

Component Units of the State of Alabama

# Comprehensive Annual Financial Report

For the Fiscal Year Ended September 30, 2020





# The Retirement Systems of Alabama

COMPREHENSIVE ANNUAL FINANCIAL REPORT

For the Fiscal Year Ended September 30, 2020

The Retirement Systems of Alabama  
Consists of:

TEACHERS' RETIREMENT SYSTEM of ALABAMA  
EMPLOYEES' RETIREMENT SYSTEM of ALABAMA  
JUDICIAL RETIREMENT FUND

(Each a Component Unit of the State of Alabama)

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David G. Bronner, Ph.D., J.D., Chief Executive Officer

201 South Union Street • P. O. Box 302150 • Montgomery, Alabama 36130-2150  
(334) 517-7000 or 1-877-517-0020 • <http://www.rsa-al.gov>

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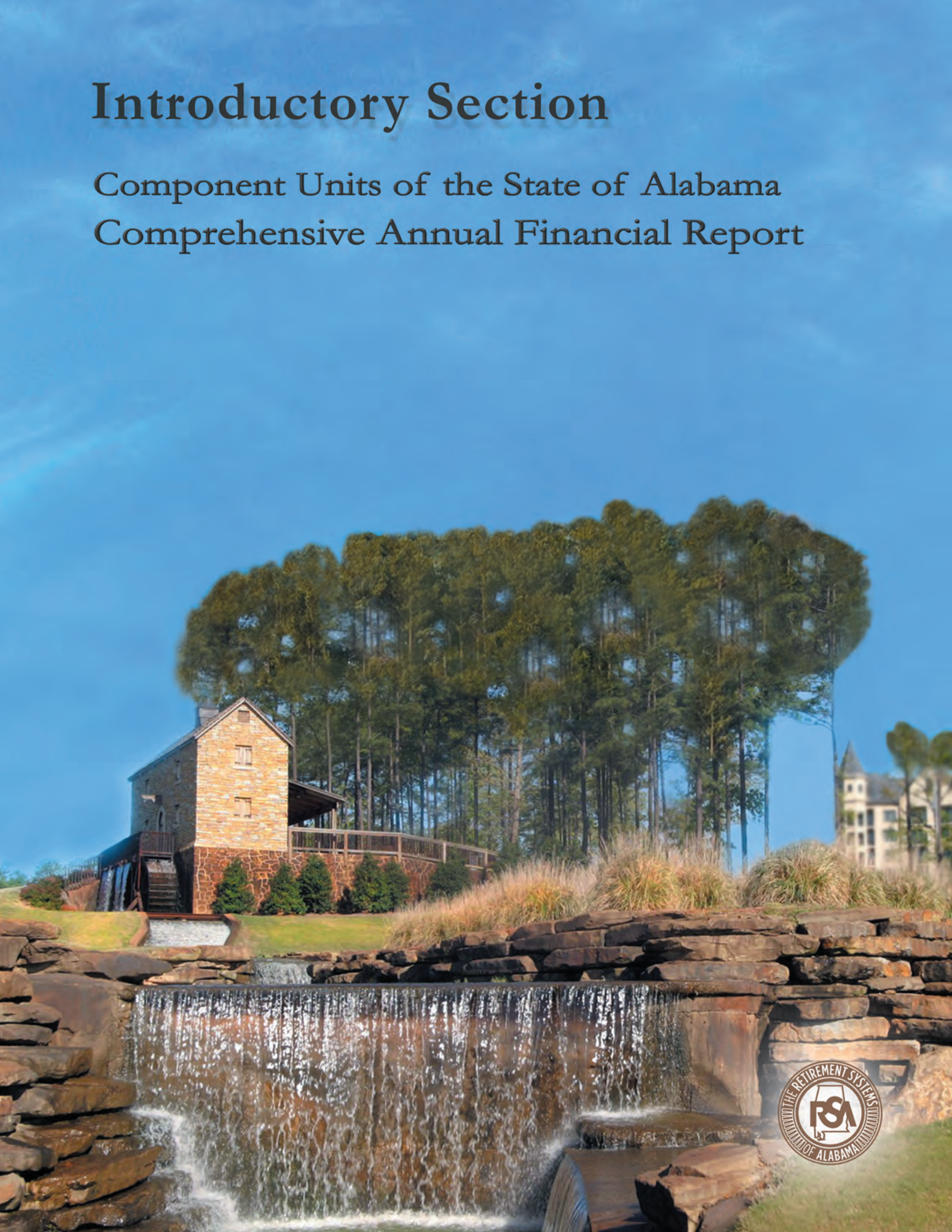
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# Introductory Section

Component Units of the State of Alabama  
Comprehensive Annual Financial Report



**Teachers**  
Luther P. Hallmark, Chair  
John R. Whaley, Vice Chair



**Employees**  
State State Police Public Judicial  
Kay Ivey, Chair  
James E. Fibbe, Vice Chair

# THE RETIREMENT SYSTEMS OF ALABAMA

David G. Bronner, CEO  
Donald L. Yancey, Deputy Director

January 15, 2021

The Boards of Control  
Teachers' Retirement System of Alabama  
Employees' Retirement System of Alabama  
201 South Union Street  
Montgomery, Alabama 36104

