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EMPLOYEES' RETIREMENT SYSTEM OF GEORGIA

(Including All Plans and Funds Administered by the Employees' Retirement System of Georgia)

(A Component Unit of the State of Georgia)

Financial Statements,
Required Supplementary Information, and
Additional Information

June 30, 2017

(With Independent Auditors' Report Thereon)

EMPLOYEES' RETIREMENT SYSTEM OF GEORGIA
(Including All Plans and Funds Administered by the
Employees' Retirement System of Georgia)
(A Component Unit of the State of Georgia)

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KPMG LLP
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Independent Auditors' Report

The Board of Trustees
Employees' Retirement System of Georgia:

Report on the Financial Statements

We have audited the accompanying financial statements of the fiduciary activities and the proprietary activities of the Employees' Retirement System of Georgia (the System), a component unit of the State of Georgia, as of and for the year ended June 30, 2017, and the related notes to the financial statements, which collectively comprise the System's basic financial statements, as listed in the table of contents.

Management's Responsibility for the Financial Statements

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

Auditors' Responsibility

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

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

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

Opinions

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the fiduciary activities and proprietary activities of the System as of June 30, 2017, and the respective changes in financial position and where applicable, cash flows thereof for the year then ended, in accordance with U.S. generally accepted accounting principles.

Emphasis of Matter

As discussed in note 3(h) to the basic financial statements, the System adopted, in 2017, Governmental Accounting Standards Board Statement No. 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans (OPEB)*. Our opinion is not modified with respect to this matter.

Report on Summarized Comparative Information

We have previously audited the System's 2016 financial statements, and we expressed an unmodified audit opinion on those audited financial statements in our report dated September 30, 2016. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2016 is consistent, in all material respects, with the audited financial statements from which it has been derived.

Other Matters

Required Supplementary Information

U.S. generally accepted accounting principles require that the management's discussion and analysis, schedules of employers' and nonemployers' contributions, schedules of employers' and nonemployers' net pension/OPEB liability and related ratios, schedules of changes in employers' and nonemployers' net pension liability/OPEB, and schedule of investment returns, on pages 4–13 and 62–68, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic 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 basic financial statements, and other knowledge we obtained during our audit of the basic 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.

Supplementary and Other Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the System's basic financial statements. The Survivors Benefit Fund statement of changes in assets and liabilities and schedule of administrative expenses – contributions and expenses are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The Survivors Benefit Fund statement of changes in assets and liabilities and schedule of administrative expenses – contributions and expenses are the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the Survivors Benefit Fund statement of changes in assets and liabilities and the schedule of administrative expenses – contributions and expenses are fairly stated in all material respects in relation to the basic financial statements as a whole.

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Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated October 4, 2017 on our consideration of the System's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the System's internal control over financial reporting and compliance.

KPMG LLP

October 4, 2017

This section provides a discussion and analysis of the financial performance of the Employees' Retirement System of Georgia (the System) for the year ended June 30, 2017. The discussion and analysis of the System's financial performance is within the context of the accompanying basic financial statements, notes to the financial statements, required supplementary schedules, and additional information following this section.

The System is responsible for administering a cost-sharing, multiple-employer defined benefit pension plan for various employer agencies of Georgia, along with six other defined benefit pension plans, a defined benefit OPEB plan, three defined contribution plans, and an agency fund, which comprise the fiduciary funds. The System is also responsible for administering an enterprise fund, which comprises the proprietary fund.

The defined benefit pension plans include:

- Employees' Retirement System (ERS)
- Public School Employees Retirement System (PSERS)
- Legislative Retirement System (LRS)
- Georgia Judicial Retirement System (GJRS)
- Georgia Military Pension Fund (GMPF)
- Superior Court Judges Retirement Fund (SCJRF)
- District Attorneys Retirement Fund (DARF)

The defined benefit OPEB plan consists of the State Employees' Assurance Department Retired and Vested Inactive Members Trust Fund (SEAD-OPEB).

The defined contribution retirement plans include:

- Georgia Defined Contribution Plan (GDCP)
- State of Georgia Employees' Qualified Trust Deferred Compensation Plan (401(k) Plan)
- State of Georgia Employees' Deferred Compensation Plan (457 Plan)

The agency fund consists of the Survivors Benefit Fund (SBF).

The enterprise fund consists of the State Employees' Assurance Department Active Members Fund (SEAD-Active).

(Continued)

Overview of the Financial Statements

In fiscal year 2017, the System adopted the provisions of Governmental Accounting Standards Board (GASB) Statement No. 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans (OPEB),* and revised its accounting methodology with regard to the presentation of its group term life insurance plan for active members, SEAD-Active, and its custodial fund for maintaining group term life insurance coverage for members of SEAD-Active and SEAD-OPEB, the SBF. Prior year comparative totals have been restated to reflect this change. Additional discussion of the GASB Statement No. 74 implementation and the restatement of previously reported amounts can be found in note (3)(h) in the notes to the financial statements.

A fund is a grouping of related accounts that is used to maintain control over resources that have been segregated for specific activities or objectives. The System administers two categories of funds: fiduciary funds and a proprietary fund. Information related to the financial statements of the funds is presented in the notes to the financial statements.

Fiduciary funds are used to account for resources held for the benefit of parties outside of the System. The primary focus of the System's fiduciary funds is the accumulation of resources for and the payment of pension and OPEB benefits. The System maintains four types of fiduciary funds: (1) defined benefit pension trust funds which are used to report resources held in trust for pensions for retirees and beneficiaries covered by ERS, PSERS, LRS, GJRS, GMPF, SCJRF, and DARF (2) a defined benefit OPEB trust fund which is used to report resources held in trust for other postemployment benefits of retirees and beneficiaries of SEAD-OPEB (3) defined contribution pension trust funds which are used to accumulate contributions and earnings in the accounts of participants covered by GDCP, the 401(k) Plan, and the 457 Plan, and (4) an agency fund which is used to report resources held by the SBF in a custodial capacity for other plans.

Proprietary funds, which include enterprise and internal services funds, are used to account for the System's activities that are similar to private-sector businesses. The System maintains one proprietary fund, an enterprise fund. The primary focus of the System's enterprise fund is the accumulation of resources for, and payment of, group term life insurance benefits for active members of ERS, LRS, and GJRS covered by SEAD-Active.

The basic financial statements comprise statements for both fiduciary and proprietary funds. The fiduciary fund financial statements include (1) *Combining Statement of Fiduciary Net Position* (2) *Defined Benefit Plans – Combining Statement of Fiduciary Net Position* (3) *Combining Statement of Changes in Fiduciary Net Position*, and (4) *Defined Benefit Plans – Combining Statement of Changes in Fiduciary Net Position.* The proprietary fund financial statements include (1) *Statement of Net Position* (2) *Statement of Revenues, Expenses, and Changes in Net Position* and (3) *Statement of Cash Flows.*

In addition, the System presents four types of required supplementary schedules, which provide historical trend information about the plan. The four schedules are (1) Schedules of Employers' and Nonemployers' Contributions (2) Schedules of Employers' and Nonemployers' Net Pension/OPEB Liability and Related Ratios (3) Schedules of Changes in Employers' and Nonemployers' Net Pension/OPEB Liability and (4) Schedule of Investment Returns. The System also includes in this report additional information to supplement the financial statements.

The System prepares its financial statements on the accrual basis of accounting in accordance with U.S. generally accepted accounting principles as promulgated by the GASB. These statements provide information about the System's overall financial status.

Financial Highlights

The highlights of the fiduciary funds of the System are as follows:

- The net position of the fiduciary funds increased by $1.1 billion, or 7.0%, from $16.0 billion at June 30, 2016 to $17.1 billion at June 30, 2017. The increase in net position from 2016 to 2017 was primarily due to the increase in equity markets.
- For the year ended June 30, 2017, the total additions to net position were $2.8 billion compared to $1.0 billion for the year ended June 30, 2016. For the year ended June 30, 2017, the additions consisted of employer, nonemployer contributing entities (nonemployer), and member contributions totaling $868.8 million, insurance premiums of $3.8 million, net investment income of $1.9 billion, and participant fees of $1.6 million.
- Net investment income of $1.9 billion in 2017 (comprising interest and dividend income, the change in fair value of investments, and other, reduced by investment expenses) represents a $1.7 billion increase, compared to the net investment income of $188.0 million for the year ended June 30, 2016. The net investment income was higher in 2017 compared to 2016 due primarily to higher returns in equity markets.
- The total deductions from net position were $1.6 billion for the years ended June 30, 2017 and 2016. For the year ended June 30, 2017, the deductions consisted of benefit payments of $1.6 billion, refunds of $21.8 million, death benefits related to OPEB of $36.0 million, and administrative expenses of $16.5 million.
- Benefit payments paid to retirees and beneficiaries had an increase of $55.8 million, or 3.7%, from $1.5 billion in 2016 to $1.6 billion in 2017, resulting primarily from an increase in the number of retirees and beneficiaries receiving benefits in 2017.

The highlights of the proprietary fund of the System are as follows:

- The net position of the proprietary fund increased by $26.3 million to $267.3 million at June 30, 2017 compared to $241.0 million at June 30, 2016. The increase in net position from 2016 to 2017 was primarily due to the increase in equity markets.
- For the year ended June 30, 2017, total operating loss was $3.5 million compared to $2.8 million for the year ended June 30, 2016. The increase relates primarily to the increase in the number of active members who received death benefits during the year.

 (Continued)

- Investment income allocated from the pooled investment fund of $29.8 million in 2017 represents a $26.7 million increase, compared to investment income allocated from the pooled investment fund of $3.1 million for the year ended June 30, 2016. The investment income allocated from the pooled investment fund was higher in 2017 compared to 2016 due primarily to higher returns in equity markets.

Description of the Financial Statements

Fiduciary Funds

The *Combining Statement of Fiduciary Net Position* is the statement of financial position presenting information that includes the fiduciary funds' assets and liabilities, with the balance representing the *Net Position Restricted for Pensions and OPEB*. The investments of the funds in this statement are presented at fair value. This statement is presented on page 14.

The *Combining Statement of Changes in Fiduciary Net Position* reports how the fiduciary funds' net position changed during the fiscal year. The additions include contributions to the retirement plans from employers, nonemployers, and members; group term life insurance premiums; participant fees; and net investment income, which includes interest and dividends and the net increase in the fair value of investments, net of investment expenses. The deductions include benefit payments, life insurance death benefit payments, refunds of member contributions and interest, and administrative expenses. This statement is presented on page 16.

The *Defined Benefit Plans' Combining Statement of Fiduciary Net Position* and the *Combining Statement of Changes in Fiduciary Net Position* present the financial position and changes in financial position for each of the defined benefit plans administered by the System. These statements are on pages 15 and 17, respectively.

Proprietary Funds

The *Statement of Net Position* is the statement of financial position presenting information that includes the assets and liabilities, with the balance representing the net position. This statement is presented on page 18.

The *Statement of Revenues, Expenses, and Changes in Net Position* distinguishes operating revenues and expenses from nonoperating items. Principal operating revenues result from insurance premiums from members, while operating expenses result from death benefit payments and administrative expenses. All revenues and expenses not meeting this definition are reported as nonoperating revenues and expenses. This statement is presented on page 19.

The *Statement of Cash Flows* provides relevant information about cash receipts and cash payments during the year. When used in conjunction with related disclosures and information in the other financial statements, the statement provides relevant information about the plan's ability to generate future net cash flows, the plan's ability to meet its obligations as they come due, and presents the reasons for differences between operating income and associated cash receipts and payments. This statement is presented on page 20.

Notes to the Financial Statements are presented to provide the information necessary for a full understanding of the financial statements. The notes to the financial statements begin on page 21.

Required Supplementary Information begins on page 62. The required schedules are discussed as follows:

- The *Schedule of Employers' and Nonemployers' Contributions* presents the required contributions and the percent of required contributions actually contributed.
- The *Schedule of Employers' and Nonemployers' Net Pension/OPEB Liability and Related Ratios* presents the components of the net pension/OPEB liability as of the fiscal year end and the fiduciary net position as a percentage of the total pension/OPEB liability as of that date. This trend information will be accumulated to display a 10-year presentation.
- The *Schedule of Changes in Employers' and Nonemployers' Net Pension/OPEB Liability* presents total net pension/OPEB liability and is measured as total pension/OPEB liability less the amount of the fiduciary net position. This trend information will be accumulated to display a 10-year presentation.
- The *Schedule of Investment Returns* presents historical trend information about the annual money-weighted rate of return on plan investments, net of plan investment expense. This trend information will be accumulated to display a 10-year presentation.

Three of the required schedules above, the *Schedules of Employers' and Nonemployers' Contributions*, the *Schedules of Employers' and Nonemployers' Net Pension/OPEB Liability and Related Ratios,* and the *Schedules of Changes in Employers' and Nonemployers' Net Pension/OPEB Liability* are applicable to five of the defined benefit pension plans (ERS, PSERS, LRS, GJRS, and GMPF) and the defined benefit OPEB plan (SEAD-OPEB).

Notes to Required Supplementary Information are presented to provide the information necessary for a full understanding of the supplementary schedules. The notes to required supplementary information begin on page 69.

Additional information is presented, beginning on page 72, and includes the *Statement of Changes in Assets and Liabilities* for the Survivors Benefit Fund which presents additions to and deductions from the fund, and the *Schedule of Administrative Expenses – Contributions and Expenses* which presents the expenses incurred in the administration of the plans and funds, and the contributions from each plan and fund to provide for these expenses.

(Continued)

Financial Analysis of the System

A summary of the System's net position of the fiduciary funds at June 30, 2017 is as follows (dollars in thousands):

		Net position			
		2017	2016, as restated	Amount change	Percentage change
Assets:					
Cash, cash equivalents, and receivables	$	330,585	360,283	(29,698)	(8.2)%
Investments		17,253,626	16,057,818	1,195,808	7.4
Capital assets, net		6,904	6,943	(39)	(0.6)
Total assets		17,591,115	16,425,044	1,166,071	7.1
Liabilities:					
Due to brokers and accounts payable		41,428	43,729	(2,301)	(5.3)
Due to other funds/plans and participating systems		403,237	361,912	41,325	11.4
Total liabilities		444,665	405,641	39,024	9.6
Net position	$	17,146,450	16,019,403	1,127,047	7.0

A summary of the System's net position of the proprietary fund at June 30, 2017 is as follows (dollars in thousands):

		Net position		Amount	Percentage
		2017	2016	change	change
Assets:					
Cash, cash equivalents, and receivables	$	127	94	33	35.1 %
Investments		267,194	240,948	26,246	10.9
Total assets		267,321	241,042	26,279	10.9
Liabilities:					
Accounts payable and other		35	57	(22)	(38.6)
Net position	$	267,286	240,985	26,301	10.9

(Continued)

The following table presents the investment allocation at June 30, 2017 and 2016:

		2017	2016
Asset allocation at June 30 (in percentages):			
Equities:			
Domestic		47.8 %	47.8 %
International		16.1	14.5
Private equity		0.8	0.6
Domestic obligations:			
U.S. Treasuries		14.6	13.8
Corporate and other bonds		10.9	14.1
International obligations:			
Governments		0.5	0.5
Corporates		1.1	1.1
Mutual funds		—	—
Commingled funds		8.2	7.6
Asset allocation at June 30 (in thousands):			
Equities:			
Domestic	$	8,249,643	7,673,204
International		2,780,668	2,332,236
Private equity		134,213	93,885
Domestic obligations:			
U.S. Treasuries		2,516,114	2,223,199
Corporate and other bonds		1,882,175	2,257,447
International obligations:			
Governments		76,935	77,266
Corporates		192,589	174,512
Mutual funds		5,601	5,084
Commingled funds		1,415,688	1,220,985
	$	17,253,626	16,057,818

The total investment portfolio increased by $1.2 billion from 2016, which is primarily due to the increase in equity markets.

Investment performance is calculated using a time-weighted rate of return using the Daily Valuation Method. The time-weighted rate of return for the fiscal year ended June 30, 2017 was 12.4% with a 19.2% return for equities, a 7.5% return for private equity (inception date of October 3, 2013), and a (1.0)% return for fixed income. The five-year annualized rate of return at June 30, 2017 was 9.5%, with a 12.8% return for equities and a 1.8% return for fixed income.

