age normal	Entry age normal
Amortization method	Level percent of	Level percent of	Level dollar	Level percent of	Level dollar
	pay	pay		pay	
Amortization period	29 years maximum,	29 years maximum,	9 years, closed	29 years variable,	18 years, closed
	closed period ²	closed period ²		but not to	
				exceed 30 years	
Asset Valuation method	5-Year Smoothed	5-Year Smoothed	5-Year Smoothed	5-Year Smoothed	5-Year Smoothed
Actuarial assumptions:					
Inflation rate	2.25%	2.25%	2.25%	2.25%	2.25%
Projected salary increases	3.0% plus step-rate	3.5% plus step-rate	None	2.75%³	None
	increases for	increases for			
	members with less	members with less			
	than 21 years of	than 15 years of			
	service ³	service ³			
Investment rate of return	7.25%	7.25%	7.25%	7.25%	7.25%
Benefit adjustments	lesser of 1% or \$500 annually	lesser of 1% or \$500 annually	None	2.75%	None

¹ The actual contribution rates and the actuarially determined contribution rates for SCRS and PORS are determined in accordance with Sections 9-1-1085 and 9-11-225 of the South Carolina Code, respectively. Contribution requirements for JSRS, GARS and the SCNG are determined in accordance with funding policies established and maintained by the PEBA Board.

² Pension reform legislation enacted effective July 1, 2017 schedules the amortization period to be reduced one year for each of the next 10 years, to 20 years.

³ Includes inflation at 2.25%.

SCRS Pension Trust Fund Year Ended June 30, 2020

					DEATH					
	ΕN	/IPLOYEE	EN	MPLOYER	BENEFIT	QEBA				
		FUND		FUND	FUND	FUND		TOTAL	20	19 TOTAL
Additions										
Employee contributions										
State	\$	266,867	\$	11,038	\$ -	\$ -	\$	277,905	\$	263,848
Public school		370,589		23,493				394,082		376,447
Other		239,943		10,609				250,552		240,369
Employer contributions										
State				552,429	6,265	895		559,589		483,352
Public school				672,059	7,212			679,271		599,245
Other				405,281	3,616			408,897		367,711
Nonemployer contributions				,	.,.			,		,
State				31,126				31,126		31,126
Public school				43,822				43,822		43,822
Other				13,758				13,758		13,758
Total contributions		877,399		1,763,615	17,093	895	-	2,659,002		2,419,678
Investment income		,								
Net appreciation (depreciation)										
in fair value of investments				(758,769)	(3,606)			(762,375)		1,255,386
Interest and dividend income				510,935	2,422			513,357		521,382
Investment expense				(193,957)	(921)			(194,878)		(279,952)
Net income (loss) from investing activities	-			(441,791)	(2,105)	-		(443,896)		1,496,816
From securities lending activities:				(112,732)	(2,103)			(113,636)		1, 130,010
Securities lending income				2,157	10			2,167		2,825
Securities lending borrower rebates				148	1			149		(250)
Net income from securities lending activities				2,305	11			2,316		2,575
Total net investment income (loss)				(439,486)	(2,094)			(441,580)		1,499,391
Supplemental retirement benefits funded by the State				291	(2,034)	. ——	-	291		320
Total additions		877,399		1,324,420	14,999	895		2,217,713		3,919,389
Total additions		677,333		1,324,420	14,333			2,217,713		3,919,369
Deductions										
Refunds of contributions to members		117,860						117,860		118,067
Transfers of contributions to other systems		1,166		381				1,547		1,244
Regular retirement benefits		•		3,006,650		895		3,007,545		2,938,416
Supplemental retirement benefits				291				291		320
Death benefits				(9)	22,759			22,750		21,806
Depreciation				146	,			146		151
Administrative expenses				14,005	67			14,072		15,385
Total deductions		119,026		3,021,464	22,826	895		3,164,211		3,095,389
						-				
Interfund transfers according to statutory requirements	S									
Contributions by members at retirement		(469,919)		469,919						
Interest credited to members' accounts		319,566		(319,566)						
Net interfund transfers		(150,353)		150,353						
Net increase (decrease) in Net Position		608,020		(1,546,691)	(7,827)			(946,498)		824,000
Net Position Restricted for Pensions										
Beginning of year		9,106,400	2	18,003,689	128,827			27,238,916	:	26,414,916
End of year	\$	9,714,420	\$:	16,456,998	\$ 121,000	\$ -	\$	26,292,418	\$:	27,238,916