Dear Board Members:

It is with great pleasure that we submit the Comprehensive Annual Financial Report (CAFR) of the Retirement Systems of Alabama (RSA or Systems) for the fiscal year ended September 30, 2020. The Retirement Systems of Alabama includes the Teachers' Retirement System of Alabama (TRS), the Employees' Retirement System of Alabama (ERS), and the Judicial Retirement Fund (JRF). Each system is considered a component unit of the State of Alabama for financial reporting purposes, and, as such, the financial statements contained in this report are also included in the State of Alabama Comprehensive Annual Financial Report.

Responsibility for both the accuracy of the data, and the completeness and fairness of the presentation, including all disclosures, rests with the management of the Systems. Sufficient internal controls exist to provide reasonable assurance regarding the safekeeping of assets and fair presentation of the financial statements, supporting schedules, and statistical tables. We trust that you and the members of the Systems will find this report helpful in understanding your retirement system.

## **Administration and Plan History**

The TRS, ERS, and JRF operate under common management and are collectively referred to as the Retirement Systems of Alabama. In addition to executive management, the TRS, ERS, and JRF share investment management, accounting, and information system services, the costs of which are allocated to the funds on an equitable basis. The TRS was established pursuant to the *Code of Alabama 1975, Title 16, Chapter 25* (Act 419 of the Legislature of 1939) to provide benefits to qualified persons employed by State-supported educational institutions. The ERS was established pursuant to the *Code of Alabama 1975, Title 36, Chapter 27* (Act 515 of the Legislature of 1945) to provide benefits to State employees, State Police, and, on an elective basis, to qualified persons of cities, towns, and quasi-public organizations. The JRF was established pursuant to the *Code of Alabama 1975, Title 12, Chapter 18* (Act 1163 of the Legislature of 1973) to provide benefits to qualified judges and justices. Additional information regarding the administration and history of each system, including laws establishing each plan and services provided, can be found in the Financial Section - Notes to the Combined Financial Statements portion of this report.

## **Financial Information**

*Accounting Method* - As required by Generally Accepted Accounting Principles (GAAP), the financial information of the TRS, ERS, and JRF is reported on the accrual basis of accounting. Revenues are recognized when earned and expenses are recognized when the corresponding liability is incurred. Investments are reported at fair value.



*Internal Controls* - The management of the RSA is responsible for maintaining the system of internal controls (system). The system provides management with reasonable, but not absolute, assurance regarding the safeguarding of assets against loss or unauthorized disposition and the reliability of the financial records from which the financial reports are prepared. The concept of reasonable assurance recognizes that the cost of a control should not exceed the resulting benefits.

*Summary Comparative Data* – Management’s Discussion and Analysis (MD&A) includes a narrative introduction, an overview of the financial statements, including the notes and required supplementary information, and summary comparative data for fiscal years 2020 and 2019. Also, an analysis of significant variances between fiscal years 2020 and 2019 is provided in the MD&A.

**Plan Financial Condition**

The funding objective of the RSA pension trust funds is to accumulate sufficient assets during a member’s employment by requiring employer and member contributions to fully finance the benefits the member is expected to receive throughout retirement.

At September 30, 2019, the date of the most recent actuarial valuation, the number of participants in the TRS was 285,399, ERS participants totaled 172,579, and JRF participants totaled 865. The following table compares the funded status as of September 30, 2019 and 2018:

<b>Funded Status (%)</b>			
<b>System</b>	<b>9/30/2019</b>	<b>9/30/2018</b>	<b>% Increase/ (Decrease)</b>
TRS	69.4	70.2	(0.8)
ERS	68.2	68.7	(0.5)
JRF	65.3	66.7	(1.4)

The funded status of the TRS decreased because salary increases were higher than expected and investment earnings were lower than expected. The funded status of the ERS decreased because salary increases were higher than expected, investment earnings were lower than expected, and mortality rates for retired members were lower than expected. The funded status of the JRF decreased because more members retired during the year than expected, mortality rates for retired members were lower than expected, and investment earnings were lower than expected.

**Investment Activity**

Total investments for the RSA increased in fiscal year 2020, primarily due to increases in the fair value of investments. Total pension fund investments managed by the RSA increased from \$38.0 billion at September 30, 2019, to \$39.0 billion at September 30, 2020, an increase of 2.46%.