A money-weighted return is weighted by the amount of dollars in the fund at the beginning and end of the performance period. A money-weighted return is highly influenced by the timing of cash flows into and out of the fund and is a better measure of an entity or person who controls the cash flows into or out of the fund. The nondiscretionary cash flows for the plan, primarily contributions and benefit payments, have a considerable impact on the money-weighted returns of the portfolio. The money-weighted rate of return for the fiscal year ended June 30, 2017 was 2.9%, compared to (7.2)% for the fiscal year ended June 30, 2016.

A summary of the changes in the System's net position of the fiduciary funds for the year ended June 30, 2017 is as follows (dollars in thousands):

	Changes in net position			
	2017	2016, as restated	Amount change	Percentage change
Additions:				
Employer contributions	$ 657,190	621,060	36,130	5.8 %
Nonemployer contributions	40,960	43,933	(2,973)	(6.8)
Member contributions	170,608	151,264	19,344	12.8
Participant fees	1,584	1,429	155	10.8
Insurance premiums	3,793	3,931	(138)	(3.5)
Net investment income	1,901,409	188,045	1,713,364	911.1
Other	15	15	—	—
Total additions	2,775,559	1,009,677	1,765,882	174.9
Deductions:				
Benefit payments	1,574,118	1,518,314	55,804	3.7
Refunds	21,849	19,762	2,087	10.6
Death benefits	36,058	33,911	2,147	6.3
Administrative expenses	16,487	16,178	309	1.9
Total deductions	1,648,512	1,588,165	60,347	3.8
Net increase (decrease) in net position	$ 1,127,047	(578,488)	1,705,535	294.8

Additions – The System accumulates resources needed to fund benefit payments through contributions and returns on invested funds. In fiscal year 2017, total contributions increased $52.5 million, or 6.4%, primarily because of an increase in the number of active members coupled with modest overall salary increases. Net investment income increased by $1.7 billion, or 911.1%, due primarily to positive returns in equity markets.

(Continued)

Deductions – For fiscal year 2017, total deductions increased 3.8%, primarily because of a 3.7% increase in benefit payments. Pension benefit payments increased due to an increase in the number of retirees and beneficiaries receiving benefits in 2017 and one-time payments for cost-of-living adjustments. Refunds increased by 10.6%, which was primarily due to an increase in the number of refunds processed during 2017. Death benefits increased by 6.3%, which was primarily due to an increase in the number of death claims processed during 2017. Administrative expenses increased by 1.9% over the prior year, primarily due to increases in personal services and contractual services.

A summary of the changes in the System's net position of the proprietary fund for the year ended June 30, 2017 is as follows (dollars in thousands):

	Changes in net position		Amount	Percentage
	2017	**2016**	**change**	**change**
Operating revenue:				
Insurance premiums	$ 599	611	(12)	(2.0)%
Total operating revenue	599	611	(12)	(2.0)
Operating expenses:				
Death benefits	4,019	3,345	674	20.1
Administrative expenses	64	67	(3)	(4.5)
Total operating expenses	4,083	3,412	671	19.7
Total operating loss	(3,484)	(2,801)	(683)	24.4
Nonoperating revenue:				
Allocation of investment income from pooled investment fund, net	29,785	3,109	26,676	858.0
Change in net position	$ 26,301	308	25,993	8,439.3

Operating and nonoperating revenue – The proprietary fund accumulates resources needed to fund death benefit payments through premiums earned and returns on invested funds. In fiscal year 2017, total premiums earned decreased $12.0 thousand, or 2%, primarily due to a decrease in the number of participating members. Allocation of investment income from the pooled investment fund, net of related expenses, increased by $26.7 million, or 858.0%, due primarily to positive returns in equity markets.

(Continued)

Operating expenses – For fiscal year 2017, death benefits increased by 20.1%, which was primarily due to an increase in the number of death claims processed during 2017. Administrative expenses decreased by 4.5% over the prior year primarily due to improved administrative efficiency.

Requests for Information

This financial report is designed to provide a general overview of the System's finances for all those with interest in the System's finances. Questions concerning any of the information provided in this report or requests for additional information should be addressed to Employees' Retirement System of Georgia, Two Northside 75, Suite 300, Atlanta, GA 30318.

EMPLOYEES' RETIREMENT SYSTEM OF GEORGIA
(Including All Plans and Funds Administered by the
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(A Component Unit of the State of Georgia)

Combining Statement of Fiduciary Net Position

June 30, 2017
(With comparative totals as of June 30, 2016)

(In thousands)

			Defined contribution plans			Agency fund		Total	
Assets	**Defined Benefit Plans**	**Pooled Investment Fund**	**Georgia Defined Contribution Plan**	**401(k) Plan**	**457 Plan**	**Survivors Benefit Fund**	**Eliminations**	**2017**	**2016, as restated**
Cash and cash equivalents	$ 31,827	160,096	24,971	16,882	1,196	92	—	235,064	222,327
Receivables:									
Contributions	35,084	—	934	2,550	339	—	—	38,907	39,882
Interest and dividends	—	43,440	359	—	—	—	—	43,799	42,486
Due from brokers for securities sold	—	10,241	—	—	—	—	—	10,241	53,612
Other	1,973	—	—	519	82	—	—	2,574	1,976
Unremitted insurance premiums	555	—	—	—	—	—	(555)	—	—
Total receivables	37,612	53,681	1,293	3,069	421	—	(555)	95,521	137,956
Investments – at fair value:									
Domestic obligations:									
U.S. Treasuries	—	2,476,243	39,871	—	—	—	—	2,516,114	2,223,199
Corporate and other bonds	—	1,836,572	45,603	—	—	—	—	1,882,175	2,257,447
International obligations:									
Governments	—	76,935	—	—	—	—	—	76,935	77,266
Corporates	—	192,589	—	—	—	—	—	192,589	174,512
Equities:									
Domestic	—	8,237,632	—	6,336	5,675	—	—	8,249,643	7,673,204
International	—	2,779,518	—	498	652	—	—	2,780,668	2,332,236
Private equity	—	134,213	—	—	—	—	—	134,213	93,885
Mutual funds	—	—	—	2,801	2,800	—	—	5,601	5,084
Commingled funds	—	—	—	827,810	587,878	—	—	1,415,688	1,220,985
Equity in pooled investment fund	15,531,378	—	—	—	—	135,951	(15,667,329)	—	—
Total investments	15,531,378	15,733,702	85,474	837,445	597,005	135,951	(15,667,329)	17,253,626	16,057,818
Capital assets, net	6,904	—	—	—	—	—	—	6,904	6,943
Total assets	15,607,721	15,947,479	111,738	857,396	598,622	136,043	(15,667,884)	17,591,115	16,425,044
Liabilities									
Accounts payable and other	24,528	1,833	464	2,399	1,009	—	—	30,233	29,648
Due to brokers for securities purchased	—	11,123	—	—	—	—	—	11,123	14,001
Insurance premiums payable	627	—	—	—	—	—	(555)	72	80
Due to other funds/plans	—	—	—	—	—	136,043	—	136,043	120,964
Due to participating systems	—	15,934,523	—	—	—	—	(15,667,329)	267,194	240,948
Total liabilities	25,155	15,947,479	464	2,399	1,009	136,043	(15,667,884)	444,665	405,641
Net position restricted for pensions and OPEB	$ 15,582,566	—	111,274	854,997	597,613	—	—	17,146,450	16,019,403

See accompanying notes to financial statements.

EMPLOYEES' RETIREMENT SYSTEM OF GEORGIA
(Including All Plans and Funds Administered by the
Employees' Retirement System of Georgia)
(A Component Unit of the State of Georgia)

Defined Benefit Plans – Combining Statement of Fiduciary Net Position

June 30, 2017

(In thousands)

	Defined benefit pension plans							Defined benefit OPEB plan	
Assets	**Employees' Retirement System**	**Public School Employees Retirement System**	**Legislative Retirement System**	**Georgia Judicial Retirement System**	**Georgia Military Pension Fund**	**Superior Court Judges Retirement Fund**	**District Attorneys Retirement Fund**	**State Employees' Assurance Department OPEB**	**Defined benefit plans Total**
Cash and cash equivalents	$ 30,951	3	14	579	94	23	3	160	31,827
Receivables:									—
Contributions	34,256	—	28	800	—	—	—	—	35,084
Interest and dividends	—	—	—	—	—	—	—	—	—
Due from brokers for securities sold	—	—	—	—	—	—	—	—	—
Other	1,815	156	1	1	—	—	—	—	1,973
Unremitted insurance premiums	—	—	—	—	—	—	—	555	555
Total receivables	36,071	156	29	801	—	—	—	555	37,612
Investments – at fair value:									
Domestic obligations:									
U.S. Treasuries	—	—	—	—	—	—	—	—	—
Corporate and other bonds	—	—	—	—	—	—	—		—
International obligations:									
Governments	—	—	—	—	—	—	—	—	—
Corporates	—	—	—	—	—	—	—	—	—
Equities:									
Domestic	—	—	—	—	—	—	—	—	—
International	—	—	—	—	—	—	—	—	—
Private equity	—	—	—	—	—	—	—	—	—
Mutual funds	—	—	—	—	—	—	—	—	—
Commingled funds	—	—	—	—	—	—	—	—	—
Equity in pooled investment fund	13,047,409	868,952	33,039	440,443	20,682	—	—	1,120,853	15,531,378
Total investments	13,047,409	868,952	33,039	440,443	20,682	—	—	1,120,853	15,531,378
Capital assets, net	6,904	—	—	—	—	—	—	—	6,904
Total assets	13,121,335	869,111	33,082	441,823	20,776	23	3	1,121,568	15,607,721
Liabilities									
Accounts payable and other	22,421	977	100	630	65	17	1	317	24,528
Due to brokers for securities purchased	—	—	—	—	—	—	—	—	—
Insurance premiums payable	615	—	1	11	—	—	—	—	627
Due to other funds/plans	—	—	—	—	—	—	—	—	—
Due to participating systems	—	—	—	—	—	—	—	—	—
Total liabilities	23,036	977	101	641	65	17	1	317	25,155
Net position restricted for pensions and OPEB	$ 13,098,299	868,134	32,981	441,182	20,711	6	2	1,121,251	15,582,566

See accompanying notes to financial statements.

EMPLOYEES' RETIREMENT SYSTEM OF GEORGIA
(Including All Plans and Funds Administered by the
Employees' Retirement System of Georgia)
(A Component Unit of the State of Georgia)

Combining Statement of Changes in Fiduciary Net Position

Year ended June 30, 2017
(With comparative totals for the year ended June 30, 2016)

(In thousands)

	Defined Benefit Plans	Pooled Investment Fund	Defined contribution plans: Georgia Defined Contribution Plan	Defined contribution plans: 401(k) Plan	Defined contribution plans: 457 Plan	Total: 2017	Total: 2016, as restated
Additions:							
Contributions:							
Employer	$ 620,429	—	—	36,761	—	657,190	621,060
Nonemployer	40,960	—	—	—	—	40,960	43,933
Member	43,180	—	14,921	93,608	18,899	170,608	151,264
Participant fees	—	—	—	1,584	—	1,584	1,429
Insurance premiums	3,793	—	—	—	—	3,793	3,931
Administrative expense allotment	15	—	—	—	—	15	15
Investment income:							
Net increase (decrease) in fair value of investments	—	1,475,241	(2,871)	90,838	59,625	1,622,833	(128,775)
Interest and dividends	—	339,807	1,871	16	—	341,694	340,308
Other	—	—	—	537	610	1,147	1,107
Less investment expenses	(9,278)	(6,690)	(56)	(2,620)	(694)	(19,338)	(19,815)
Allocation of investment income	1,763,431	(1,808,358)	—	—	—	(44,927)	(4,780)
Net investment income (loss)	1,754,153	—	(1,056)	88,771	59,541	1,901,409	188,045
Total additions	2,462,530	—	13,865	220,724	78,440	2,775,559	1,009,677
Deductions:							
Benefit payments	1,479,380	—	—	55,866	38,872	1,574,118	1,518,314
Refunds of member contributions and interest	10,305	—	11,544	—	—	21,849	19,762
Death benefits	36,058	—	—	—	—	36,058	33,911
Administrative expenses	11,817	—	785	3,096	789	16,487	16,178
Total deductions	1,537,560	—	12,329	58,962	39,661	1,648,512	1,588,165
Net increase (decrease) in net position	924,970	—	1,536	161,762	38,779	1,127,047	(578,488)
Net position restricted for pensions and OPEB:							
Beginning of year, as restated	14,657,596	—	109,738	693,235	558,834	16,019,403	16,597,891
End of year	$ 15,582,566	—	111,274	854,997	597,613	17,146,450	16,019,403

See accompanying notes to financial statements.

EMPLOYEES' RETIREMENT SYSTEM OF GEORGIA
(Including All Plans and Funds Administered by the
Employees' Retirement System of Georgia)
(A Component Unit of the State of Georgia)

Defined Benefit Plans – Combining Statement of Changes in Fiduciary Net Position

Year ended June 30, 2017

(In thousands)

	Defined benefit pension plans							Defined benefit OPEB plan	
	Employees' Retirement System	Public School Employees Retirement System	Legislative Retirement System	Georgia Judicial Retirement System	Georgia Military Pension Fund	Superior Court Judges Retirement Fund	District Attorneys Retirement Fund	State Employees' Assurance Department OPEB	Defined Benefit Plans Total
Additions:									
Contributions:									
Employer	$ 613,201	—	—	4,081	2,018	1,077	51	1	620,429
Nonemployer	12,080	26,277	—	2,603	—	—	—	—	40,960
Member	35,863	2,084	327	4,906	—	—	—	—	43,180
Participant fees	—	—	—	—	—	—	—	—	—
Insurance premiums	—	—	—	—	—	—	—	3,793	3,793
Administrative expense allotment	10	—	—	—	—	1	4	—	15
Investment income:									
Net increase (decrease) in fair value of investments	—	—	—	—	—	—	—	—	—
Interest and dividends	—	—	—	—	—	—	—	—	—
Other	—	—	—	—	—	—	—	—	—
Less investment expenses	(8,157)	(371)	(10)	(179)	(6)	—	—	(555)	(9,278)
Allocation of investment income	1,483,783	98,086	3,751	49,438	2,268	—	—	126,105	1,763,431
Net investment income	1,475,626	97,715	3,741	49,259	2,262	—	—	125,550	1,754,153
Total additions	2,136,780	126,076	4,068	60,849	4,280	1,078	55	129,344	2,462,530
Deductions:									
Benefit payments	1,394,283	59,378	1,763	21,784	1,042	1,079	51	—	1,479,380
Refunds of member contributions and interest	9,033	1,031	75	166	—	—	—	—	10,305
Death benefits	—	—	—	—	—	—	—	36,058	36,058
Administrative expenses	8,732	1,308	224	728	244	1	4	576	11,817
Total deductions	1,412,048	61,717	2,062	22,678	1,286	1,080	55	36,634	1,537,560
Net increase (decrease) in net position	724,732	64,359	2,006	38,171	2,994	(2)	—	92,710	924,970
Net position restricted for pensions and OPEB:									
Beginning of year, as restated	12,373,567	803,775	30,975	403,011	17,717	8	2	1,028,541	14,657,596
End of year	$ 13,098,299	868,134	32,981	441,182	20,711	6	2	1,121,251	15,582,566

See accompanying notes to financial statements.

EMPLOYEES' RETIREMENT SYSTEM OF GEORGIA
(Including All Plans and Funds Administered by the
Employees' Retirement System of Georgia)
(A Component Unit of the State of Georgia)

Statement of Net Position

State Employees' Assurance Department Active Members Fund

June 30, 2017
(With comparative totals as of June 30, 2016)

(In thousands)

		2017	2016
Assets			
Cash and cash equivalents	$	55	14
Receivables:			
Unremitted insurance premiums		72	80
Investments – at fair value:			
Equity share of pooled investment fund		267,194	240,948
Total assets		267,321	241,042
Liabilities			
Accounts payable and other		35	57
Total liabilities		35	57
Total net position	$	267,286	240,985

See accompanying notes to financial statements.