PORS Pension Trust Fund Year Ended June 30, 2020

With summarized comparative totals for the year ended June 30, 2019

(Amounts expressed in thousands)

	EMPLOYEE	EMPLOYER	DEATH BENEFIT	ACCIDENTAL DEATH	QEBA		
	FUND	FUND	FUND	FUND	FUND	TOTAL	2019 TOTAL
Additions							
Employee contributions							
State	\$ 42,888	\$ 2,168	\$ -	\$ -	\$ -	\$ 45,056	\$ 44,347
Public school	. , , 58	474	·	•		532	547
Other	97,625	8,622				106,247	99,853
Employer contributions	, , ,	-,-				,	,
State		75,897	896	896	2	77,691	72,253
Public school		893	10	10		913	849
Other		180,504	2,070	1,957		184,531	164,719
Nonemployer contributions		,	,-	,		- ,	, ,
State		4,070				4,070	4,070
Public school		44				44	44
Other		8,356				8,356	8,356
Total contributions	140,571	281,028	2,976	2,863	2	427,440	395,038
Investment income	· · · · · · · · · · · · · · · · · · ·						
Net appreciation (depreciation)							
in fair value of investments		(132,978)	(1,410)	(1,907)		(136,295)	221,668
Interest and dividend income		89,440	946	1,280		91,666	91,513
Investment expense		(34,041)	(361)	(488)		(34,890)	(49,309)
Net income (loss) from investing activities		(77,579)	(825)	(1,115)		(79,519)	263,872
From securities lending activities:		(11/010)	(0=0)	(-))		(10)000	
Securities lending income		377	4	5		386	494
Securities lending borrower rebates		27				27	(43)
Net income from securities lending activities		404	4	5		413	451
Total net investment income (loss)		(77,175)	(821)	(1,110)		(79,106)	264,323
Supplemental retirement benefits funded by the State		10				10	13
Transfers of contributions from other systems	617	381				998	1,148
Total additions	141,188	204,244	2,155	1,753	2	349,342	660,522
Deductions	22.402					22.402	24 500
Refunds of contributions to members	22,492					22,492	21,608
Transfers of contributions to other systems	14					14	
Regular retirement benefits		405,788			2	405,790	387,228
Supplemental retirement benefits		10				10	13
Death Benefits		(6)	2,365			2,359	1,890
Accidental death benefits				1,842		1,842	1,809
Depreciation		18				18	19
Administrative expenses		2,392	25	34_		2,451	2,577
Total deductions	22,506	408,202	2,390	1,876	2	434,976	415,144
Interfund transfers according to statutory requirements							
Contributions by members at retirement	(75,645)	75,645					
Interest credited to members' accounts	42,512	(42,512)					
Net interfund transfers	(33,133)	33,133					
	(00)200)						
Net increase (decrease) in Net Position	85,549	(170,825)	(235)	(123)		(85,634)	245,378
Net Position Restricted for Pensions							
Beginning of year	1,179,539	3,519,048	49,837	67,385		4,815,809	4,570,431
End of year	\$ 1,265,088	\$ 3,348,223	\$ 49,602	\$ 67,262	\$ -	\$ 4,730,175	\$ 4,815,809