	<b>Investments, at Fair Value</b>		<b>Interest &amp; Dividend Income</b>	
	<b>9/30/2020</b>	<b>9/30/2019</b>	<b>9/30/2020</b>	<b>9/30/2019</b>
<b>TRS</b>	\$25.6 billion	\$25.3 billion	\$576.2 million	\$583.3 million
<b>ERS</b>	\$13.0 billion	\$12.5 billion	\$298.8 million	\$291.0 million
<b>JRF</b>	\$313.9 million	\$308.1 million	\$6.9 million	\$7.5 million

<b>Net Change in Fair Value of Investments</b>		
	<b>9/30/2020</b>	<b>9/30/2019</b>
<b>TRS</b>	\$801.5 million	\$33.7 million
<b>ERS</b>	\$425.6 million	\$30.1 million
<b>JRF</b>	\$16.2 million	\$3.5 million

Total returns were 5.62%, 5.83%, and 7.87% for TRS, ERS, and JRF, respectively. The early part of the year started off fairly smooth as most equity markets moved higher through mid-February. As the economy ground to a stunning halt when the COVID-19 pandemic started to unfold, equity markets around the globe cratered. Global central banks stepped into financial markets and bought unprecedented amounts of securities, while at the same time fiscal policy makers set up a multitude of programs to prop up businesses as well as displaced employees. Fast forward to the end of the year and equity markets as measured by the S&P 500 managed to produce a nice return with most of the return generated by a very narrow basket of technology and work-from-home companies. Interest rates have remained pegged across the curve and we saw a large amount of corporate debt issuance as companies took advantage of the low interest rate environment. We just experienced one of the quickest and deepest recessions on record followed by one of the quickest recoveries. With a new presidential cycle, a new COVID-19 wave, and partisan politics looking likely, we expect markets to remain volatile. With that said, we will continue to invest in a diverse mix of assets and monitor asset class ranges per the guidance given in the respective Investment Policy Statements of each system with the long-term goal of achieving our actuarial assumed rate of return. Additional information concerning investments, including investment policy statements, is located in the Investment Section of this report. The Schedule of Broker Commissions Paid can be found on page 114 of the Investment Section in this report.

#### **Management's Discussion and Analysis**

GASB Statement No. 34 requires that management provide a narrative introduction, overview, and analysis to accompany the Financial Statements in the form of Management's Discussion and Analysis (MD&A). This letter of transmittal is intended to complement the MD&A and should be read in conjunction with it. The MD&A can be found immediately following the Independent Auditors' Report.

#### **Professional Services**

Professional consultants are appointed by the Boards of Control to perform professional services that are essential to the effective operation of the TRS, ERS, and JRF. The certification letters from the independent actuary are included in this report. The professional consultants appointed by the Boards of Control are listed on the last page of the Introductory Section in this report.

#### **Financial Statement Audit**

Carr, Riggs & Ingram, LLC, Certified Public Accountants, issued an unqualified ("clean") opinion on the RSA's financial statements for the fiscal year ended September 30, 2020. The independent auditors' report is located at the front of the Financial Section of this report.

#### **Highlights and Initiatives**

During the fiscal year, the U.S. government recognized SiO2, a materials science company in Auburn, Alabama, by announcing an agreement worth \$143 million to help fund manufacturing of SiO2's patented materials science, which is a microscopic, thin, pure glass coating for biological drugs and vaccines. A solution to COVID-19 is being sought around the world by top science and research companies, and SiO2's syringes and vials will provide the vehicle to deliver those products with its breakthrough packaging. The RSA was one of three original investors in their technology for packaging biological drugs and vaccines.

In real estate news, the Auburn Marriott Opelika Resort & Spa at Grand National was named Marriott's Best Spa in North American for 2019, according to data released by Marriott International. These rankings are determined by guest surveys conducted independently for Marriott. The Grand Hotel Golf Resort & Spa was also honored; *USA Today* named The Grand in its Top 5 Historic Hotels as voted on by industry experts as well as a public vote. This is the second consecutive year for the Grand Hotel Golf Resort & Spa to be named a top historic property – it was ranked number four in 2019 and number three in 2020.

#### **Awards**

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Retirement Systems of Alabama for its comprehensive annual financial report for the fiscal year ended September 30, 2019. In order to be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized comprehensive annual financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

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A Certificate of Achievement is valid for a period of one year only. We believe our current comprehensive annual financial report continues to conform to the Certificate of Achievement Program's requirements and we are submitting it to the GFOA to determine its eligibility for another certificate.

The Retirement Systems received the Public Pension Coordinating Council (PPCC) Recognition Award for Funding 2020. The award recognizes organizations that meet professional standards for plan funding as set forth in the Public Pension Standards.

**Acknowledgments**

The compilation of this report reflects the combined effort of the staff under the leadership of the Boards of Control. It is intended to provide extensive and reliable information as a basis for making management decisions, determining compliance with legal provisions, and determining responsible stewardship of the funds of the TRS, ERS, and JRF.

We would like to take this opportunity to express our gratitude to the staff, the Boards of Control, the consultants, the Legislature, and to the many people who have worked so diligently through continued cooperative efforts to assure the successful operation and financial soundness of the TRS, ERS, and JRF.