EMPLOYEES' RETIREMENT SYSTEM OF GEORGIA
(Including All Plans and Funds Administered by the
Employees' Retirement System of Georgia)
(A Component Unit of the State of Georgia)

Statement of Revenues, Expenses, and Changes in Net Position

State Employees' Assurance Department Active Members Fund

Year ended June 30, 2017
(With comparative totals for the year ended June 30, 2016)

(In thousands)

		2017	2016
Operating revenue:			
Insurance premiums	$	599	611
Total operating revenue		599	611
Operating expenses:			
Death benefits		4,019	3,345
Administrative expenses		64	67
Total operating expenses		4,083	3,412
Total operating loss		(3,484)	(2,801)
Nonoperating revenues (expenses):			
Allocation of investment income from pooled investment fund		29,847	3,169
Investment expenses		(62)	(60)
Total nonoperating revenues		29,785	3,109
Change in net position		26,301	308
Total net position:			
Beginning of year		240,985	240,677
End of year	$	267,286	240,985

See accompanying notes to financial statements.

EMPLOYEES' RETIREMENT SYSTEM OF GEORGIA
(Including All Plans and Funds Administered by the
Employees' Retirement System of Georgia)
(A Component Unit of the State of Georgia)

Statement of Cash Flows

State Employees' Assurance Department Active Members Fund

Year ended June 30, 2017
(With comparative totals for the year ended June 30, 2016)

(In thousands)

		2017	2016
Cash flows from operating activities:			
Insurance premiums received	$	607	614
Death benefits paid		(4,019)	(3,345)
Administrative fees paid		(85)	(53)
Net cash used in operating activities		(3,497)	(2,784)
Cash flows from investing activities:			
Withdrawals from pooled investment fund		3,600	2,800
Investment expenses paid		(62)	(60)
Net cash provided by investing activities		3,538	2,740
Net increase (decrease) in cash and cash equivalents		41	(44)
Cash and cash equivalents, beginning of year		14	58
Cash and cash equivalents, end of year	$	55	14
Reconciliation of operating loss to net cash used in operating activities:			
Operating loss	$	(3,484)	(2,801)
Changes in assets and liabilities:			
Unremitted insurance premiums		8	4
Accounts payable and other		(21)	13
Net cash used in operating activities	$	(3,497)	(2,784)

See accompanying notes to financial statements.

(1) General

The accompanying basic financial statements of the Employees' Retirement System of Georgia, including all plans and funds administered by the Employees' Retirement System of Georgia (collectively, the System), comprises the Employees' Retirement System of Georgia (ERS), Public School Employees Retirement System (PSERS), Legislative Retirement System (LRS), Georgia Judicial Retirement System (GJRS), Georgia Military Pension Fund (GMPF), Superior Court Judges Retirement Fund (SCJRF), District Attorneys Retirement Fund (DARF), State Employees' Assurance Department Retired and Vested Inactive Members Trust Fund (SEAD-OPEB), Georgia Defined Contribution Plan (GDCP), State of Georgia Employee's Qualified Trust Deferred Compensation Plan (401(k) Plan), State of Georgia Employees' Deferred Compensation Plan (457 Plan), Survivors Benefit Fund (SBF), and State Employees' Assurance Department Active Members Fund (SEAD-Active). All significant transactions among the various systems, departments, and funds have been eliminated. The Boards of Trustees, comprising active and retired members, ex-officio state employees, and appointees by the Governor, are ultimately responsible for the administration of the System.

(2) Authorizing Legislation and Plan Descriptions

Each plan and fund, including benefit and contribution provisions, was established and can be amended by state law. The following summarizes authorizing legislation and the plan description of each retirement fund:

(a) ERS is a cost-sharing multiple-employer defined benefit pension plan established by the Georgia General Assembly during the 1949 Legislative Session for the purpose of providing retirement allowances for employees of the State of Georgia and its political subdivisions. ERS is directed by a Board of Trustees and has the powers and privileges of a corporation. There were 427 employers and 1 nonemployer contributing entity participating in the plan during 2017.

Membership

As of June 30, 2017, participation in ERS is as follows:

Inactive members and beneficiaries currently receiving benefits	49,632
Inactive members entitled to benefits but not yet receiving benefits	57,329
Active plan members	60,983
Total	167,944

Benefits

The ERS Plan supports three benefit tiers: Old Plan, New Plan, and Georgia State Employees' Pension and Savings Plan (GSEPS). Employees under the Old Plan started membership prior to July 1, 1982 and are subject to plan provisions in effect prior to July 1, 1982. Members hired on or after July 1, 1982 but prior to January 1, 2009 are New Plan members subject to modified plan provisions. Effective January 1, 2009, new state employees and rehired state employees who did not retain membership rights under the Old or New Plans are members of GSEPS. ERS members hired prior to January 1, 2009 also have the option to irrevocably change their membership to GSEPS.

Under the Old Plan, the New Plan, and GSEPS, a member may retire and receive normal retirement benefits after completion of 10 years of creditable service and attainment of age 60 or 30 years of creditable service, regardless of age. Additionally, there are some provisions allowing for early retirement after 25 years of creditable service for members under age 60.

Retirement benefits paid to members are based upon the monthly average of the member's highest 24 consecutive calendar months, multiplied by the number of years of creditable service, multiplied by the applicable benefit factor. Annually, postretirement cost-of-living adjustments may also be made to members' benefits, provided the members were hired prior to July 1, 2009. The normal retirement pension is payable monthly for life; however, options are available for distribution of the member's monthly pension, at reduced rates, to a designated beneficiary upon the member's death. Death and disability benefits are also available through ERS.

Contributions and Vesting

Member contributions under the Old Plan are 4% of annual compensation, up to $4,200, plus 6% of annual compensation in excess of $4,200. Under the Old Plan, the state pays member contributions in excess of 1.25% of annual compensation. Under the Old Plan, these state contributions are included in the members' accounts for refund purposes and are used in the computation of the members' earnable compensation for the purpose of computing retirement benefits. Member contributions under the New Plan and GSEPS are 1.25% of annual compensation. The state is required to contribute at a specified percentage of active member payrolls, determined annually by actuarial valuation. The state contributions are not at any time refundable to the member or his/her beneficiary.

Pursuant to The Official Code of Georgia Annotated (O.C.G.A.) 47-2-292, the employer contributions for local tax commissioners and their employees who took office or were employed prior to July 1, 2012 are funded by the State of Georgia on behalf of the local county employer. Pursuant to O.C.G.A. 47-2-290, the employer contribution for certain State Court employees is funded by the state on behalf of the local county employer.

Employer and nonemployer contributions as a percentage of covered payroll required for fiscal year 2017 were based on the June 30, 2014 actuarial valuation for the Old Plan, New Plan, and GSEPS, as follows:

	Old Plan	New Plan	GSEPS
Employer and nonemployer:			
Normal	1.38 %	6.13 %	3.13 %
Employer paid for member	4.75	—	—
Accrued liability	18.56	18.56	18.56
Total	24.69 %	24.69 %	21.69 %

Members become vested after 10 years of membership service. Upon termination of employment, member contributions with accumulated interest are refundable upon request by the member. However, if an otherwise vested member terminates and withdraws his/her member contributions, the member forfeits all rights to retirement benefits.

(b) PSERS is a cost-sharing multiple-employer defined benefit pension plan established by the Georgia General Assembly in 1969 for the purpose of providing retirement allowances for public school employees who are not eligible for membership in the Teachers Retirement System of Georgia. The ERS Board of Trustees, plus two additional trustees, administers PSERS. There were 184 employers and 1 nonemployer contributing entity participating in the plan during 2017.

Membership

As of June 30, 2017, participation in PSERS is as follows:

Inactive members and beneficiaries currently receiving benefits	18,104
Inactive members entitled to benefits but not yet receiving benefits	48,189
Active plan members	35,510
Total	101,803

Benefits

A member may retire and elect to receive normal monthly retirement benefits after completion of 10 years of creditable service and attainment of age 65. A member may choose to receive reduced benefits after age 60 and upon completion of 10 years of service.

Upon retirement, the member will receive a monthly benefit of $14.75, multiplied by the number of years of creditable service. Death and disability benefits are also available through PSERS. Additionally, PSERS may make periodic cost-of-living adjustments to the monthly benefits.

(Continued)

Contributions and Vesting

Individuals who became members prior to July 1, 2012 contribute $4 per month for nine months each fiscal year. Individuals who became members on or after July 1, 2012 contribute $10 per month for nine months each fiscal year. The State of Georgia, although not the employer of PSERS members, is required by statute to make employer contributions actuarially determined and approved and certified by the PSERS Board of Trustees.

Employer contributions required for the year ended June 30, 2017 were $727.97 per active member and were based on the June 30, 2014 actuarial valuation.

Members become vested after 10 years of creditable service. Upon termination of employment, member contributions with accumulated interest are refundable upon request by the member. However, if an otherwise vested member terminates and withdraws his/her member contributions, the member forfeits all rights to retirement benefits.

(c) LRS is a single-employer defined benefit pension plan established by the Georgia General Assembly from 1967 - 1971, and later reestablished in 1979, for the purpose of providing retirement allowances for all members of the Georgia General Assembly. LRS is administered by the ERS Board of Trustees. There was one employer in the plan for 2017.

Membership

As of June 30, 2017, participation in LRS is as follows:

Inactive members and beneficiaries currently receiving benefits	263
Inactive members entitled to benefits but not yet receiving benefits	164
Active plan members	222
Total	649

Benefits

A member's normal retirement is after eight years of creditable service and attainment of age 65, or eight years of membership service (four legislative terms) and attainment of age 62. A member may retire early and elect to receive a monthly retirement benefit after completion of eight years of membership service and attainment of age 60; however, the retirement benefit is reduced by 5% for each year the member is under age 62.

Upon retirement, the member will receive a monthly service retirement allowance of $36, multiplied by the number of years of creditable service. Death benefits are also available through the plan.

Contributions and Vesting

Member contributions are 8.5% of annual salary. The state pays member contributions in excess of 4.75% of annual compensation. Employer contributions are actuarially determined and approved and certified by the ERS Board of Trustees.

There were no employer contributions required for the year ended June 30, 2017 based on the June 30, 2014 actuarial valuation.

Members become vested after eight years of creditable service. Upon termination of employment, member contributions with accumulated interest are refundable upon request by the member.

However, if an otherwise vested member terminates and withdraws his/her member contributions, the member forfeits all rights to retirement benefits.

(d) GJRS is a cost-sharing multiple-employer defined benefit pension plan established by the Georgia General Assembly in 1998 for the purpose of providing retirement allowances for judges and solicitors generals of the state courts and juvenile court judges in Georgia, and their survivors and other beneficiaries, superior court judges of the State of Georgia, and district attorneys of the State of Georgia.

The GJRS was also created to serve the members and beneficiaries of the Trial Judges and Solicitors Retirement Fund, the Superior Court Judges Retirement System, and the District Attorneys Retirement System (collectively, the Predecessor Retirement Systems). As of June 30, 1998, any person who was an active, inactive, or retired member or beneficiary of the Predecessor Retirement Systems was transferred to GJRS in the same status effective July 1, 1998. All assets of the Predecessor Retirement Systems were transferred to GJRS as of July 1, 1998. The ERS Board of Trustees and three additional trustees administer GJRS. There were 94 employers and 1 nonemployer contributing entity participating in the plan during 2017.

Membership

As of June 30, 2017, participation in GJRS is as follows:

Inactive members and beneficiaries currently receiving benefits	346
Inactive members entitled to benefits but not yet receiving benefits	60
Active plan members	527
Total	933

Benefits

The normal retirement for GJRS is age 60, with 16 years of creditable service; however, a member may retire at age 60 with a minimum of 10 years of creditable service.

Annual retirement benefits paid to members are computed as 66⅔% of state-paid salary at retirement for district attorneys and superior court judges and 66⅔% of the average over 24 consecutive months for trial judges and solicitors, plus 1% for each year of credited service over 16 years, not to exceed 24 years. Early retirement benefits paid to members are computed as the pro rata portion of the normal retirement benefit, based on service not to exceed 16 years. Death, disability, and spousal benefits are also available.

Contributions and Vesting

Members are required to contribute 7.5% of their annual salary. Those who became members prior to July 1, 2012 must also contribute an additional 2.5% of their annual salary if spousal benefit is elected. Employer contributions are actuarially determined and approved and certified by the GJRS Board of Trustees.

Pursuant to O.C.G.A. 47-23-81, the employer contributions for state court judges and solicitors are funded by the State of Georgia on behalf of the local county employers and pursuant to O.C.G.A. 47-23-82, the employer contributions for juvenile court judges are funded by the state on behalf of local county employers.

Employer and nonemployer contributions required for fiscal year 2017 were based on the June 30, 2014 actuarial valuation, as follows:

Employer and nonemployer:	
Normal	14.55 %
Accrued liability	(4.07)
Total	10.48 %

Members become vested after 10 years of creditable service. Upon termination of employment, member contributions with accumulated interest are refundable upon request by the member. However, if an otherwise vested member terminates and withdraws his/her member contributions, the member forfeits all rights to retirement benefits.

(e) The GMPF is a single-employer defined benefit pension plan established on July 1, 2002 by the Georgia General Assembly for the purpose of providing retirement allowances and other benefits for members of the Georgia National Guard (the National Guard). The ERS Board of Trustees administers the GMPF.

Membership

As of June 30, 2017, GMPF had 985 retirees and beneficiaries currently receiving benefits. Active and inactive plan member information is maintained by one employer, the Georgia Department of Defense.

Benefits

A member becomes eligible for benefits upon attainment of age 60, with 20 or more years of creditable service (including at least 15 years of service as a member of the National Guard), having served at least 10 consecutive years as a member of the National Guard immediately prior to discharge, and having received an honorable discharge from the National Guard.

The retirement allowance is payable for life in the amount of $50 per month, plus $5 per month for each year of creditable service in excess of 20 years. The maximum benefit is $100 per month.

Contributions and Vesting

Employer contributions are actuarially determined and approved and certified by the ERS Board of Trustees. There are no member contributions required.

Employer contributions required for the year ended June 30, 2017 were $149.82 per active member and were based on the June 30, 2014 actuarial valuation.

A member becomes vested after 20 years of creditable service (including at least 15 years of service as a member of the National Guard), having served at least 10 consecutive years as a member of the National Guard immediately prior to discharge, and having received an honorable discharge from the National Guard.

(f) SCJRF is a single-employer defined benefit pension plan established by the Georgia General Assembly in 1945 for the purpose of providing retirement benefits to the superior court judges of the State of Georgia. SCJRF is directed by its own Board of Trustees. The Boards of Trustees for ERS and SCJRF entered into a contract for ERS to administer the plan effective July 1, 1995.

Membership

As of June 30, 2017, SCJRF had 16 retirees and beneficiaries currently receiving benefits and no active members. No new members are allowed into SCJRF.

Benefits

The normal retirement for SCJRF is age 68, with 19 years of creditable service, with a benefit of two-thirds the salary paid to superior court judges. A member may also retire at age 65, with a minimum of 10 years of creditable service, with a benefit of one-half the salary paid to superior court judges. Death, disability, and spousal benefits are also available.

Contributions and Vesting

Employer contributions are not actuarially determined, but are provided on an as-needed basis to fund current benefits.

(g) DARF is a multiple-employer defined benefit pension plan established by the Georgia General Assembly in 1949 for the purpose of providing retirement benefits to the district attorneys of the state of Georgia. DARF is directed by its own Board of Trustees. The Boards of Trustees for ERS and DARF entered into a contract for ERS to administer the plan effective July 1, 1995.

Membership

As of June 30, 2017, DARF had five retirees and beneficiaries currently receiving benefits and no active members. No new members are allowed into DARF.

Benefits

Persons appointed as district attorney emeritus shall receive an annual benefit of $15,000, or one-half of the state salary received by such person as a district attorney for the calendar year immediately prior to the person's retirement, whichever is greater.

Contributions and Vesting

Employer contributions are not actuarially determined, but are provided on an as-needed basis to fund current benefits.

(h) SEAD-OPEB is a cost-sharing multiple-employer defined benefit other postemployment benefit plan created in 2007 by the Georgia General Assembly to amend Title 47 of the O.C.G.A., relating to retirement, so as to establish a fund for the provision of term life insurance to retired and vested inactive members of ERS, LRS, and GJRS. Effective July 1, 2009, no newly hired members of any Georgia public retirement system are eligible for term life insurance under SEAD. The SEAD-OPEB trust fund accumulates the premiums received from the aforementioned retirement systems, including interest earned on deposits and investments of such payments from retired and vested inactive members. There were 455 employers and 1 nonemployer contributing entity participating in the plan during 2017.