GARS Pension Trust Fund Year Ended June 30, 2020

	EMPLOYEE FUND		EMPLOYER FUND		QE	BA	TOTAL			
					FUI	ND			201	9 TOTAL
Additions										
Contributions										
Employee contributions - State	\$	222	\$	-	\$	-	\$	222	\$	162
Employer contributions - State				6,326		3		6,329		5,804
Total contributions		222		6,326		3		6,551		5,966
Investment income										
Net appreciation (depreciation)										
in fair value of investments				(908)				(908)		1,484
Interest and dividend income				695				695		729
Investment expense				(233)				(233)		(329)
Net income (loss) from investing activities				(446)				(446)		1,884
From securities lending activities:										
Securities lending income				3				3		3
Net income from securities lending activities				3				3		3
Total net investment income (loss)				(443)				(443)		1,887
Total additions		222		5,883		3		6,108		7,853
Deductions										
Refunds of contributions to members								-		17
Regular retirement benefits				6,320		3		6,323		6,480
Death benefits				25				25		18
Administrative expenses				18				18		20
Total deductions				6,363		3		6,366		6,535
Interfund transfers according to statutory requirements										
Contributions by members at retirement		(40)		40						
Interest credited to members' accounts		203		(203)						
Net interfund transfers		163		(163)						
Net increase (decrease) in Net Position		385		(643)				(258)		1,318
Net Position Restricted for Pensions										
Beginning of year		6,661		28,051				34,712		33,394
End of year	\$	7,046	\$	27,408	\$	-	\$	34,454	\$	34,712

JSRS Pension Trust Fund Year Ended June 30, 2020

	EMPLOYEE FUND			PLOYER FUND	EBA JND	1	TOTAL	201	9 TOTAL
Additions									
Contributions									
Employee contributions - State	\$	4,641	\$	325	\$ -	\$	4,966	\$	2,840
Employer contributions - State				18,695	403		19,098		11,730
Nonemployer contributions				2,900			2,900		
Total contributions	_	4,641		21,920	403		26,964		14,570
Investment income									
Net appreciation (depreciation)									
in fair value of investments				(4,575)			(4,575)		7,519
Interest and dividend income				3,375			3,375		3,319
Investment expense				(1,175)			(1,175)		(1,670)
Net income (loss) from investing activities				(2,375)			(2,375)		9,168
From securities lending activities:									
Securities lending income				13			13		17
Securities lending borrower rebates				1			1		(2)
Net income from securities lending activities				14			14		15
Total net investment income (loss)				(2,361)			(2,361)		9,183
Transfers of contributions from other systems		563					563		96
Total additions		5,204		19,559	403		25,166	_	23,849
Deductions									
Refunds of contributions to members		182					182		
Regular retirement benefits				24,442	403		24,845		17,947
Deferred retirement benefits				456			456		
Death benefits				190			190		3
Depreciation				1			1		1
Administrative expenses				85			85		91
Total deductions		182		25,174	403		25,759		18,042
Interfund transfers according to statutory requirements									
Contributions by members at retirement		(3,268)		3,268					
Interest credited to members' accounts		1,110		(1,110)					
Net interfund transfers		(2,158)		2,158					
Net increase (decrease) in Net Position		2,864		(3,457)			(593)		5,807
Net Position Restricted for Pensions									
Beginning of year	;	30,289	:	135,554	 		165,843		160,036
End of year	\$:	33,153	\$ 1	132,097	\$ 	\$	165,250	\$ 1	165,843

SCNG Pension Trust Fund Year Ended June 30, 2020

	2020 Total	2019 Total		
Additions				
Contributions				
State appropriated	\$ 5,290	\$ 5,290		
Total contributions	5,290	5,290		
Investment income				
Net appreciation (depreciation)				
in fair value of investments	(769)	1,257		
Interest and dividend income	613	635		
Investment expense	(198)	(279)		
Net Income (loss) from investing activities	(354)	1,613		
From securities lending activities:				
Securities lending income	2	3		
Net income from securities lending activities	2	3		
Total net investment income (loss)	(352)	1,616		
Total additions	4,938	6,906		
Deductions				
Regular retirement benefits	4,514	4,534		
Administrative expenses	15	16		
Total deductions	4,529	4,550		
Net increase in Net Position	409	2,356		
Net Position Restricted for Pensions				
Beginning of year	30,683	28,327		
End of year	\$ 31,092	\$ 30,683		