Sincerely,

***Diane E. Scott***

Diane E. Scott, C.P.A., C.G.M.A.  
Chief Accountant & Financial Officer

***David G. Bronner***

David G. Bronner, Ph.D., J.D.  
Chief Executive Officer



Government Finance Officers Association

Certificate of  
Achievement  
for Excellence  
in Financial  
Reporting

Presented to

**The Retirement Systems of Alabama**

For its Comprehensive Annual  
Financial Report  
For the Fiscal Year Ended

September 30, 2019

*Christopher P. Morrill*

Executive Director/CEO



Public Pension Coordinating Council

***Recognition Award for Funding  
2020***

Presented to

***The Retirement Systems of Alabama***

In recognition of meeting professional standards for  
plan funding as  
set forth in the Public Pension Standards.

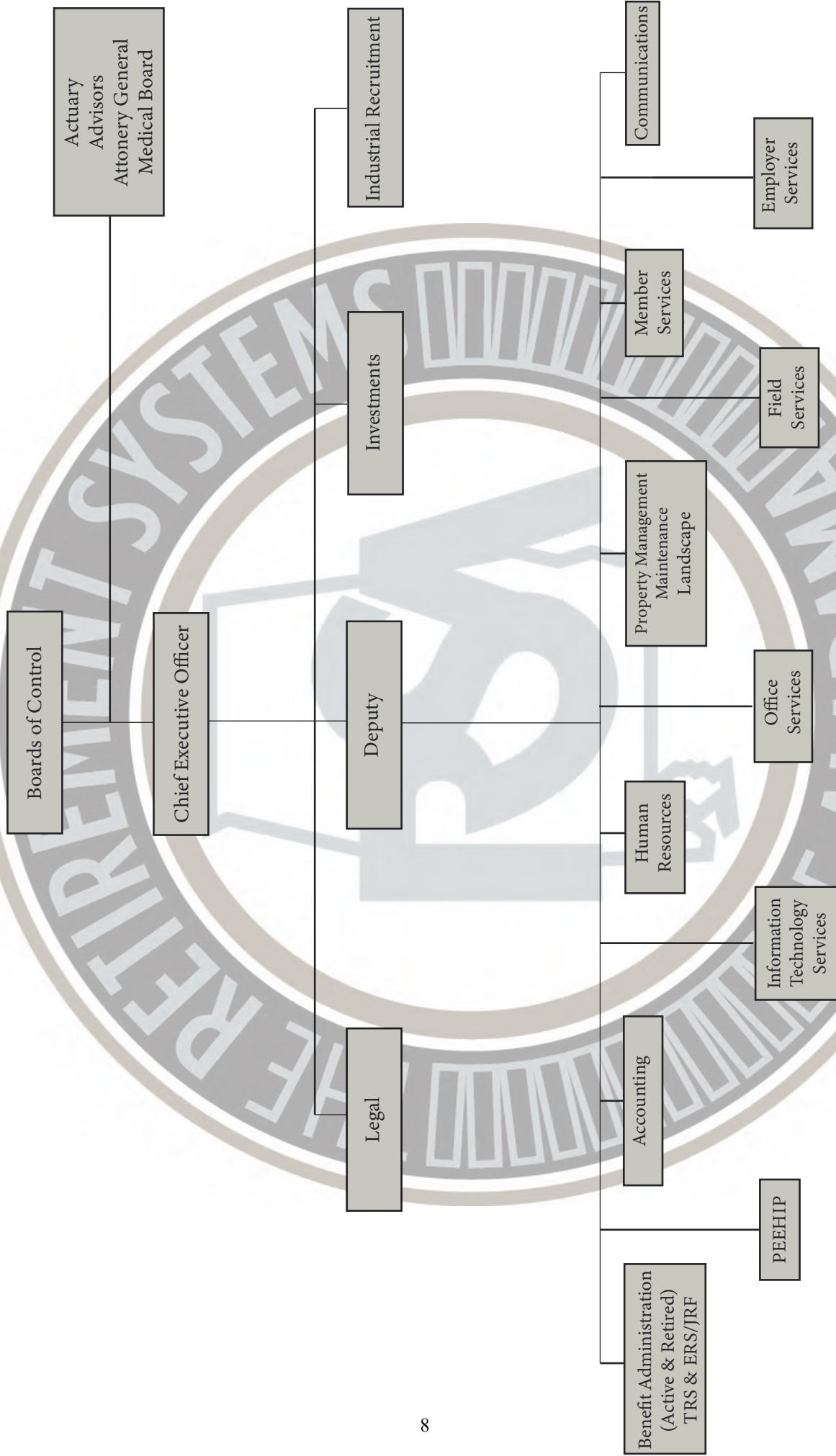
*Presented by the Public Pension Coordinating Council, a confederation of*

National Association of State Retirement Administrators (NASRA)  
National Conference on Public Employee Retirement Systems (NCPERS)  
National Council on Teacher Retirement (NCTR)

A handwritten signature in black ink that reads "Alan H. Winkle". The signature is written in a cursive style with a large, stylized 'A' and 'W'.