As of June 30, 2017, participation in SEAD-OPEB is as follows:

Retirees and beneficiaries	41,717
Terminated employees	1,054
Active plan members	28,873
Total	71,644

Employee contribution rates as a percentage of member's salaries were appropriated for the fiscal year ended June 30, 2017 as follows: ERS Old Plan – 0.45% and ERS New Plan, LRS, and GJRS – 0.23%. ERS Old Plan members were hired prior to July 1, 1982 and New Plan members were hired on or after July 1, 1982, but prior to January 1, 2009.

Georgia law provides that employee contributions to the plan shall be in an amount established by the Board of Trustees not to exceed one-half of 1% of the member's earnable compensation. There were no employer contributions required for the fiscal year ended June 30, 2017.

According to the policy terms covering the lives of members, insurance coverage is provided on a monthly, renewable term basis, and no return premiums or cash value are earned. The net position represents the excess accumulation of investment income and premiums over benefit payments and expenses, and is held as a reserve for payment of death benefits under existing policies.

The amount of insurance for a retiree with creditable service prior to April 1, 1964 is the full amount of insurance under SEAD-Active in effect on the date of retirement. The amount of insurance for a service retiree with no creditable service prior to April 1, 1964 is 70% of the amount of insurance under SEAD-Active at age 60 or at termination, if earlier. Life insurance proceeds are paid in a lump sum to the beneficiary upon death of the retiree.

Administrative costs for the plan are determined based on the plan's share of overhead costs to accumulate and invest funds, actuarial services, and to process benefit payments to beneficiaries. Administrative fees are financed from the assets of the plan.

(i) GDCP is a defined contribution plan established by the Georgia General Assembly in July 1992 for the purpose of providing retirement allowances for state employees who are not members of a public retirement or pension system and do not participate in Social Security. GDCP is administered by the ERS Board of Trustees. There were 71 employers participating in the plan during 2017. There were 117,509 members as of June 30, 2017.

Benefits

A member may retire and elect to receive periodic payments after attainment of age 65. The payments will be based upon mortality tables and interest assumptions adopted by the ERS Board of Trustees. If a terminated member has less than $5,000 credited to his/her account, the ERS Board of Trustees has the option of requiring a lump-sum distribution to the member. Upon the death of a member, a lump-sum distribution equaling the amount credited to his/her account will be paid to the member's designated beneficiary.

Contributions and Vesting

Members are required to contribute 7.5% of their annual salary and vest immediately in the plan upon contribution. There are no employer contributions. Earnings will be credited to each member's account as adopted by the ERS Board of Trustees. Upon termination of employment, the amount of the member's account is refundable upon request by the member.

(Continued)

(j) The 401(k) Plan was established by the State of Georgia Employee Benefit Plan Council in accordance with Georgia Law 1985, as amended, O.C.G.A, Sections 45-18-50 through 45-18-58, and Section 401(k) of the Internal Revenue Code (IRC). On October 1, 1994, activity commenced when the 401(k) Plan became available to employees of the State of Georgia Community Service Boards (CSBs). On December 1, 1998, the 401(k) Plan became available to employees of the Georgia Lottery Corporation (GLC). On July 1, 2005, the Plan became available to employees of Fayette County Board of Education; on July 1, 2006, the Plan became available to employees of Walton County Board of Education; on January 1, 2010, the Plan became available to employees of Henry County Board of Education; and on July 1, 2017, the Plan will become available to employees of the Baldwin County Board of Education.

Effective July 1, 1998, the State of Georgia Employee's Deferred Compensation Group Trust (the Master Trust) was formed for the State of Georgia Deferred Compensation Program to serve as the funding medium for the 401(k) Plan. At that time, the 401(k) Plan began operating on an employee elective deferral basis for all state employees working at least 1,000 hours in a 12-month period. All assets of the 401(k) Plan are held in trust for the exclusive benefit of the participants and their beneficiaries. The assets of the 401(k) Plan and the 457 Plan are commingled in the Master Trust with the respective trusts owning units of the Master Trust. Participant contributions are invested according to the participant's investment election. If the participant does not make an election, investments are automatically defaulted to a Lifecycle Fund based on the participant's date of birth.

Effective July 1, 2005 (HB275), ERS became the trustee of the 401(k) Plan. Aon Hewitt, which became Alight Solutions in June 2017, and JPMorgan Chase hold, administer, and invest the assets of the Master Trust.

Contributions and Vesting

Participating CSBs, the GLC, and Walton and Henry County Boards of Education offer employer contributions, some matching, some automatic, and some a combination of both, to eligible employees at various rates (limited to a maximum of $265,000 base salary in calendar year 2016 and $270,000 in calendar year 2017). As of January 1, 2009, individual participants may defer up to 80% of eligible compensation, or up to limits prescribed by the IRC (whichever is less).

Effective January 1, 2009, in accordance with O.C.G.A. 47-2-350 through 47-2-360, newly hired state employees, as well as rehired state employees who did not maintain eligibility for the ERS Old Plan or New Plan, are members of GSEPS. From January 1, 2009 to June 30, 2014, the GSEPS tier included automatic enrollment in the 401(k) Plan at a contribution rate of 1% of salary. Effective July 1, 2014, in accordance with HB764, the employee contribution rate for automatic enrollment increased from 1% to 5%. The state matches 100% of the employee's initial 1% contribution and 50% of contributions above 1% and up to 5%. Therefore, the state will match 3% of salary when an employee contributes at least 5% to the 401(k) Plan. Employee contributions greater than 5% of salary do not receive any additional matching funds. Plan participants who are not employees of the GLC, a CSB, Walton and Henry County Boards of Education, or who are not GSEPS eligible do not receive any employer contributions in their 401(k) Plan.

All employer contributions are subject to a vesting schedule, which determines eligibility to receive all or a portion of the employer contribution balance at the time of any distribution from the account after separation from all state service. Vesting is determined based on the following schedule:

Less than 1 year	— %
1	20
2	40
3	60
4	80
5 or more years	100

For CSB/GLC participants whose services terminated prior to January 1, 2010 but after December 31, 2001, the following vesting schedule applies:

Less than 2 years	— %
2	20
3	40
4	60
5	80
6 or more years	100

For CSB/GLC participants whose services terminated prior to January 1, 2002, the following vesting schedule applies:

Less than 3 years	— %
3	20
4	40
5	60
6	80
7 or more years	100

Employee contributions and earnings thereon are 100% vested at all times. The 401(k) Plan also allows participants to roll over amounts from other qualified plans to their respective account in the 401(k) Plan on approval by the 401(k) plan administrator. Such rollovers are 100% vested at the time of transfer.

Participation

As of June 30, 2017, the 401(k) Plan had 61,407 participants with a balance. A total of 471 employers transmitted contributions to the plan during 2017.

Distributions

The participant may receive the value of his or her vested accounts upon attaining age 59.5, qualifying financial hardship, or 30 days after retirement or other termination of service (employer contribution balances are only eligible for distribution upon separation from service). Upon the death of a participant, his or her beneficiary shall be entitled to the vested value of his or her accounts. Employees who die while actively employed and eligible for 401(k) Plan employer matching contributions become fully vested in employer contributions upon death. Distributions are made in installments or in a lump sum.

(k) The 457 Plan was established by the State Personnel Board in accordance with Georgia Law 1974, page 198 as amended, O.C.G.A., Sections 45-18-30 through 45-18-36, and Section 457 of the IRC. The 457 Plan is available to employees of the State of Georgia and county health departments and permits such employees to defer a portion of their annual salary until future years. Employee contributions and earnings thereon are 100% vested at all times.

Effective July 1, 1998, the Master Trust was formed for the State of Georgia Deferred Compensation Program to serve as the funding medium for the 457 Plan. All assets of the 457 Plan are held in trust for the exclusive benefit of the participants and their beneficiaries. The assets of the 457 Plan and the 401(k) Plan are commingled in the Master Trust with the respective trusts owning units of the Master Trust. Participant contributions are invested according to the participant's investment election. If the participant does not make an election, investments are automatically defaulted to a Lifecycle Fund based on the participant's date of birth.

Effective July 1, 2005 (HB275), ERS became the trustee of the 457 Plan. Aon Hewitt, which became Alight Solutions in June 2017, and JPMorgan Chase hold, administer, and invest the assets of the Master Trust.

Participation

As of June 30, 2017, the 457 Plan had 12,899 participants with a balance. A total of 307 employers transmitted contributions to the plan during 2017.

Distributions

The balance in the employee's account in the 457 Plan is not available to the employee until age 70.5, termination, retirement, death, or unforeseeable emergency, as defined in the 457 Plan. Upon the death of a participant, his or her beneficiary shall be entitled to the vested value of his or her accounts. Distributions are made in installments or in a lump sum.

(l) SBF was established under O.C.G.A. 47-2-128(c)(3) within the ERS trust solely for maintaining group term life insurance coverage for members of the plan. All assets of SBF are therefore limited to the payment of benefits and expenses for such coverage and cannot be used to pay pension benefits of ERS. SBF is shown on the financial statements separately as an agency fund to reflect ERS's custodial responsibility and to account for assets held for distribution to SEAD-Active and SEAD-OPEB. SBF may only be used to pay benefits or expenses of SEAD-OPEB or SEAD-Active with authorization by the ERS Board of Trustees. An actuarial valuation is not prepared, as there are no funding requirements.

(m) SEAD-Active is a cost-sharing multiple-employer life insurance plan created in 2007 by the Georgia General Assembly to amend Title 47 of the Official Code of Georgia Annotated, relating to retirement, so as to establish a fund for the provision of term life insurance to active members of ERS, LRS, and GJRS. Effective July 1, 2009, no newly hired members of any Georgia public retirement system are eligible for term life insurance under SEAD. The SEAD-Active fund accumulates the premiums received from the aforementioned retirement systems, including interest earned on deposits and investments of such payments from active members. There were 455 employers and 1 nonemployer contributing entity participating in the plan during 2017. As of June 30, 2017, there were 28,873 active plan members in SEAD-Active.

Employee contribution rates as a percentage of member's salaries were appropriated for the fiscal year ended June 30, 2017 as follows: ERS Old Plan – 0.05% and ERS New Plan, LRS, and GJRS – 0.02%. ERS Old Plan members were hired prior to July 1, 1982 and new plan members were hired on or after July 1, 1982, but prior to January 1, 2009.

Georgia law provides that employee contributions to the plan shall be in an amount established by the Board of Trustees not to exceed one-half of 1% of the member's earnable compensation. There were no employer contributions required for the fiscal year ended June 30, 2017.

According to the policy terms covering the lives of members, insurance coverage is provided on a monthly, renewable term basis, and no return premiums or cash value are earned. The net position represents the excess accumulation of investment income and premiums over benefit payments and expenses, and is held as a reserve for payment of death benefits under existing policies.

The amount of insurance coverage is equal to 18 times monthly earnable compensation frozen at age 60. For members with no creditable service prior to April 1, 1964, the amount decreases from age 60 by a half of 1% per month until age 65, at which point the member will be covered for 70% of the age 60 coverage. Life insurance proceeds are paid in lump sum to the beneficiary upon death of the member.

Administrative costs for the plan are determined based on the plan's share of overhead costs to accumulate and invest funds, actuarial services, and to process benefit payments to beneficiaries. Administrative fees are financed from the assets of the plan.

(3) Significant Accounting Policies and System Asset Matters

(a) Basis of Accounting

The System's financial statements are prepared in accordance with U.S. generally accepted accounting principles as applicable to governmental organizations. The System follows the reporting requirements established by GASB.

Fiduciary funds include the defined benefit plans and defined contribution plans, which are accounted for on the flow of economic resources measurement focus and the accrual basis of accounting. Contributions to the defined benefit pension plans and OPEB plan are recognized in the period in which the contributions are due. Benefits and refunds are recognized when due and payable in accordance with the terms of each plan. Contributions to the deferred compensation plans are recognized as received. The SBF is an agency fund and is custodial in nature and does not measure the results of operations. Assets and liabilities are recorded using the accrual basis of accounting. The proprietary fund comprises the SEAD-Active plan. This fund is accounted for on the flow of economic resources measurement focus and uses the accrual basis of accounting. The principal operating revenues are derived from insurance premiums. Operating expenses include the cost of claims and related expenses.

(b) Reporting Entity

The System is a component unit of the State of Georgia; however, it is accountable for its own fiscal matters and presentation of its separate financial statements. The System has considered potential component units under GASB Statements No. 80, *Blending Requirements for Certain Component Units,* No. 61, *The Financial Reporting Entity's Omnibus – An Amendment of GASB Statement No. 14 and No. 34*, and No. 39, *Determining Whether Certain Organizations are Component Units*, and determined there were no component units of the System.

(c) Cash and Cash Equivalents

Cash and cash equivalents, reported at cost, include cash on deposit at banks and cash on deposit with the investment custodian.

(d) Investments

Investments are reported at fair value, and in some cases, net asset value (NAV) as a practical expedient to fair value. Equity securities traded on a national or international exchange are valued at the last reported sales price. Investments in private investment companies are valued utilizing the NAVs provided by the underlying private investment companies as a practical expedient. The Pooled Investment Fund (the Fund) applies the practical expedient to its investments in private investment companies on an investment by investment basis, and consistent with the Fund's entire position in a particular investment, unless it is probable that the Fund will sell a portion of an investment at an amount different from the NAV of the investment. Private equity fair value is measured using the valuation of the underlying companies as reported by the general partner. These investments, in the form of limited partnerships, reflect values and related performance on a quarter-lag basis due to the nature of the investments and the time it takes to value them. The estimated fair value of investments without readily ascertainable market values could differ significantly if a ready market for these assets existed. Fixed income securities are valued based primarily on quoted market prices provided by independent pricing sources. Global foreign exchange holdings are translated using a third-party vendor. Investment income is recognized as earned by the System. There are no investments in, loans to, or leases with parties related to the System.

(Continued)

The System utilizes various investment instruments. Investment securities, in general, are exposed to various risks, such as interest rate, credit, foreign currency, and overall market volatility. Due to the level of risk associated with certain investment securities, it is reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect the amounts reported in the financial statements.

The System's policy with regard to the allocation of invested assets is established on a cost basis in compliance with Georgia statute. Plan assets are managed on a total return basis with a long-term objective of achieving and maintaining a fully funded status for the benefits provided through the pension and OPEB plans. The following was the System's adopted asset allocation policy as of June 30, 2017:

Asset class	Target allocation
Fixed income	25%–45%
Equities	55%–75%
Alternative investments	0%–5%
Cash and cash equivalents	—
Total	100%

Approximately 14.6% of the investments held in trust for pension and OPEB benefits are invested in debt securities of the U.S. government. The System has no investments in any one organization, other than those issued by the U.S. government and its instrumentalities that represent 5% or more of the System's net position restricted for pensions and OPEB.

For the year ended June 30, 2017, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 2.9%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

(e) Capital Assets

Capital assets, including software development costs, are stated at cost less accumulated depreciation and reside in ERS. The capitalization thresholds are $100,000 for buildings and building improvements and $5,000 for equipment and vehicles. Depreciation on capital assets is computed using the straight-line method over estimated useful lives of 5 to 40 years. Depreciation expense is included in administrative expenses. Maintenance and repairs are charged to administrative expenses when incurred. When assets are retired or otherwise disposed of, the costs and related accumulated depreciation are removed from the accounts, and any resulting gain or loss is reflected in the combining statement of changes in fiduciary net position in the period of disposal.

(f) Use of Estimates

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of net position and changes therein. Actual results could differ from those estimates.

(g) New Accounting Pronouncements

Pronouncements effective for the 2017 financial statements:

In June 2015, the GASB issued Statement No. 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans.* This Statement improves the usefulness of other postemployment benefits (OPEB) information included in the general purpose external financial reports of state and local governmental OPEB plans for making decisions and assessing accountability. This pronouncement resulted in expanded footnote disclosures and required supplementary information (RSI) related to the measurement of the OPEB liabilities. See footnote (3)(h) for more information regarding the implementation of this Statement.

In August 2015, the GASB issued Statement No. 77, *Tax Abatement Disclosures*. This Statement defines tax abatement and provides disclosure guidance for governments that have granted tax abatements. There are no applicable reporting requirements for the System related to this Statement.