South Carolina Retirement Systems Schedule of Administrative Expenses

Year Ended June 30, 2020 (Amounts expressed in thousands)

Personnel Services	
Salaries and Wages	\$ 9,024
Employee Benefits	3,595
Total Personnel Services	12,619
Professional and Consultant Fees	
Information Technology	748
Medical and Health Services	259
Financial Audit	175
Actuarial Services	271
Management Professional Services	744
Legal Services	20
Total Professional and Consultant Fees	2,217
Operating Expenses	
Facilities Management	206
Building Rent	116
Software Licenses and Programs	683
Furniture and Equipment - Expensed	38
Communications and Utilities	123
Insurance	240
Postage	226
Supplies	139
Miscellaneous Expenses	34
Total Operating Expenses	1,805
Total Administrative Expenses	\$ 16,641
Allocation of Administrative Expenses	
SCRS	\$ 14,072
PORS	2,451
GARS	18
JSRS	85
SCNG	15

Total Administrative Expenses

\$ 16,641

South Carolina Retirement Systems Schedule of Professional and Consultant Fees

Year Ended June 30, 2020 (Amounts expressed in thousands)

Professional / Consultant Type	Nature of Service Provided		unts Paid
CliftonLarsonAllen	Audit and Consulting Services	\$	175
Find Great People	Personnel Services		30
Funston Advisory Services	Fiduciary Audit		157
Gabriel Roeder Smith & Company	Actuarial and Consulting Services		271
Ice Miller	IRC Consulting Services and Compliance Review		17
ICON Integration & Design	Data Conversion and Bridging Services		184
Linea Solutions	Client Services Vendor to Facilitate and Support Program Activities		201
NWN Corporation	IT Installation Services		122
Roper Personnel Services	Personnel Services		47
Segal Consulting	Investment Consulting Services for State ORP and Deferred Compensation		117
SunGard Availability Services	IT Disaster Recovery		145
Tapfin	Application Development Resources		465
USC Department of Internal Medicine	Disability Review		27
Vocational Rehabilitation	Disability Review		232
Soteria	Cyber Security Consulting Services		13
Aggregate of payees less than \$10,000 each	Professional and Consulting Services		14
Total Professional and Consultant Fees		\$	2,217