Alan H. Winkle  
Program Administrator

# Retirement Systems of Alabama



Note: The Retirement Systems of Alabama ("RSA") is a public pension plan statutorily formed under the laws of the State of Alabama. RSA consists of the Teachers' Retirement System of Alabama and the Employees' Retirement System of Alabama which includes and administers the Judicial Retirement Fund. Each system is considered a body corporate of the State of Alabama and they are referred to collectively for financial reporting purposes as "RSA." While each system has distinct boards of control, they share executive management and certain other services.

**Teachers' Retirement System Board of Control**

**Ex Officio Members**

Honorable John McMillan, Jr., State Treasurer  
Mr. Kelly Butler, State Finance Director  
Dr. Eric Mackey, State Superintendent of Education

**Elected Members**

Chair, Mr. Luther P. Hallmark, Superintendent Position  
Vice Chair, Mr. John R. Whaley, Teacher Position  
Ms. Peggy Mobley, Retired Position  
Mrs. Anita Gibson, Retired Position  
Ms. Kelli D. Shomaker, Higher Education Position  
Dr. Joseph G. Van Matre, Higher Education Position  
Dr. Susan Williams Brown, Postsecondary Position  
Mr. Jeffrey R. Cole, Principal Position  
Ms. Charlene McCoy, Teacher Position  
Ms. Amy C. Crew, Teacher Position  
Mrs. Susan Lockridge, Support Personnel Position  
Mr. Russell J. Twilley, Support Personnel Position

**Employees' Retirement System Board of Control\*\***

**Ex Officio Members**

Chair, Honorable Kay Ivey, Governor  
Mrs. Jackie B. Graham, State Personnel Director  
Honorable John McMillan, Jr., State Treasurer  
Mr. Kelly Butler, State Finance Director

**Elected Members**

Vice Chair, Mr. James Fibbe, Retired Local Employee Position  
Mr. Norris Green, Retired State Employee Position  
Mrs. Wendy S. Hester, Active State Employee Position  
Mrs. Lindsey Ward, Active State Employee Position  
Mr. David J. Harer, Active Local Employee Position  
Mrs. Lisa Statum, Active Local Employee Position

**Appointed Members**

Mr. John D. Free  
Ms. Tammy Rolling  
Lt. David Colston

\*\* The Employees' Retirement System Board of Control is responsible for the administration of both the Employees' Retirement System and the Judicial Retirement Fund.

*Introductory Section*

Staff, Advisors, and Medical Board

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**Staff, Advisors, and Medical Board**

David G. Bronner, Ph.D., J.D., Chief Executive Officer

Donald L. Yancey, M.P.A., J.D., Deputy Director

**Administrative Staff**

Chief Accountant & Financial Officer, Diane E. Scott, B.S., C.P.A., C.G.M.A.

Teachers' Retirement Executive, Christopher P. Townes, M.B.A.

Employees' & Judicial Retirement Executive, William F. Kelley, Jr., J.D.

Information Technology Services, Michael T. Baker, B.S.

General Counsel, Leura G. Canary, J.D.

Legislative Counsel, Neah M. Scott, J.D.

Communications, Deborah J. Kirk, B.S.

Field Services, Christopher C. Gallup, B.S.

Member Services, Penny K. Wilson, B.S.

**Investment Staff**

Director of Investments, R. Marc Green, M.B.A., CFA

Director of Private Placements, M. Hunter Harrell, M.B.A., J.D., CFA

Private Placements Analyst, Rachel W. Daniels, M.A., C.P.A.

Director of Fixed Income, Julie S. Barranco, M.B.A., CFA

Chief Economist, C. Lance Lachney, M.B.A., CFA

Fixed Income Analyst/Portfolio Manager, Nicholas A. Prillaman, M.S., CFA

Director of Equities, G. Allan Carr Jr., M.B.A., CFA

Assistant Director of Equities, Steven R. Lambdin, M.B.A., CFA

Assistant Director of Equities, Z. Hunter Bronson, M.S., CFA

Senior Equity Analyst/Portfolio Manager, Adam M. Rogers, M.A., CFA

Equity Analyst/Portfolio Manager, Bobby Long, M.B.A., CFA

Equity Analyst/Portfolio Manager, Kevin W. Gamble, M.B.A., CFA

Equity Analyst, Michael J. McNair, M.B.A., CFA

Equity Analyst, Joshua A. Husted, M.B.A., CFA

Equity Analyst, Shaun Wasso, M.B.A.

Cash Management & Operations, Catherine S. Ray, B.A.

**Advisors**

Independent Certified Public Accountants, Carr, Riggs, & Ingram, LLC

Investment Consultant, Regions Bank N.A., Mr. Alan McKnight

Investment Custodian, State Street Bank and Trust Company

Consulting Actuary, Cavanaugh Macdonald Consulting, LLC, Mr. Larry Langer

Attorney General, Honorable Steve Marshall

Chief Examiner, Honorable Rachel Riddle

**Medical Board**

Chair, Glenn Yates, M.D.

Gregory Borg, M.D.

Malcolm Brown, M.D.