In December 2015, the GASB issued Statement No. 78, *Pensions Provided through Certain Multiple-Employer Defined Benefit Pension Plans*. The objective of this Statement is to amend the scope and applicability of Statement No. 68, *Accounting and Financial Reporting for Pensions*, to exclude pensions provided to employees of state or local governmental employers through certain multiple-employer defined benefit pension plans and to establish accounting and reporting requirements for those pensions. There are no applicable reporting requirements for the System related to this Statement.

In January 2016, the GASB issued Statement No. 80, *Blending Requirements for Certain Component Units.* The objective of this Statement is to improve financial reporting by clarifying the financial statement presentation requirements for certain component units and to amend the blending requirements established in paragraph 53 of Statement No. 14, *The Financial Reporting Entity*, as amended. There are no applicable reporting requirements for the System related to this Statement.

In March 2016, the GASB issued Statement No. 82, *Pension Issues – an Amendment of GASB Statements No. 67, 68, and No. 73.* The objective of this Statement is to address issues regarding (1) the presentation of payroll-related measures in the required supplementary information, (2) the selection of assumptions and the treatment of deviations from the guidance in an Actuarial Standard of Practice for financial reporting purposes, and (3) the classification of payments made by employers to satisfy employee (plan member) contribution requirements. The implementation of GASB Statement No. 82 did not impact the amounts recorded or disclosures presented in the System's financial Statements.

Pronouncements issued, but not yet effective:

In June 2015, the GASB issued Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefit Plans Other Than Pensions,* effective for fiscal years beginning after June 15, 2017*.* This Statement addresses accounting and financial reporting for OPEB that is provided to the employees of state and local governmental employers. This Statement establishes standards for recognizing and measuring liabilities, deferred outflows of resources, deferred inflows of resources, and expenses. This Statement also establishes requirements for note disclosures and required supplementary information for defined benefit OPEB plans. The System is in the process of evaluating the impact of this pronouncement on its financial statements.

In March 2016, the GASB issued Statement No. 81, *Irrevocable Split-Interest Agreements,* effective for fiscal years beginning after December 15, 2016*.* The objective of this Statement is to improve accounting and financial reporting for irrevocable split-interest agreements by providing recognition and measurement guidance for situations in which a government is a beneficiary of the agreement. There will be no applicable reporting requirements for the System related to this Statement.

In November 2016, the GASB issued Statement No. 83, *Certain Asset Retirement Obligations,* effective for fiscal years beginning after June 15, 2018. This Statement addresses accounting and financial reporting for certain asset retirement obligations (AROs). An ARO is a legally enforceable liability associated with the retirement of a tangible capital asset. The System does not anticipate this statement to impact its financial statements and related reporting.

In January 2017, the GASB issued Statement No. 84, *Fiduciary Activities,* effective for fiscal years beginning after December 15, 2018*.* The objective of this Statement is to improve guidance regarding the identification of fiduciary activities for accounting and financial reporting purposes and how those activities should be reported. The System is in the process of evaluating the impact of this pronouncement on its financial statements.

In March 2017, the GASB issued Statement No. 85, *Omnibus 2017,* effective for fiscal years beginning after June 15, 2017*.* This Statement addresses practice issues that have been identified during implementation and application of certain GASB Statements. A variety of topics are addressed including issues related to blending component units, goodwill, fair value measurement and application, and OPEB. The System is in the process of evaluating the impact of this pronouncement on its financial statements.

In May 2017, the GASB issued Statement No. 86, *Certain Debt Extinguishment Issues,* effective for fiscal years beginning after June 15, 2017*.* The primary objective of this Statement is to improve consistency in accounting and financial reporting for in-substance defeasance of debt. There will be no applicable reporting requirements for the System related to this Statement.

(Continued)

(h) Change in Accounting Principle

During fiscal year 2017, the System adopted the provisions of GASB Statement No. 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans (OPEB)*. GASB Statement No. 74 requires the disclosure of the net OPEB liability and expanded footnote disclosure and RSI for OPEB plans and clarifies what constitutes an OPEB plan. As a result, SEAD-Active and SBF, both previously reported as defined benefit OPEB plans, are now reported as an enterprise fund and an agency fund, respectively, based on the nature of their activities. Comparative financial information presented for 2016 has been restated to reflect this change as follows (amounts in thousands):

		System Total
Combining Statement of Fiduciary Net Position:		
Total assets, as of 6/30/16 as previously reported	$	16,425,058
Adoption of GASB Statement No. 74		(14)
Total assets as of 6/30/16, as restated	$	16,425,044
Total liabilities as of 6/30/16, as previously reported	$	43,706
Adoption of GASB Statement No. 74		361,935
Total liabilities as of 6/30/16, as restated	$	405,641
Combining Statement of Changes in Fiduciary Net Position:		
Total additions as of 6/30/16, as previously reported	$	1,015,006
Adoption of GASB Statement No. 74		(5,329)
Total additions as of 6/30/16, as restated	$	1,009,677
Total deductions as of 6/30/16, as previously reported	$	1,591,577
Adoption of GASB Statement No. 74		(3,412)
Total deductions as of 6/30/16, as restated	$	1,588,165
Net Position, as of 7/1/15 as previously reported	$	16,957,923
Adoption of GASB Statement No. 74		(360,032)
Net Position as of 7/1/15, as restated	$	16,597,891
Net Position, as of 6/30/16 as previously reported	$	16,381,352
Adoption of GASB Statement No. 74		(361,949)
Net Position as of 6/30/16, as restated	$	16,019,403

(4) Investment Program

The System maintains sufficient cash to meet its immediate liquidity needs. Cash not immediately needed is invested as directed by the Board of Trustees. All investments are held by agent custodial banks in the name of the System. State statutes and the System's investment policy authorize the System to invest in a variety of short-term and long-term securities as follows:

(a) Cash and Cash Equivalents

Custodial credit risk is the risk that in the event a depository institution or counterparty fails, the System would not be able to recover the value of its deposits or investments. The System does not have a formal policy relating to custodial credit risk. The carrying amount of the System's deposits totaled $235.1 million at June 30, 2017 with actual bank balances of $238.7 million. The System's bank balances of $223.6 million are fully insured through the Federal Deposit Insurance Corporation, an independent agency of the U.S. government. The remaining bank deposits of $15.1 million are uninsured and uncollateralized. The System's noncash investments are held in the System's name and are not exposed to custodial credit risk.

Short-term securities authorized but not currently used are as follows:

- Repurchase and reverse repurchase agreements, whereby the System and a broker exchange cash for direct obligations of the U.S. government or obligations unconditionally guaranteed by agencies of the U.S. government or U.S. corporations. The System or broker promises to repay the cash received, plus interest, at a specific date in the future in exchange for the same securities.
- U.S. Treasury obligations
- Commercial paper, with a maturity of 180 days or less. Commercial paper is an unsecured promissory note issued primarily by corporations for a specific amount and maturing on a specific day. The System considers for investment only commercial paper of the highest quality, rated P-l and/or A-l by national credit rating agencies.
- Master notes, an overnight security administered by a custodian bank and an obligation of a corporation whose commercial paper is rated P-l and/or A-l by national credit rating agencies

Investments in commercial paper or master notes are limited to no more than $500 million in any one name.

(b) Investments

Fixed income investments, managed by the Division of Investment Services (the Division), are authorized in the following instruments:

- U.S. and foreign government obligations. At June 30, 2017, the System held U.S. Treasury bonds of approximately $2.5 billion and international government bonds of approximately $76.9 million.
- Obligations unconditionally guaranteed by agencies of the U.S. government. At June 30, 2017, the System did not hold agency bonds.

- U.S. and foreign corporate obligations. At June 30, 2017, the System held U.S. corporate bonds of approximately $1.9 billion and international corporate bonds of approximately $192.6 million.
- Private placements are authorized under the same general restrictions applicable to corporate bonds. At June 30, 2017, the System did not hold private placements.

Mortgage investments are authorized to the extent that they are secured by first mortgages on improved real property located in the state of Georgia.

Equity securities are also authorized (in statutes) for investment as a complement to the System's fixed-income portfolio and as a long-term inflation hedge. By statute, no more than 75% of the total invested assets on a historical cost basis may be placed in equities. Equity holdings in any one corporation may not exceed 5% of the outstanding equity of the issuing corporation. The equity portfolio is managed by the Division, in conjunction with independent advisers. Buy/sell decisions are based on securities meeting rating criteria established by the Board of Trustees, in-house research considering such matters as yield, growth, and sales statistics, and analysis of independent market research. Equity trades are approved and executed by the Division's staff. Common stocks eligible for investment are approved by the Investment Committee of the Board of Trustees before being placed on an approved list.

Equity investments are authorized in the following instruments:

- Domestic equities are those securities considered by O.C.G.A. to be domiciled in the United States. At June 30, 2017, the System held domestic equities of approximately $8.2 billion.
- International equities, including American Depository Receipts (ADR), are not considered by the O.C.G.A. to be domiciled in the United States. At June 30, 2017, the System held international equities of approximately $762.1 million and ADRs of approximately $2.0 billion, excluding the 401(k) and 457 plans.
- Alternative investments are authorized (in statutes) to provide portfolio diversification and to enhance the risk-adjusted rate of return for the retirement fund that benefits the members of the System. By statute, the allocation to alternative investments shall not, in the aggregate, exceed 5% of the System's plan assets at any time. Further, in any calendar year, new commitments to alternative investments shall not, in the aggregate exceed 1.0% of the System's plan assets until the first occurrence that 4.5% of the assets have been invested, at which time there shall be no limit on the percentage of commitments that may be made in any calendar year, subject to compliance with other provisions of the statute. At June 30, 2017, the System held private equity investments of approximately $134.2 million.

The Master Trust invests in various mutual funds, common collective trust funds, and separate accounts, as selected by participants. Each participant is allowed to select and invest contributions into investment options that own one or more commingled funds, as authorized by the Board of Trustees. Participants may also contribute to a self-directed brokerage account that offers investments in various mutual funds and equities. At June 30, 2017, the deferred compensation plans held commingled funds of approximately $1.4 billion, mutual funds of approximately $5.6 million, domestic equities of approximately $12.0 million, and international equities of approximately $1.2 million.

Substantially all of the investments of ERS, PSERS, LRS, GJRS, GMPF, SEAD-OPEB, SBF, and SEAD-Active are pooled into one common investment fund. Units in the pooled common investment fund are allocated to the respective plans, based upon the cost of assets contributed, and additional units are allocated to the participating plans, based on the market value of the pooled common investment fund at the date of contribution. Net income of the pooled common investment fund is allocated monthly to the participating plans, based upon the number of units outstanding during the month.

The units and fair value of each plan's equity in the pooled common investment fund at June 30, 2017 were as follows (dollars in thousands):

	Fair value	Units
Employees' Retirement System	$ 13,047,409	2,879,843
Public School Employees Retirement System	868,952	191,796
Legislative Retirement System	33,039	7,292
Georgia Judicial Retirement System	440,443	97,215
Georgia Military Pension Fund	20,682	4,565
State Employees' Assurance Department-OPEB	1,120,853	247,396
Survivors Benefit Fund	135,951	30,007
Total defined benefit plans	15,667,329	3,458,114
State Employees' Assurance Department-Active	267,194	58,976
Total in pooled investment funds	$ 15,934,523	3,517,090

Fair Value Measurements: The System categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the inputs used in valuation and gives the highest priority to unadjusted quoted prices in active markets and requires that observable inputs be used in the valuations when available. The disclosure of fair value estimates in the hierarchy is based on whether the significant inputs into the valuations are observable. In determining the level of the hierarchy in which the estimate is disclosed, the highest level, Level 1, is given to unadjusted quoted prices in active markets and the lowest level, Level 3, to unobservable inputs.

The three levels of the fair value hierarchy are as follows:

Level 1 – Valuations based on unadjusted quoted prices for identical instruments in active markets that the System has the ability to access

Level 2 – Valuations based on 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 – Valuations based on inputs that are unobservable and significant to the overall fair value measurement

The System also has investments held through limited partnerships for which fair value is estimated using the NAV reported by the general partner as a practical expedient to fair value. Such investments have not been categorized within the fair value hierarchy.

In instances where inputs used to measure fair value fall into different levels in the fair value hierarchy, fair value measurements in their entirety are categorized based on the lowest level input that is significant to the valuation. The System's assessment of the significance of particular inputs to these fair value measurements requires judgment and considers factors specific to each investment. The table below shows the fair value leveling of the System's investments (in thousands).

	Fair value measures using			
Investments by fair value level	**Quoted prices in active markets for identical assets (Level 1)**	**Significant other observable inputs (Level 2)**	**Significant unobservable inputs (Level 3)**	**Total**
Equities:				
Domestic	$ 8,249,568	—	75	8,249,643
International	2,761,392	19,276	—	2,780,668
Obligations:				
Domestic:				
U.S. Treasuries	2,516,114	—	—	2,516,114
Corporate bonds	—	1,882,175	—	1,882,175
International:				
Governments	—	76,935	—	76,935
Corporate bonds	—	192,589	—	192,589
Mutual funds	5,601	—	—	5,601
Commingled funds	81,919	1,333,769	—	1,415,688
Total investments by fair value level	$ 13,614,594	3,504,744	75	17,119,413
Investments measured at NAV*				
Private equity funds				134,213
Total investments				$ 17,253,626

* Certain investments that are measured at fair value using the NAV per share (or its equivalent) as a practical expedient have not been categorized in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the combining statement of fiduciary net position.

Equity securities classified in Level 1 are valued using prices quoted in active markets for those securities. Equity securities in Level 2 are valued using prices quoted for similar instruments in active markets. Equity securities classified in Level 3 are valued using third-party valuations not currently observable in the market.

Debt securities classified in Level 1 are valued using prices quoted in active markets. Debt securities classified in Level 2 are valued using either a bid evaluation or a matrix pricing technique. Bid evaluations may include market quotations, yields, maturities, call features, and ratings. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices. These securities have nonproprietary information that was readily available to market participants, from multiple independent sources, which are known to be actively involved in the market.

Mutual funds and commingled funds classified in Level 1 are valued using prices quoted in active markets for those investment types. Commingled funds classified in Level 2 are valued using observable underlying inputs that are market corroborated.

Unfunded commitments, redemption frequency, and redemption notice period relative to the System's alternative investments for which the System utilized NAV or its equivalent relative to the determination of fair value at June 30, 2017 are as follows (in thousands):

	Investments measured at NAV	Unfunded commitments	Redemption frequency (if currently eligible)	Redemption notice period
Private equity funds	$ 134,213	261,146	Not eligible	N/A

Investments in privately held limited partnerships are valued using the NAV provided by the general partner as of March 31 of each fiscal year, adjusted by the System for cash flows through June 30. The quarterly values of the partnership investments provided from the general partner are reviewed by the System to determine if any adjustments are necessary. The types of partnership strategies held include growth equity, leveraged buyouts, and mezzanine debt. Two of the 15 partnerships held are secondary investments and are in or nearing the wind-up phase of the fund. The remaining investments typically have an approximate life of 8–10 years. These investments are considered illiquid since the nature of these private investments prohibits redemption with the fund; instead, distributions are received from the general partner through liquidation of the underlying assets of the fund. The System currently has no plans to sell any of the investments prior to their liquidation resulting in these assets being carried at the NAV estimated by the general partner and adjusted for second quarter cash flows by the System.

Credit Risk: Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations to the System. O.C.G.A. 47-20-84 limits investments to investment grade securities.

It is the System's investment policy to require that the bond portfolio be of high quality and chosen with respect to maturity ranges, coupon levels, refunding characteristics, and marketability. The System's policy is to require that new purchases of bonds be restricted to high-grade bonds rated no lower than "A" by any nationally recognized statistical rating organization. If a bond is subsequently downgraded to a rating below "A," it is placed on a watch list. The System holds one bond, which was downgraded to a rating below "A." Obligations of the U.S. government or obligations explicitly guaranteed by the U.S. government are not considered to have credit risk and do not require disclosure of credit quality. The quality ratings of investments in fixed income securities as described by Standard & Poor's and by Moody's Investors Service, which are nationally recognized statistical rating organizations, at June 30, 2017 are shown in the following table (in thousands):

Quality Ratings of Fixed Income Investments
Held at June 30, 2017

Investment type	Standard & Poor's/Moody's quality rating	June 30, 2017 fair value
Domestic obligations:		
U.S. Treasuries		$ 2,516,114
Corporates	AAA/Aaa	192,343
	AA/Aaa	192,005
	AA/Aa	251,366
	AA/A	458,391
	A/A	711,134
	BBB/Baa	76,936
Total corporates		1,882,175
International obligations:		
Governments	A/Aa	76,935
Corporates	A/Aa	96,266
	A/A	96,323
Total corporates		192,589
Total fixed income investments		$ 4,667,813

Mutual funds, commingled funds, and various equities of the deferred compensation plans are not considered to have credit risk and do not require disclosure of credit risk rating.