South Carolina Retirement Systems Schedule of Investment Fees and Expenses

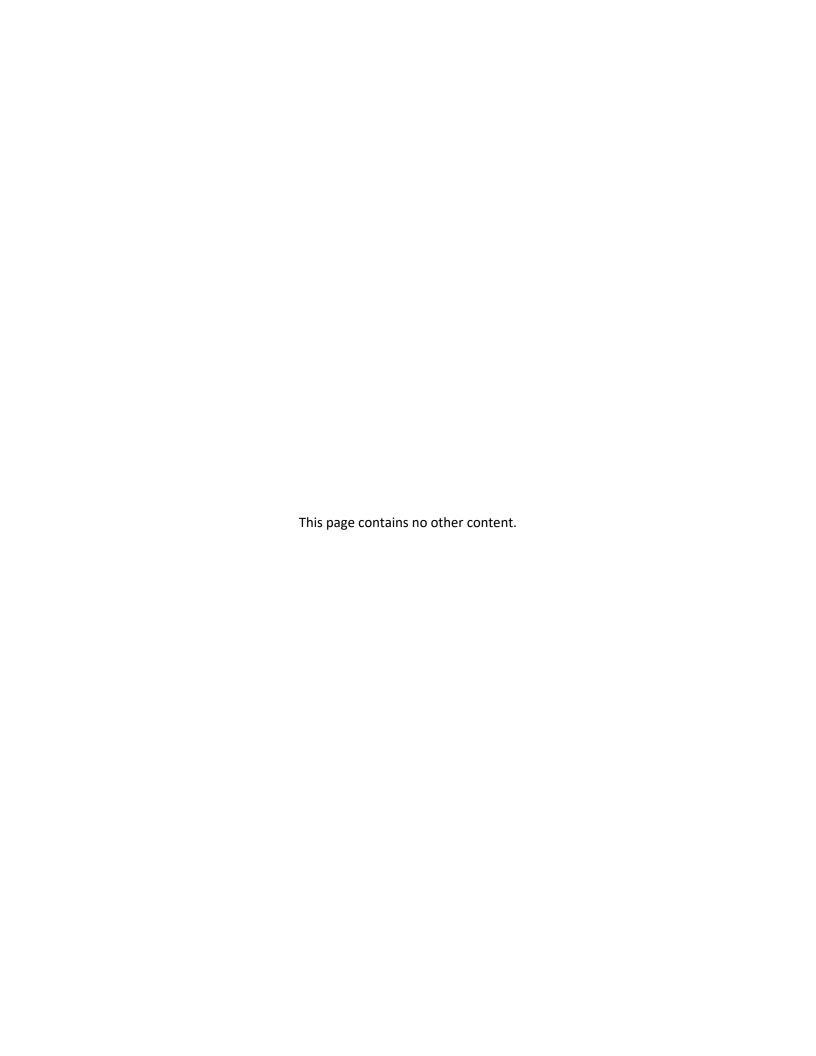
Year Ended June 30, 2020 (Amounts expressed in thousands)

	9	CRS	PORS		G	GARS		ISRS	SCNG		TOTALS ¹	
Short Term	\$	590	\$	106	\$	1	\$	3	\$	1	\$	701
Fixed Income:												
Core Fixed Income		1,496		268		2		9		1		1,776
High Yield/Bank Loans		6,049		1,084		7		37		6		7,183
Emerging Market Debt		3,821		685		5		23		4		4,538
Global Public Equity		20,558		3,683		25		124		21	2	24,411
Equity Options Strategy		2,911		521		3		18		3		3,456
Public Real Estate		1,218		218		1		7		1		1,445
Public Infrastructure		2,604		467		3		16		3		3,093
Opportunistic/GTAA		7,348		1,320		9		45		7		8,729
Beta Overlay		1,205		216		2		7		1		1,431
Alternatives:												
Hedge Funds		76,442	1	3,738		92		463		78	g	90,813
Private Debt		15,603		2,797		19		94		16	1	18,529
Private Equity		18,618		3,309		22		111		19	2	22,079
Private Real Estate		18,705		3,328		22		112		19	2	22,186
Private Infrastructure		4,754		853		5		29		5		5,646
Strategic Partnerships ²		1,300		234		1		8		1		1,544
Total Investment Manager Fees	1	83,222	3	2,827		219		1,106		186	21	L7,560
Bank Fees and Investment Expenses ³		11,656		2,063		14		69		12	1	13,814
Total Investment Expenses	1	94,878	3	4,890		233		1,175		198	23	31,374
Securities Lending Expenses:												
Borrower Rebates	Ċ	(149)	\$	(27)	\$	_	\$	(1)	\$		\$	(177)
	\$			_								
Total Securities Lending Expenses	\$	(149)	\$	(27)	\$		\$	(1)	\$		\$	(177)

¹ All investment manager fees, whether directly invoiced (\$39,264) or deducted from the fund on a net basis (\$178,296) 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.





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, 2020, 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 15, 2020.

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.



The Honorable Henry D. McMaster, Governor Mr. George L. Kennedy, CPA, State Auditor, and Board of Directors
South Carolina Public Employee Benefit Authority

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

Clifton Larson Allen LLP

Baltimore, Maryland October 15, 2020