# Financial Section

Component Units of the State of Alabama  
Comprehensive Annual Financial Report



## **INDEPENDENT AUDITORS' REPORT**

To the Boards of Control  
Teachers' Retirement System of Alabama  
Employees' Retirement System of Alabama  
Judicial Retirement Fund

We have audited the accompanying combined financial statements of the Retirement Systems of Alabama (consisting of the Teachers' Retirement System of Alabama, the Employees' Retirement System of Alabama, and the Judicial Retirement Fund (the RSA), a component unit of the State of Alabama), which comprise the combining statement of fiduciary net position as of September 30, 2020 and the related combining statement of changes in fiduciary net position, for the year then ended, and the related notes to the combined financial statements, which collectively comprise the Retirement Systems of Alabama'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 accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

### **Auditors' Responsibility**

Our responsibility is to express an opinion on these combined financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. 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 auditors consider internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

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

### **Opinion**

In our opinion, the combined financial statements referred to above present fairly, in all material respects, the fiduciary net position of the Retirement Systems of Alabama, as of September 30, 2020, and the changes in fiduciary net position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

## Other Matters

### *Prior-Year Comparative Information*

The financial statements include partial prior-year comparative information. Such information does not include all of the information required to constitute a presentation in conformity with accounting principles generally accepted in the United States of America. Accordingly, such information should be read in conjunction with the Retirement Systems of Alabama's financial statements for the year ended September 30, 2019, from which such partial information was derived. We have previously audited the Retirement Systems of Alabama's financial statements and we expressed an unmodified opinion on the respective financial statements in our report dated March 9, 2020. In our opinion, the summarized comparative information presented herein as of and for the year ended September 30, 2019, is consistent, in all material respects, with the audited financial statements from which it has been derived.

### *Required Supplementary Information*

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, schedule of changes in the net pension liability and related ratios, schedules of employer pension contributions, schedule of investment returns, schedules of proportionate share of the net pension liability, schedules of pension contributions, schedules of proportionate share of the net OPEB liability and schedules of net OPEB contributions for the RSA 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 an opinion on the combined financial statements that collectively comprise the Retirement Systems of Alabama's basic financial statements. The introductory section, investment section, actuarial section, statistical section, schedule of administrative expenses, schedule of investment expenses and schedule of professional/consultant fees (supplementary information) are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The schedule of administrative expenses, schedule of investment expenses and schedule of professional/consultant fees are the responsibility of management and were derived from and relate 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 schedule of administrative expenses, schedule of investment expenses and schedule of professional/consultant fees are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

The introductory, investment, actuarial, and statistical sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

*Carr, Riggs & Ingram, L.L.C.*

January 15, 2021  
Montgomery, Alabama

The Retirement Systems of Alabama (RSA) is comprised of the Teachers' Retirement System (TRS), Employees' Retirement System (ERS), and Judicial Retirement Fund (JRF). The following discussion provides an overview of the financial position and results of operations for RSA as of and for the fiscal year ended September 30, 2020. For more detailed information, please refer to the financial statements, including the Notes to the Combined Financial Statements and the Required Supplementary Information.

#### **Financial Statements and Required Supplementary Information**

The financial statements (statements) include the Combining Statement of Fiduciary Net Position and the Combining Statement of Changes in Fiduciary Net Position. The Notes to the Combined Financial Statements are considered an integral part of the financial statements. The statements are prepared using the economic resources measurement focus and accrual basis of accounting. Revenues are recognized when earned, pursuant to plan requirements, and expenses are recognized when incurred, regardless of when cash is received or expended. Investments are reported at fair value.

Combining Statement of Fiduciary Net Position – Includes all assets, deferred outflows of resources, liabilities, and deferred inflows of resources of RSA and provides a snapshot of the financial position of RSA as of the end of the fiscal year. Assets and deferred outflows of resources less liabilities and deferred inflows of resources results in the net position restricted for pension benefits at the end of the fiscal year.

Combining Statement of Changes in Fiduciary Net Position – Reports all additions and deductions of RSA for the fiscal year. Additions primarily consist of employer contributions, employee contributions, and investment income. Deductions are principally made up of retirement allowance payments. Additions minus deductions provide the change in fiduciary net position during the fiscal year. The change in fiduciary net position plus the beginning fiduciary net position results in the fiduciary net position at the end of the fiscal year.

The Notes to the Combined Financial Statements include plan descriptions, a summary of significant accounting policies, a description of legally required reserves and corresponding reserve balances at the end of the fiscal year, credit risk disclosures for cash and investments, concentration of investments disclosures, securities lending disclosures, funded status, net pension liability, net other postemployment benefits (OPEB) liability, contributions required and made, and additional actuarial information relevant to the latest actuarial valuations.

The Required Supplementary Information following the Notes to the Combined Financial Statements includes Schedules of Changes in the Net Pension Liability & Related Ratios, Schedules of Participating Employer Contributions to the Teachers' Retirement System (TRS) and the Judicial Retirement Fund (JRF), Schedule of Investment Returns, Schedules of Proportionate Share of the Net Pension Liability, Schedules of Retirement Contributions for TRS, ERS, and JRF Employees, Schedules of Proportionate Share of the Net OPEB Liability, and Schedules of SEHIP Contributions for TRS, ERS, and JRF Employees. The Schedules of Employer Contributions provides trend data on the annual required employer contributions and the percentage actually contributed.