Concentration of Credit Risk: Concentration of credit risk is the risk of loss that may be attributed to the magnitude of a government's investment in a single issue. At June 30, 2017, the System did not have debt or equity investments in any one organization, other than those issued or guaranteed by the U.S. government or its agencies, which represented greater than 5% of plan net position.

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 System has no formal interest rate risk policy, active management of the bond portfolio incorporates interest rate risk to generate improved returns. This risk is managed within the portfolio using the effective duration method. This method is widely used in the management of fixed income portfolios and quantifies to a much greater degree the sensitivity to interest rate changes when analyzing a bond portfolio with call options, prepayment provisions, and any other cash flows. Effective duration makes assumptions regarding the most likely timing and amounts of variable cash flows and is best utilized to gauge the effect of a change in interest rates on the fair value of a portfolio. It is believed that the reporting of effective duration found in the table below quantifies to the fullest extent possible the interest rate risk of the System's fixed income assets (amounts in thousands).

Effective Duration of Fixed Income Assets

Fixed income type	Fair value June 30, 2017	Percent of all fixed income assets	Effective duration (years)
Domestic obligations:			
U.S. Treasuries	$ 2,516,114	53.9 %	5.7
Corporates	1,882,175	40.3	4.0
International obligations:			
Governments	76,935	1.7	0.3
Corporates	192,589	4.1	1.8
Total	$ 4,667,813	100.0 %	4.7

Foreign Currency Risk: Foreign currency risk is the risk that changes in exchange rates will adversely impact the fair value of an investment. The System's currency risk exposures, or exchange rate risks, primarily reside within the System's international equity investment holdings. The System's foreign exchange risk management policy is to minimize risk and protect the investments from negative impact by hedging foreign currency exposures with foreign exchange instruments when market conditions and circumstances are deemed appropriate. As of June 30, 2017, the System's exposure to foreign currency risk in U.S. dollars, excluding the 401(k) and 457 plans, is highlighted in the following table (amounts in thousands):

International Investment Securities at Fair Value as of June 30, 2017

Currency		Equities	Fixed income	Total
Australian dollar	$	33,088	—	33,088
Brazilian real		18,200	—	18,200
British pound		72,752	—	72,752
Canadian dollar		9,989	—	9,989
Czech krone		456	—	456
Danish krone		18,472	—	18,472
Euro		114,340	—	114,340
Hong Kong dollar		39,625	—	39,625
Indian rupee		43,935	—	43,935
Indonesian rupiah		6,128	—	6,128
Japanese yen		113,116	—	113,116
Malaysian ringgit		9,874	—	9,874
Mexican peso		7,258	—	7,258
New Taiwan dollar		48,498	—	48,498
Philippine peso		5,483	—	5,483
Polish zloty		3,839	—	3,839
Singapore dollar		20,872	—	20,872
South African rand		37,877	—	37,877
South Korean won		82,203	—	82,203
Swedish krona		35,036	—	35,036
Swiss franc		17,249	—	17,249
Thailand baht		19,276	—	19,276
Total holdings subject to foreign currency risk		757,566	—	757,566
Investment securities payable in U.S. dollars		2,021,952	269,524	2,291,476
Total international investment securities – at fair value	$	2,779,518	269,524	3,049,042

(Continued)

(5) Securities Lending Program

State statutes and Board of Trustees policies permit the System to lend its securities to broker-dealers with a simultaneous agreement to return the collateral for the same securities in the future. The System is presently involved in a securities lending program with major brokerage firms. The System lends equity and fixed income securities for varying terms and receives a fee based on the loaned securities' value. The System reports the gross loan fee income earned as investment income on the combining statement of changes in fiduciary net position. During a loan, the System continues to receive dividends and interest as the owner of the loaned securities. The brokerage firms pledge collateral securities consisting of U.S. government and agency securities, mortgage-backed securities issued by a U.S. government agency, corporate bonds, and equities. The collateral value must be equal to at least 102% to 109% of the loaned securities' value, depending on the type of collateral security.

Securities loaned totaled approximately $3.7 billion at fair value at June 30, 2017. The collateral value was equal to 103.8% of the loaned securities' value at June 30, 2017. The System's lending collateral was held in the System's name by the tri-party custodian.

Loaned securities are included in the accompanying combining statement of fiduciary net position since the System maintains ownership. The related collateral securities are not recorded as assets on the System's combining statement of fiduciary net position, and a corresponding liability is not recorded, since the System is deemed not to have the ability to pledge or trade the collateral securities. The System is deemed not to have the ability to pledge or sell the collateral securities, since the System's lending contracts do not address whether the lender can pledge or sell the collateral securities without a borrower default, the System has not previously demonstrated that ability, and there are no indications of the System's ability to pledge or sell the collateral securities.

(6) Capital Assets

The following is a summary of capital assets and depreciation information as of and for the year ended June 30, 2017:

	Balance at June 30, 2016	Additions	Disposals	Balance at June 30, 2017
Capital assets:				
Land	$ 4,341,787	—	—	4,341,787
Building	2,800,000	—	—	2,800,000
Equipment	3,006,423	265,789	—	3,272,212
Vehicles	13,382	—	—	13,382
Computer software	14,344,609	—	—	14,344,609
	$ 24,506,201	265,789	—	24,771,990

		Balance at June 30, 2016	Additions	Disposals	Balance at June 30, 2017
Accumulated depreciation for:					
Building	$	(840,000)	(70,000)	—	(910,000)
Equipment		(2,365,228)	(234,384)	—	(2,599,612)
Vehicles		(13,382)	—	—	(13,382)
Computer software		(14,344,609)	—	—	(14,344,609)
		(17,563,219)	(304,384)	—	(17,867,603)
Capital assets, net	$	6,942,982	(38,595)	—	6,904,387

(7) Commitments

As of June 30, 2017, the System had committed to fund certain private equity partnerships for a total capital commitment of approximately $397.8 million. Of this amount, approximately $261.1 million remained unfunded and is not recorded on the System's combining statement of fiduciary net position.

(8) Net Pension Liability of Employers and Nonemployers – ERS

The components of the net pension liability of the participating employers and nonemployers at June 30, 2017 were as follows (dollars in thousands):

Total pension liability	$	17,159,634
Plan fiduciary net position		13,098,299
Employers' and nonemployers' net pension liability	$	4,061,335
Plan fiduciary net position as a percentage of the total pension liability		76.33 %

Actuarial assumptions: The total pension liability was determined by an actuarial valuation as of June 30, 2016, using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.75%
Salary increases	3.25–7.00%, including inflation
Investment rate of return	7.50%, net of pension plan investment expense, including inflation

Postretirement mortality rates were based on the RP-2000 Combined Mortality Table with future mortality improvement projected to 2025 with the Society of Actuaries projection scale BB and set forward two years for both males and females for service retirements and dependent beneficiaries. The RP-2000 Disabled Mortality Table with future mortality improvement projected to 2025 with Society of Actuaries projection scale BB and set back seven years for males and set forward three years for females was used for death after disability retirement. Rates of mortality in active service were based on the RP-2000 Employee Mortality Table projected to 2025 with projection scale BB. There is a margin for future mortality improvement in the tables used by the plan.

The actuarial assumptions used in the June 30, 2016 valuation were based on the results of an actuarial experience study for the period July 1, 2009 – June 30, 2014.

The long-term expected rate of return on pension plan investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target asset allocation and best estimates of arithmetic real rates of return for each major asset class are summarized in the following table:

Asset class	Target allocation	Long-term expected real rate of return*
Fixed income	30.00 %	(0.50)%
Domestic large equities	37.20	9.00
Domestic mid equities	3.40	12.00
Domestic small equities	1.40	13.50
International developed market equities	17.80	8.00
International emerging market equities	5.20	12.00
Alternatives	5.00	10.50
Total	100.00 %	

* Rates shown are net of inflation.

Discount rate: The discount rate used to measure the total pension liability was 7.50%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all 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.

Sensitivity of the net pension liability to changes in the discount rate: The following presents the net pension liability, calculated using the discount rate of 7.50%, as well as what the net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.50%) or 1-percentage-point higher (8.50%) than the current rate (dollars in thousands):

		1% Decrease (6.50%)	Current discount rate (7.50%)	1% Increase (8.50%)
Employers' and nonemployers' net pension liability	$	5,732,372	4,061,335	2,635,889

Actuarial valuation date: June 30, 2016 is the actuarial valuation date upon which the total pension liability is based. An expected total pension liability is determined as of June 30, 2017 using standard roll-forward techniques. The roll-forward calculation adds the annual normal cost (also called service cost), subtracts the actual benefit payments and refunds for the plan year, and then applies the expected investment rate of return for the year.

(9) Net Pension Liability of Employers and Nonemployers – PSERS

The components of the net pension liability of the participating employers and nonemployers at June 30, 2017 were as follows (dollars in thousands):

Total pension liability	$	1,013,163
Plan fiduciary net position		868,134
Employers' and nonemployers' net pension liability	$	145,029
Plan fiduciary net position as a percentage of the total pension liability		85.69 %

Actuarial assumptions: The total pension liability was determined by an actuarial valuation as of June 30, 2016, using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.75%
Salary increases	N/A
Investment rate of return	7.50%, net of pension plan investment expense, including inflation

Postretirement mortality rates were based on the RP-2000 Blue-Collar Mortality Table projected to 2025 with projection scale BB (set forward three years for males and two years for females) for the period after service retirement and for dependent beneficiaries. The RP-2000 Disabled Mortality projected to 2025 with projection scale BB (set forward five years for both males and females) was used for death after disability retirement. Rates of mortality in active service were based on the RP-2000 Employee Mortality Table projected to 2025 with projection scale BB. There is a margin for future mortality improvement in the tables used by the plan.

The actuarial assumptions used in the June 30, 2016 valuation were based on the results of an actuarial experience study for the period July 1, 2009 – June 30, 2014.

The long-term expected rate of return on pension plan investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target asset allocation and best estimates of arithmetic real rates of return for each major asset class are summarized in the following table:

Asset class	Target allocation	Long-term expected real rate of return*
Fixed income	30.00 %	(0.50)%
Domestic large equities	37.20	9.00
Domestic mid equities	3.40	12.00
Domestic small equities	1.40	13.50
International developed market equities	17.80	8.00
International emerging market equities	5.20	12.00
Alternatives	5.00	10.50
Total	100.00 %	

* Rates shown are net of inflation.

Discount rate: The discount rate used to measure the total pension liability was 7.50%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that employer and nonemployer contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all 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.

(Continued)

Sensitivity of the net pension liability to changes in the discount rate: The following presents the net pension liability, calculated using the discount rate of 7.50%, as well as what the net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.50%) or 1-percentage-point higher (8.50%) than the current rate (dollars in thousands):

		1% Decrease (6.50%)	Current discount rate (7.50%)	1% Increase (8.50%)
Employers' and nonemployers' net pension liability	$	256,593	145,029	51,139

Actuarial valuation date: June 30, 2016 is the actuarial valuation date upon which the total pension liability is based. An expected total pension liability is determined as of June 30, 2017 using standard roll-forward techniques. The roll-forward calculation adds the annual normal cost (also called service cost), subtracts the actual benefit payments and refunds for the plan year, and then applies the expected investment rate of return for the year.

(10) Net Pension Liability of Employer – LRS

The components of the net pension liability of the participating employer at June 30, 2017 were as follows (dollars in thousands):

Total pension liability	$	25,898
Plan fiduciary net position		32,981
Employers' and nonemployers' net pension asset	$	(7,083)
Plan fiduciary net position as a percentage of the total pension liability		127.35 %

Actuarial assumptions: The total pension liability was determined by an actuarial valuation as of June 30, 2016, using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.75%
Salary increases	None
Investment rate of return	7.50%, net of pension plan investment expense, including inflation

Postretirement mortality rates were based on the RP-2000 Combined Mortality Table projected to 2025 with projection scale BB (set forward two years for both males and females) for the period after service retirement. The RP-2000 Employee Mortality table projected to 2025 using projection scale BB was used for deaths in active service. There is a margin for future mortality improvement in the tables used by the plan.

The actuarial assumptions used in the June 30, 2016 valuation were based on the results of an actuarial experience study for the period July 1, 2009 – June 30, 2014.

The long-term expected rate of return on pension plan investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target asset allocation and best estimates of arithmetic real rates of return for each major asset class are summarized in the following table:

Asset class	Target allocation	Long-term expected real rate of return*
Fixed income	30.00 %	(0.50)%
Domestic large equities	37.20	9.00
Domestic mid equities	3.40	12.00
Domestic small equities	1.40	13.50
International developed market equities	17.80	8.00
International emerging market equities	5.20	12.00
Alternatives	5.00	10.50
Total	100.00 %	

* Rates shown are net of inflation.

Discount rate: The discount rate used to measure the total pension liability was 7.50%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that employer and nonemployer contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all 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.

Sensitivity of the net pension liability to changes in the discount rate: The following table presents the net pension liability, calculated using the discount rate of 7.50%, as well as what the net pension liability would

be if it were calculated using a discount rate that is 1-percentage-point lower (6.50%) or 1-percentage-point higher (8.50%) than the current rate (dollars in thousands):

		1% Decrease (6.50%)	Current discount rate (7.50%)	1% Increase (8.50%)
Employers' and nonemployers' net pension asset	$	(4,654)	(7,083)	(9,138)

Actuarial valuation date: June 30, 2016 is the actuarial valuation date upon which the total pension liability is based. An expected total pension liability is determined as of June 30, 2017 using standard roll-forward techniques. The roll-forward calculation adds the annual normal cost (also called service cost), subtracts the actual benefit payments and refunds for the plan year, and then applies the expected investment rate of return for the year.

(11) Net Pension Liability of Employers and Nonemployers – GJRS

The components of the net pension liability of the participating employers and nonemployers at June 30, 2017 were as follows (dollars in thousands):

Total pension liability	$	394,736
Plan fiduciary net position		441,182
Employers' and nonemployers' net pension asset	$	(46,446)
Plan fiduciary net position as a percentage of the total pension liability		111.77 %

Actuarial assumptions: The total pension liability was determined by an actuarial valuation as of June 30, 2016, using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.75%
Salary increases	4.50%, including inflation
Investment rate of return	7.50%, net of pension plan investment expense, including inflation

Mortality rates were based on the RP-2000 Combined Mortality Table projected to 2025 with projection scale BB and set forward two years for both males and females for the period after retirement and for dependent beneficiaries. For the period after disability retirement, the RP-2000 Disabled Mortality Table projected to 2025 with projection scale BB and set back seven years for males and set forward three years for females is used. Rates of mortality in active service were based on the RP-2000 Employee Mortality Table projected to 2025 with projection scale BB. There is a margin for future mortality improvement in the tables used by the plan.

The actuarial assumptions used in the June 30, 2016 valuation were based on the results of an actuarial experience study for the period July 1, 2009 – June 30, 2014.

The long-term expected rate of return on pension plan investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target asset allocation and best estimates of arithmetic real rates of return for each major asset class are summarized in the following table:

Asset class	Target allocation	Long-term expected real rate of return*
Fixed income	30.00 %	(0.50)%
Domestic large equities	37.20	9.00
Domestic mid equities	3.40	12.00
Domestic small equities	1.40	13.50
International developed market equities	17.80	8.00
International emerging market equities	5.20	12.00
Alternatives	5.00	10.50
Total	100.00 %	

* Rates shown are net of inflation.

Discount rate: The discount rate used to measure the total pension liability was 7.50%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that employer and nonemployer contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all 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.