RETIREMENT SYSTEMS OF ALABAMA

Financial Section

Management's Discussion and Analysis (Continued)

Comparative Summary Statements

Summary Comparative Combining Statement of Fiduciary Net Position

As of September 30, 2020 and 2019

(Dollar Amounts in Thousands)

	2020	2019	Variance	% Increase/ (Decrease)
<i>Assets &amp; Deferred Outflows of Resources</i>				
Cash	\$ 92,598	\$ 92,506	\$ 92	0.10
Receivables	275,541	294,607	(19,066)	(6.47)
Investment Sales Receivable	83,743	11,927	71,816	602.13
Investments, at Fair Value	38,963,720	38,028,895	934,825	2.46
Invested Securities Lending Collateral	1,138,806	961,787	177,019	18.41
Property and Equipment, Net	150,765	161,424	(10,659)	(6.60)
Total Assets	40,705,173	39,551,146	1,154,027	
Deferred Outflows of Resources	11,552	9,640	1,912	19.83
Total Assets & Deferred Outflows of Resources	40,716,725	39,560,786	1,155,939	2.92
<i>Liabilities &amp; Deferred Inflows of Resources</i>				
Accounts Payable and Other Liabilities	13,374	12,609	765	6.07
Investment Purchases Payable	74,816	13,505	61,311	453.99
Net Other Postemployment Benefits Liability	16,672	27,175	(10,503)	(38.65)
Net Pension Liability	41,281	36,026	5,255	14.59
Securities Lending Collateral	1,138,806	961,787	177,019	18.41
Total Liabilities	1,284,949	1,051,102	233,847	22.25
Deferred Inflows of Resources	16,291	9,222	7,069	76.65
Total Liabilities & Deferred Inflows of Resources	1,301,240	1,060,324	240,916	22.72
<b>Net Position</b>	<b>\$ 39,415,485</b>	<b>\$ 38,500,462</b>	<b>\$ 915,023</b>	<b>2.38</b>

RETIREMENT SYSTEMS OF ALABAMA

Financial Section

Management's Discussion and Analysis (Continued)

**Summary Comparative Combining Statement of Changes in Fiduciary Net Position  
For the Fiscal Years Ended September 30, 2020 and 2019  
(Dollar Amounts in Thousands)**

	<u>2020</u>	<u>2019</u>	<u>Variance</u>	<u>% Increase/ (Decrease)</u>
<b>Additions</b>				
Employee Contributions	\$ 780,899	\$ 770,840	\$ 10,059	1.30
Employer Contributions	1,400,380	1,354,911	45,469	3.36
New Units	344,352	-	344,352	100.00
Investment Income	2,121,145	946,028	1,175,117	124.22
Transfers Between Systems	9,235	10,610	(1,375)	(12.96)
Transfers from an Internal Service Fund	997	-	997	100.00
Total Additions	<u>4,657,008</u>	<u>3,082,389</u>	<u>1,574,619</u>	51.08
<b>Deductions</b>				
Retirement Allowance Payments	3,577,141	3,393,573	183,568	5.41
Return of Contributions, Unit Withdrawals & Death Benefits	107,602	106,562	1,040	0.98
Transfers Between Systems	9,235	10,610	(1,375)	(12.96)
Administrative Expenses	35,442	33,874	1,568	4.63
Depreciation	12,565	10,407	2,158	20.74
Total Deductions	<u>3,741,985</u>	<u>3,555,026</u>	<u>186,959</u>	5.26
<b>Net Increase/(Decrease) in Fiduciary Net Position</b>				
	915,023	(472,637)	1,387,660	293.60
Net Position - Beginning of Year	<u>38,500,462</u>	<u>38,973,099</u>	<u>(472,637)</u>	(1.21)
<b>Net Position - End of Year</b>	<u><b>\$ 39,415,485</b></u>	<u><b>\$ 38,500,462</b></u>	<u><b>\$ 915,023</b></u>	<b>2.38</b>

**Comparison of Individual Fiduciary Net Position  
As of September 30, 2020 and 2019  
(Dollar Amounts in Thousands)**

	<u>2020</u>	<u>2019</u>	<u>Variance</u>	<u>% Increase/ (Decrease)</u>
<b>TRS</b>	\$ 25,946,389	\$ 25,619,448	\$ 326,941	1.28
<b>ERS</b>	13,150,538	12,568,473	582,065	4.63
<b>JRF</b>	318,558	312,541	6,017	1.93
<b>Total</b>	<u><b>\$ 39,415,485</b></u>	<u><b>\$ 38,500,462</b></u>	<u><b>\$ 915,023</b></u>	<b>2.38</b>