Sensitivity of the net pension liability to changes in the discount rate: The following table presents the net pension liability, calculated using the discount rate of 7.50%, as well as what the net pension liability would

be if it were calculated using a discount rate that is 1-percentage-point lower (6.50%) or 1-percentage-point higher (8.50%) than the current rate (dollars in thousands):

		1% Decrease (6.50%)	Current discount rate (7.50%)	1% Increase (8.50%)
Employers' and nonemployers' net pension asset	$	(8,873)	(46,446)	(79,122)

Actuarial valuation date: June 30, 2016 is the actuarial valuation date upon which the total pension liability is based. An expected total pension liability is determined as of June 30, 2017 using standard roll-forward techniques. The roll-forward calculation adds the annual normal cost (also called service cost), subtracts the actual benefit payments and refunds for the plan year, and then applies the expected investment rate of return for the year.

(12) Net Pension Liability of Employer – GMPF

The components of the net pension liability of the participating employer at June 30, 2017 were as follows (dollars in thousands):

Total pension liability	$	40,085
Plan fiduciary net position		20,711
Employer's net pension liability	$	19,374
Plan fiduciary net position as a percentage of the total pension liability		51.67 %

Actuarial assumptions: The total pension liability was determined by an actuarial valuation as of June 30, 2016, using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.75%
Salary increases	N/A
Investment rate of return	7.50%, net of pension plan investment expense, including inflation

Postretirement mortality rates were based on the RP-2000 Combined Mortality Table projected to 2025 with projection scale BB (set forward two years for both males and females) for the period after service retirement. The RP-2000 Employee Mortality Table projected to 2025 using projection scale BB was used for deaths in active service. There is a margin for future mortality improvement in the tables used by the plan.

The actuarial assumptions used in the June 30, 2016 valuation were based on the results of an actuarial experience study for the period July 1, 2009 – June 30, 2014.

The long-term expected rate of return on pension plan investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target asset allocation and best estimates of arithmetic real rates of return for each major asset class are summarized in the following table:

Asset class	Target allocation	Long-term expected real rate of return*
Fixed income	30.00 %	(0.50)%
Domestic large equities	37.20	9.00
Domestic mid equities	3.40	12.00
Domestic small equities	1.40	13.50
International developed market equities	17.80	8.00
International emerging market equities	5.20	12.00
Alternatives	5.00	10.50
Total	100.00 %	

* Rates shown are net of inflation.

Discount rate: The discount rate used to measure the total pension liability was 7.50%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that employer and nonemployer contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all 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.

Sensitivity of the net pension liability to changes in the discount rate: The following table presents the net pension liability, calculated using the discount rate of 7.50%, as well as what the net pension liability would

be if it were calculated using a discount rate that is 1-percentage-point lower (6.50%) or 1-percentage-point higher (8.50%) than the current rate (dollars in thousands):

		1% Decrease (6.50%)	Current discount rate (7.50%)	1% Increase (8.50%)
Employer's net pension liability	$	25,182	19,374	14,656

Actuarial valuation date: June 30, 2016 is the actuarial valuation date upon which the total pension liability is based. An expected total pension liability is determined as of June 30, 2017 using standard roll-forward techniques. The roll-forward calculation adds the annual normal cost (also called service cost), subtracts the actual benefit payments and refunds for the plan year, and then applies the expected investment rate of return for the year.

(13) Net OPEB Liability of Employers – SEAD-OPEB

The components of the net OPEB liability of the participating employers at June 30, 2017 were as follows (dollars in thousands):

Total OPEB liability	$	861,346
Plan fiduciary net position		1,121,251
Employers' net OPEB asset	$	(259,905)
Plan fiduciary net position as a percentage of the total pension liability		130.17 %

Actuarial assumptions: The total OPEB liability was determined by an actuarial valuation as of June 30, 2016, using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.75%
Salary increases:	
ERS	3.25%–7.00%
GJRS	4.50%
LRS	N/A
Investment rate of return	7.50%, net of pension plan investment expense, including inflation
Healthcare cost trend rate	N/A

Postretirement mortality rates were based on the RP-2000 Combined Mortality Table with future mortality improvement projected to 2025 with the Society of Actuaries projection scale BB and set forward two years for both males and females for service retirements and dependent beneficiaries. There is a margin for future mortality improvement in the tables used by the plan.

The actuarial assumptions used in the June 30, 2016 valuation were based on the results of an actuarial experience study for the period July 1, 2009 – June 30, 2014.

The long-term expected rate of return on OPEB plan investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of OPEB plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target asset allocation and best estimates of arithmetic real rates of return for each major asset class are summarized in the following table:

Asset class	Target allocation	Long-term expected real rate of return*
Fixed income	30.00 %	(0.50)%
Domestic large equities	37.20	9.00
Domestic mid equities	3.40	12.00
Domestic small equities	1.40	13.50
International developed market equities	17.80	8.00
International emerging market equities	5.20	12.00
Alternatives	5.00	10.50
Total	100.00 %	

* Rates shown are net of inflation.

Discount rate: The discount rate used to measure the total OPEB liability was 7.50%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that employer and nonemployer contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on those assumptions, the OPEB plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on OPEB plan investments was applied to all periods of projected benefit payments to determine the total OPEB liability.

Sensitivity of the net OPEB liability to changes in the discount rate: The following table presents the net OPEB asset, calculated using the discount rate of 7.50%, as well as what the net OPEB asset would be if it were calculated using a discount rate that is 1-percentage-point lower (6.50%) or 1-percentage-point higher (8.50%) than the current rate (dollars in thousands):

		1% Decrease (6.50%)	Current discount rate (7.50%)	1% Increase (8.50%)
Employers' net OPEB asset	$	(142,257)	(259,905)	(356,322)

Actuarial valuation date: June 30, 2016 is the actuarial valuation date upon which the total pension liability is based. An expected total OPEB liability is determined as of June 30, 2017 using standard roll-forward techniques. The roll-forward calculation adds the annual normal cost (also called service cost), subtracts the actual benefit payments and refunds for the plan year, and then applies the expected investment rate of return for the year.

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)

(See Accompanying Independent Auditors' Report)

EMPLOYEES' RETIREMENT SYSTEM OF GEORGIA
(Including All Plans and Funds Administered by the
Employees' Retirement System of Georgia)
(A Component Unit of the State of Georgia)

Required Supplementary Information

Schedules of Employers' and Nonemployers' Contributions – Defined Benefit Plans

Year ended June 30, 2017

(In thousands)

(Unaudited)

	Year ended	Actuarially determined contribution (a)	Contributions in relation to the actuarially determined contribution (b)	Contribution deficiency (excess) (a-b)	Covered employee payroll (c)	Contributions as a percentage of covered-employee payroll (b/c)
Employees' Retirement System[1]	6/30/2008	$ 286,256	286,256	—	2,809,199	10.2 %
	6/30/2009	282,103	281,206	897	2,674,155	10.5
	6/30/2010	263,064	263,064	—	2,571,042	10.2
	6/30/2011	261,132	261,132	—	2,486,780	10.5
	6/30/2012	273,623	274,034	(411)	2,414,884	11.3
	6/30/2013	358,376	358,992	(616)	2,335,773	15.4
	6/30/2014	428,982	429,752	(770)	2,335,773	18.4
	6/30/2015	517,220	518,163	(943)	2,353,225	22.0
	6/30/2016	595,124	595,566	(442)	2,390,457	24.9
	6/30/2017	624,623	625,281	(658)	2,565,918	24.4
Public School Employees Retirement System[2]	6/30/2008	2,869	2,869	—	N/A	N/A
	6/30/2009	5,529	5,529	—	N/A	N/A
	6/30/2010	5,530	5,530	—	N/A	N/A
	6/30/2011	7,509	7,509	—	N/A	N/A
	6/30/2012	15,884	15,884	—	N/A	N/A
	6/30/2013	24,829	24,829	—	N/A	N/A
	6/30/2014	27,160	27,160	—	N/A	N/A
	6/30/2015	28,461	28,461	—	N/A	N/A
	6/30/2016	28,580	28,580	—	N/A	N/A
	6/30/2017	26,277	26,277	—	N/A	N/A
Legislative Retirement System[3]	6/30/2008	—	73	(73)	N/A	N/A
	6/30/2009	—	71	(71)	N/A	N/A
	6/30/2010	—	75	(75)	N/A	N/A
	6/30/2011	—	75	(75)	N/A	N/A
	6/30/2012	—	76	(76)	N/A	N/A
	6/30/2013	—	128	(128)	N/A	N/A
	6/30/2014	—	45	(45)	N/A	N/A
	6/30/2015	—	—	—	N/A	N/A
	6/30/2016	—	—	—	N/A	N/A
	6/30/2017	—	—	—	N/A	N/A
Georgia Judicial Retirement System	6/30/2008	2,395	2,395	—	51,102	4.7
	6/30/2009	1,703	1,703	—	52,803	3.2
	6/30/2010	2,600	2,600	—	51,293	5.1
	6/30/2010	1,932	1,932	—	52,331	3.7
	6/30/2011	2,083	2,083	—	51,898	4.0
	6/30/2013	2,279	2,279	—	52,807	4.3
	6/30/2014	2,375	2,375	—	54,787	4.3
	6/30/2015	4,261	4,261	—	54,272	7.9
	6/30/2016	7,623	7,623	—	57,401	13.3
	6/30/2017	6,684	6,684	—	59,695	11.2

EMPLOYEES' RETIREMENT SYSTEM OF GEORGIA
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Schedules of Employers' and Nonemployers' Contributions – Defined Benefit Plans

Year ended June 30, 2017

(In thousands)

(Unaudited)

	Year ended	Actuarially determined contribution (a)	Contributions in relation to the actuarially determined contribution (b)	Contribution deficiency (excess) (a-b)	Covered employee payroll (c)	Contributions as a percentage of covered-employee payroll (b/c)
Georgia Military Pension Fund[4]	6/30/2008	$ 1,103	1,103	—	N/A	N/A
	6/30/2009	1,323	1,323	—	N/A	N/A
	6/30/2010	1,434	1,434	—	N/A	N/A
	6/30/2011	1,282	1,282	—	N/A	N/A
	6/30/2012	1,521	1,521	—	N/A	N/A
	6/30/2013	1,703	1,703	—	N/A	N/A
	6/30/2014	1,892	1,892	—	N/A	N/A
	6/30/2015	1,893	1,893	—	N/A	N/A
	6/30/2016	1,990	1,990	—	N/A	N/A
	6/30/2017	2,018	2,018	—	N/A	N/A
State Employees' Assurance Department Retired and Vested Inactive Members Trust Fund						
	6/30/2008	—	—	—	N/A	N/A
	6/30/2009	—	—	—	N/A	N/A
	6/30/2010	—	—	—	N/A	N/A
	6/30/2011	—	—	—	N/A	N/A
	6/30/2012	12,724	12,724	—	2,085,902	1.0
	6/30/2013	5,009	5,009	—	1,855,185	—
	6/30/2014	—	—	—	N/A	N/A
	6/30/2015	—	—	—	N/A	N/A
	6/30/2016	—	—	—	N/A	N/A
	6/30/2017	—	—	—	N/A	N/A

This data, except for annual covered payroll, was provided by the System's actuary.

1 In 2009, an employer group within ERS did not contribute the full actuarially determined contribution. This employer is making additional contributions to repay this shortfall.

2 No statistics regarding covered payroll are available. Contributions are not based upon members' salaries but are simply $4.00 per member, per month, for nine months, each fiscal year if hired prior to July 1, 2012 and $10 per month, per member, for nine months, if hired after July 1, 2012.

3 The Georgia General Assembly made contributions in some years that were not required.

4 No statistics regarding covered payroll are available. Active and inactive plan member information is maintained by the Georgia Department of Defense.

See accompanying notes to required supplementary schedules and accompanying independent auditors' report.

EMPLOYEES' RETIREMENT SYSTEM OF GEORGIA
(Including All Plans and Funds Administered by the
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Required Supplementary Information

Schedules of Employers' and Nonemployers' Net Pension/OPEB Liability and Related Ratios – Defined Benefit Plans

June 30, 2017

(In thousands)

(Unaudited)

		2017	2016	2015	2014
Employees' Retirement System:					
Total pension liability	$	17,159,634	17,103,987	17,019,362	17,042,149
Plan fiduciary net position		13,098,299	12,373,567	12,967,964	13,291,531
Employers' and nonemployers' net pension liability	$	4,061,335	4,730,420	4,051,398	3,750,618
Plan fiduciary net position as a percentage of the total pension liability		76.33 %	72.34 %	76.20 %	77.99 %
Covered-employee payroll	$	2,565,918	2,390,457	2,353,225	2,335,773
Employers' and nonemployers' net pension liability as a percentage of covered-employee payroll		158.28 %	197.89 %	172.16 %	160.57 %
Public School Employees Retirement System:					
Total pension liability	$	1,013,163	992,292	946,200	930,745
Plan fiduciary net position		868,134	803,775	823,150	821,733
Employers' and nonemployers' net pension liability	$	145,029	188,517	123,050	109,012
Plan fiduciary net position as a percentage of the total pension liability		85.69 %	81.00 %	87.00 %	88.29 %
Covered-employee payroll		N/A	N/A	N/A	N/A
Employers' and nonemployers' net pension liability as a percentage of covered-employee payroll		N/A	N/A	N/A	N/A
Legislative Retirement System:					
Total pension liability	$	25,898	26,142	25,271	25,216
Plan fiduciary net position		32,981	30,975	32,359	32,794
Employer's net pension asset	$	(7,083)	(4,833)	(7,088)	(7,578)
Plan fiduciary net position as a percentage of the total pension liability		127.35 %	118.49 %	128.05 %	130.05 %
Covered-employee payroll		N/A	N/A	N/A	N/A
Employer's net pension asset as a percentage of covered-employee payroll		N/A	N/A	N/A	N/A
Georgia Judicial Retirement System:					
Total pension liability	$	394,736	368,669	357,081	350,443
Plan fiduciary net position		441,182	403,011	404,852	400,790
Employers' and nonemployers' net pension asset	$	(46,446)	(34,342)	(47,771)	(50,347)
Plan fiduciary net position as a percentage of the total pension liability		111.77 %	109.32 %	113.38 %	114.37 %
Covered-employee payroll	$	59,695	57,401	54,272	54,787
Employers' and nonemployers' net pension asset as a percentage of covered-employee payroll		(77.81)%	(59.83)%	(88.02)%	(91.90)%
Georgia Military Pension Fund:					
Total pension liability	$	40,085	36,950	33,343	31,511
Plan fiduciary net position		20,711	17,717	16,712	15,251
Employer's net pension liability	$	19,374	19,233	16,631	16,260
Plan fiduciary net position as a percentage of the total pension liability		51.67 %	47.95 %	50.12 %	48.40 %
Covered-employee payroll		N/A	N/A	N/A	N/A
Employer's net pension liability as a percentage of covered-employee payroll		N/A	N/A	N/A	N/A
State Employees' Assurance Department Retired and Vested Inactive Members Trust Fund:					
Total OPEB liability	$	861,346	—	—	—
Plan fiduciary net position		1,121,251	—	—	—
Employer's net OPEB asset	$	(259,905)	—	—	—
Plan fiduciary net position as a percentage of the total liability		130.17 %	— %	— %	— %
Covered-employee payroll		1,383,860	—	—	—
Employer's net OPEB asset as a percentage of covered-employee payroll		(18.78)%	— %	— %	— %

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

See accompanying notes to required supplementary schedule and accompanying independent auditors' report.

EMPLOYEES' RETIREMENT SYSTEM OF GEORGIA
(Including All Plans and Funds Administered by the
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Schedules of Changes in Employers' and Nonemployers' Net Pension/OPEB Liability – Defined Benefit Plans

June 30, 2017

(In thousands)

(Unaudited)

	2017	2016	2015	2014
Employees' Retirement System:				
Total pension liability:				
Service cost	$ 125,910	143,043	145,045	150,075
Interest	1,230,175	1,225,650	1,227,846	1,224,380
Benefit changes	30,563	—	—	—
Differences between expected and actual experience	72,315	(238)	(53,950)	—
Changes of assumptions	—	70,890	—	—
Benefit payments	(1,394,283)	(1,347,633)	(1,334,278)	(1,305,998)
Refunds of contributions	(9,033)	(7,087)	(7,450)	(8,757)
Net change in total pension liability	55,647	84,625	(22,787)	59,700
Total pension liability – beginning	17,103,987	17,019,362	17,042,149	16,982,449
Total pension liability – end (a)	17,159,634	17,103,987	17,019,362	17,042,149
Plan fiduciary net position:				
Contributions – employer	613,201	583,082	505,668	418,807
Contributions – nonemployer	12,080	12,484	12,495	10,945
Contributions – member	35,863	31,961	33,713	32,423
Administrative expense allotment	10	10	10	—
Net investment income	1,475,626	141,292	474,147	2,021,748
Benefit payments	(1,394,283)	(1,347,633)	(1,334,278)	(1,305,998)
Administrative expense	(8,732)	(8,506)	(7,872)	(7,440)
Refunds of contributions	(9,033)	(7,087)	(7,450)	(8,757)
Other	—	—	—	—
Net change in plan fiduciary net position	724,732	(594,397)	(323,567)	1,161,728
Plan fiduciary net position – beginning	12,373,567	12,967,964	13,291,531	12,129,803
Plan fiduciary net position – end (b)	13,098,299	12,373,567	12,967,964	13,291,531
Net pension liability – end (a)-(b)	$ 4,061,335	4,730,420	4,051,398	3,750,618
Public School Employees Retirement System:				
Total pension liability:				
Service cost	$ 12,788	11,952	12,088	11,049
Interest	72,157	68,776	67,652	66,143
Benefit changes	—	—	—	—
Differences between expected and actual experience	(3,665)	(9,483)	(6,858)	—
Changes of assumptions	—	33,215	—	—
Benefit payments	(59,378)	(57,903)	(56,972)	(56,189)
Refunds of contributions	(1,031)	(465)	(455)	(514)
Net change in total pension liability	20,871	46,092	15,455	20,489
Total pension liability – beginning	992,292	946,200	930,745	910,256
Total pension liability – ending (a)	1,013,163	992,292	946,200	930,745
Plan fiduciary net position:				
Contributions – nonemployer	26,277	28,580	28,461	27,160
Contributions – member	2,084	1,925	1,800	1,659
Net investment income	97,715	9,809	30,129	123,799
Benefit payments	(59,378)	(57,903)	(56,972)	(56,189)
Administrative expense	(1,308)	(1,321)	(1,545)	(1,450)
Refunds of contributions	(1,031)	(465)	(456)	(514)
Other	—	—	—	—
Net change in plan fiduciary net position	64,359	(19,375)	1,417	94,465
Plan fiduciary net position – beginning	803,775	823,150	821,733	727,268
Plan fiduciary net position – end (b)	868,134	803,775	823,150	821,733
Net pension liability – end (a)-(b)	$ 145,029	188,517	123,050	109,012

(Continued)

EMPLOYEES' RETIREMENT SYSTEM OF GEORGIA
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Schedules of Changes in Employers' and Nonemployers' Net Pension/OPEB Liability – Defined Benefit Plans

June 30, 2017

(In thousands)

(Unaudited)

		2017	2016	2015	2014
Legislative Retirement System:					
Total pension liability:					
Service cost	$	357	331	338	344
Interest		1,892	1,829	1,824	1,799
Benefit changes		—	—	—	—
Differences between expected and actual experience		(655)	(465)	(325)	—
Changes of assumptions		—	938	—	—
Benefit payments		(1,763)	(1,724)	(1,756)	(1,801)
Refunds of contributions		(75)	(38)	(26)	(30)
Net change in total pension liability		(244)	871	55	312
Total pension liability – beginning		26,142	25,271	25,216	24,904
Total pension liability – end (a)		25,898	26,142	25,271	25,216
Plan fiduciary net position:					
Contributions – employer		—	—	—	45
Contributions – member		327	328	327	282
Net investment income		3,741	363	1,189	4,969
Benefit payments		(1,763)	(1,724)	(1,756)	(1,801)
Administrative expense		(224)	(313)	(169)	(152)
Refunds of contributions		(75)	(38)	(26)	(30)
Other		—	—	—	—
Net change in plan fiduciary net position		2,006	(1,384)	(435)	3,313
Plan fiduciary net position – beginning		30,975	32,359	32,794	29,481
Plan fiduciary net position – end (b)		32,981	30,975	32,359	32,794
Net pension asset – end (a)-(b)	$	(7,083)	(4,833)	(7,088)	(7,578)
Georgia Judicial Retirement System:					
Total pension liability:					
Service cost	$	12,514	12,713	7,751	7,584
Interest		26,826	26,058	25,566	24,530
Benefit changes		3,419	—	—	—
Differences between expected and actual experience		5,258	(3,603)	(7,542)	—
Changes of assumptions		—	(4,308)	—	—
Benefit payments		(21,784)	(19,011)	(18,365)	(17,441)
Refunds of contributions		(166)	(261)	(772)	(22)
Net change in total pension liability		26,067	11,588	6,638	14,651
Total pension liability – beginning		368,669	357,081	350,443	335,792
Total pension liability – end (a)		394,736	368,669	357,081	350,443
Plan fiduciary net position:					
Contributions – employer		4,081	4,754	2,696	1,373
Contributions – nonemployer		2,603	2,869	1,564	1,002
Contributions – member		4,906	5,507	5,061	4,731
Net investment income		49,259	5,055	14,697	60,012
Benefit payments		(21,784)	(19,011)	(18,365)	(17,441)
Administrative expense		(728)	(754)	(819)	(754)
Refunds of contributions		(166)	(261)	(772)	(22)
Other		—	—	—	—
Net change in plan fiduciary net position		38,171	(1,841)	4,062	48,901
Plan fiduciary net position – beginning		403,011	404,852	400,790	351,889
Plan fiduciary net position – end (b)		441,182	403,011	404,852	400,790
Net pension asset – end (a)-(b)	$	(46,446)	(34,342)	(47,771)	(50,347)

EMPLOYEES' RETIREMENT SYSTEM OF GEORGIA
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Schedules of Changes in Employers' and Nonemployers' Net Pension/OPEB Liability – Defined Benefit Plans

June 30, 2017

(In thousands)

(Unaudited)

		2017	2016	2015	2014
Georgia Military Pension Fund:					
Total pension liability:					
Service cost	$	89	73	73	73
Interest		2,732	2,465	2,330	2,223
Benefit changes		—	—	—	—
Differences between expected and actual experience		1,356	950	326	—
Changes of assumptions		—	1,082	—	—
Benefit payments		(1,042)	(963)	(897)	(841)
Refunds of contributions		—	—	—	—
Net change in total pension liability		3,135	3,607	1,832	1,455
Total pension liability – beginning		36,950	33,343	31,511	30,056
Total pension liability – end (a)		40,085	36,950	33,343	31,511
Plan fiduciary net position:					
Contributions – employer		2,018	1,990	1,893	1,892
Contributions – member		—	—	—	—
Net investment income		2,262	240	585	2,179
Benefit payments		(1,042)	(963)	(896)	(841)
Administrative expense		(244)	(262)	(121)	(110)
Refunds of contributions		—	—	—	—
Other		—	—	—	—
Net change in plan fiduciary net position		2,994	1,005	1,461	3,120
Plan fiduciary net position – beginning		17,717	16,712	15,251	12,131
Plan fiduciary net position – end (b)		20,711	17,717	16,712	15,251
Net pension liability – end (a)-(b)	$	19,374	19,233	16,631	16,260
State Employees' Assurance Department Retired and Vested Inactive Members Trust Fund:					
Total OPEB liability:					
Service cost	$	3,959	—	—	—
Interest		61,076	—	—	—
Benefit changes		—	—	—	—
Differences between expected and actual experience		—	—	—	—
Changes of assumptions		—	—	—	—
Benefit payments		(36,058)	—	—	—
Refunds of contributions		—	—	—	—
Net change in total OPEB liability		28,977	—	—	—
Total OPEB liability – beginning		832,369	—	—	—
Total OPEB liability – end (a)		861,346	—	—	—
Plan fiduciary net position:					
Contributions – employer		1	—	—	—
Insurance premiums – member		3,793	—	—	—
Net investment income		125,550	—	—	—
Benefit payments		(36,058)	—	—	—
Administrative expense		(576)	—	—	—
Refunds of contributions		—	—	—	—
Other		—	—	—	—
Net change in plan fiduciary net position		92,710	—	—	—
Plan fiduciary net position – beginning		1,028,541	—	—	—
Plan fiduciary net position – end (b)		1,121,251	—	—	—
Net OPEB asset – end (a)-(b)	$	(259,905)	—	—	—

See accompanying notes to required supplementary schedule and accompanying independent auditors' report.

EMPLOYEES' RETIREMENT SYSTEM OF GEORGIA
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Required Supplementary Information

Schedule of Investment Returns

Year ended June 30, 2017

(Unaudited)

	2017	2016	2015	2014
Pooled Investment Fund:				
Annual money-weighted rate of return, net of investment expense	2.9 %	(7.2)%	(5.3)%	6.0 %

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

See accompanying notes to required supplementary schedule and accompanying independent auditors' report.

(1) Schedule of Employers' and Nonemployers' Contributions – Defined Benefit Plans

This schedule presents the required contributions and the percent of required contributions actually contributed.

(2) Schedule of Employers' and Nonemployers' Net Pension/OPEB Liability and Related Ratios – Defined Benefit Plans

The components of the net pension/OPEB liability as of the fiscal year end and the fiduciary net position as a percentage of the total pension/OPEB liability as of that date are presented in this schedule. This trend information will be accumulated to display a 10-year presentation.

(3) Schedule of Changes in Employers' and Nonemployers' Net Pension/OPEB Liability – Defined Benefit Plans

Net pension/OPEB liability which is measured as total pension/OPEB liability less the amount of the fiduciary net position is presented in this schedule. This trend information will be accumulated to display a 10-year presentation.

(4) Schedule of Investment Returns

This schedule presents historical trend information about the annual money-weighted rate of return on plan investments, net of plan investment expense. This trend information will be accumulated to display a 10-year presentation.

(5) Individual Plan Information

This note provides information about changes of benefit terms, changes of assumptions, and methods and assumptions used in calculations of actuarially determined contributions.

(a) Employees' Retirement System

Changes of benefit terms – A new benefit tier was added for members joining the System on and after July 1, 2009. A one-time 3% payment was granted to certain retirees and beneficiaries effective July 2016.

Changes of assumptions – On December 17, 2015, the board adopted recommended changes to the economic and demographic assumptions utilized by the System. Primary among the changes were the updates to rates of mortality, retirement, withdrawal, and salary increases.

(b) Public School Employees Retirement System

Changes of benefit terms – The member contribution rate was increased from $4 to $10 per month for members joining the System on or after July 1, 2012.

Changes of assumptions – On December 17, 2015, the Board adopted recommended changes to the economic and demographic assumptions utilized by the System. Primary among the changes were the updates to rates of mortality, retirement, and withdrawal.

(Continued)

(c) Legislative Retirement System

Changes of benefit terms – none

Changes of assumptions – On December 17, 2015, the Board adopted recommended changes to the economic and demographic assumptions utilized by the System. Primary among the changes were the updates to rates of mortality, retirement, and withdrawal.

(d) Georgia Judicial Retirement System

Changes of benefit terms – Spouses' benefits were changed for members joining the System on and after July 1, 2012. A 2% cost-of-living adjustment was granted to certain retired members and beneficiaries effective July 1, 2016.

Changes of assumptions – On December 17, 2015, the Board adopted recommended changes to the economic and demographic assumptions utilized by the System. Primary among the changes were the updates to rates of mortality, retirement, withdrawal, and salary increases.

(e) Georgia Military Pension Fund

Changes of benefit terms – none

Changes of assumptions – On December 17, 2015, the board adopted recommended changes to the economic and demographic assumptions utilized by the System. Primary among the changes were the updates to rates of mortality, retirement, and withdrawal.

(Continued)

The following actuarial methods and assumptions were used to determine the most recent contribution rates reported in those schedules:

	ERS	GJRS
Actuarial cost method	Entry age	Entry age
Amortization method	Level dollar, closed	Level percent of pay, closed
Remaining amortization period	22.6 years	19.5 years
Asset valuation method	5-year smoothed market	5-year smoothed market
Inflation	3.00%	3.00%
Salary increases	5.45–9.25%, including inflation	6.00%, including inflation
Investment rate of return	7.50% net of pension plan investment expense, including inflation	7.50% net of pension plan investment expense, including inflation

	PSERS	GMPF
Actuarial cost method	Entry age	Entry age
Amortization method	Level dollar, closed	Level dollar, closed
Remaining amortization period	23.9 years	19 years
Asset valuation method	5-year smoothed market	5-year smoothed market
Inflation	3.00%	3.00%
Salary increase	N/A	N/A
Investment rate of return	7.50% net of pension plan investment expense, including inflation	7.50% net of pension plan investment expense, including inflation

	LRS	SEAD – OPEB
Actuarial cost method	Entry age	Projected unit credit
Amortization method	Level dollar, open	Level dollar, open
Remaining amortization period	N/A	N/A
Asset valuation method	5-year smoothed market	Market value of assets
Inflation	3.00%	3.00%
Salary increases:		
ERS	N/A	5.45%–9.25%
GJRS	N/A	6.00
LRS	N/A	—
Investment rate of return	7.50% net of pension plan investment expense, including inflation	7.50% net of pension plan investment expense, including inflation

ADDITIONAL INFORMATION

(See Accompanying Independent Auditors' Report)

EMPLOYEES' RETIREMENT SYSTEM OF GEORGIA
(Including All Plans and Funds Administered by the
Employees' Retirement System of Georgia)
(A Component Unit of the State of Georgia)

Statement of Changes in Assets and Liabilities

Survivors Benefit Fund

Year ended June 30, 2017

(In thousands)

		Balance at June 30, 2016	Additions	Deductions	Balance at June 30, 2017
Assets:					
Cash and cash equivalents	$	93	—	1	92
Equity in pooled investment fund		120,871	15,080	—	135,951
Total assets	$	120,964	15,080	1	136,043
Liabilities:					
Due to other funds/plans	$	120,964	15,080	1	136,043
Total liabilities	$	120,964	15,080	1	136,043

See accompanying independent auditors' report.

EMPLOYEES' RETIREMENT SYSTEM OF GEORGIA
(Including All Plans and Funds Administered by the
Employees' Retirement System of Georgia)
(A Component Unit of the State of Georgia)

Schedule of Administrative Expenses

Contributions and Expenses

Year ended June 30, 2017
(With comparative amounts for the year ended June 30, 2016)

(In thousands)

		2017	2016
Contributions from fiduciary funds:			
Employees' Retirement System	$	8,732	8,506
Public School Employees Retirement System		1,308	1,321
Legislative Retirement System		224	313
Georgia Judicial Retirement System		728	754
Georgia Military Pension Fund		244	262
Superior Court Judges Retirement Fund		1	4
District Attorneys Retirement Fund		4	1
Georgia Defined Contribution Plan		785	766
401(k) Plan		3,096	2,832
457 Plan		789	820
State Employees' Assurance Department – OPEB		576	599
Total fiduciary funds		16,487	16,178
Contributions from proprietary fund:			
State Employees' Assurance Department Active Members Fund		64	67
Total contributions		16,551	16,245
Expenses:			
Personal services:			
Salaries and fringes		5,256	5,074
Retirement contributions		1,251	1,211
FICA		376	360
Health insurance		1,603	1,546
Miscellaneous		57	73
		8,543	8,264
Communications:			
Postage		279	245
Publications and printing		16	14
Telecommunications		60	64
Travel		14	14
		369	337
Professional services:			
Accounting services		730	709
Computer services		1,034	792
Contracts		3,298	3,175
Actuarial services		277	428
Medical services		133	180
Audit fees		291	260
Legal services		40	39
		5,803	5,583

(Continued)

EMPLOYEES' RETIREMENT SYSTEM OF GEORGIA
(Including All Plans and Funds Administered by the
Employees' Retirement System of Georgia)
(A Component Unit of the State of Georgia)

Schedule of Administrative Expenses

Contributions and Expenses

Year ended June 30, 2017
(With comparative amounts for the year ended June 30, 2016)

(In thousands)

		2017	2016
Management fees:			
Building maintenance	$	617	617
Other services and charges:			
Temporary services		745	966
Supplies and materials		78	77
Repairs and maintenance		21	20
Courier services		3	3
Depreciation		304	320
Miscellaneous		65	55
Office equipment		3	3
		1,219	1,444
Total expenses		16,551	16,245
Net income	$	—	—

See accompanying independent auditors' report.