# RETIREMENT SYSTEMS OF ALABAMA

## Financial Section

### Management's Discussion and Analysis (Continued)

#### Financial Analysis

- Primarily all cash on hand at September 30, 2020, was held for administrative expenses.
- In the Summary Comparative Combining Statement of Fiduciary Net Position, receivables consist primarily of employee contributions, employer contributions, interest, dividends, and member transfers between systems at September 30, 2020.
- Investment sales receivable and investment purchases payable occur as a result of trade date accounting. The increase in the receivable and payable for fiscal year 2020 was due to the value of securities traded in the current fiscal year and settling in the following fiscal year being greater than the value of the securities traded but settled in the previous fiscal year.
- The RSA's investment portfolio presented in percentages by investment type:

	<u>TRS</u>	<u>ERS</u>	<u>JRF</u>
<b>Equity</b>	69.09%	68.83%	65.23%
<b>Fixed</b>	21.67%	22.36%	33.47%
<b>Real Estate</b>	9.24%	8.81%	1.30%
<b>Total</b>	<u><u>100.00%</u></u>	<u><u>100.00%</u></u>	<u><u>100.00%</u></u>

- Employer contributions increased as a result of salary increases for fiscal year 2020 due to cost-of-living adjustments. The employer contribution rates for fiscal year 2020 are in the table below. ERS local participating employer contribution rates differ for each employer.

	<u>Tier 1</u>	<u>Tier 2</u>
<b>TRS</b>	12.43%	11.34%
<b>ERS - State Employees</b>	15.24%	14.87%
<b>ERS - State Police</b>	52.29%	45.56%
<b>JRF - Groups 1 &amp; 2</b>	40.40%	-
<b>JRF - Group 3 - Judges &amp; Clerks' Plan</b>	35.05%	-
<b>JRF - District Attorneys' Plan</b>	19.77%	-

- During fiscal year 2020, returns on investments of the TRS, ERS, and JRF were 5.62%, 5.83%, and 7.87%, respectively. The returns were calculated by State Street Bank.
- During fiscal year 2020, investment income increased by 124.22% primarily due to a large increase in the unrealized gains and losses which were offset by a small decrease in interest and dividend income and realized gains and losses. Net securities lending income decreased by 3.26% for RSA which was primarily driven by a decrease in the average yield of the collateral pool and a decrease in demand. At September 30, 2020, cash loan balances increased approximately 16% and non-cash loan balances decreased approximately 31% from their balances at September 30, 2019. Non-cash loans continue to be the collateral of choice for brokers due to the regulations imposed by the Frank-Dodd Act. Although non-cash loans are more beneficial to the brokers' balance sheet due to the lower overall demand, these types of loans decreased by approximately 31%.
- Retirement allowance payments increased as a result of 9,362 members who retired during fiscal year 2020.
- Net other postemployment benefits liability and net pension liability represent the RSA's obligations related to postemployment benefits for its employees and varies year to year with actuarial valuation.

#### **Funding Status**

The Governmental Accounting Standards Board (GASB) has issued Statement No. 67, *Financial Reporting for Pension Plans*, which amends GASB Statement No. 25. Under GASB Statement No. 67, the methodology for determining the net pension liability disclosed in the Notes to the Combined Financial Statements has shifted from a funding perspective to an accounting perspective.

At September 30, 2020, TRS and JRF employers' total pension liability was \$38.3 billion and \$481.2 million, respectively. The plan fiduciary net position of TRS and JRF employers was \$25.9 billion and \$318.6 million, respectively, resulting in a net pension liability of \$12.4 billion and \$162.6 million, respectively. The plan fiduciary net position as a percentage of the total pension liability for TRS and JRF employers was 67.72% and 66.20%, respectively, using GASB Statement No. 67 measurements.

Under the provisions of GASB Statement No. 67, agent-multiple employer plans such as the ERS apply the measurements and recognition of net pension liability at the individual plan level for each retirement plan administered. Therefore, aggregate information for the ERS related to the net pension liability has not been presented.

#### **Financial Highlights**

- Net position held in trust of \$39.4 billion at September 30, 2020, was available to meet future benefit payments.
- At September 30, 2019, the date of the most recent actuarial valuation, the funding level (actuarial value of assets as a percentage of actuarial accrued liabilities) was 69.4% for the TRS, 68.2% for the ERS, and 65.3% for the JRF.





RETIREMENT SYSTEMS OF ALABAMA

*Financial Section*

Combining Statement of Fiduciary Net Position

September 30, 2020 with comparative figures for 2019

(Dollar Amounts in Thousands)

	2020			Total
	Teachers' Retirement System	Employees' Retirement System	Judicial Retirement Fund	
<b>Assets</b>				
Cash (Note 4)	\$ 65,689	\$ 23,545	\$ 3,364	\$ 92,598
Receivables				
Employee Contributions	47,445	13,501	166	61,112
Employer Contributions	81,489	27,883	642	110,014
Transfers Receivable from Teachers' Retirement System	-	234	-	234
Transfers Receivable from Employees' Retirement System	-	-	21	21
Investment Sales Receivable	58,904	24,824	15	83,743
Dividends and Interest	68,634	33,613	941	103,188
Miscellaneous Receivable	356	614	2	972
Total Receivables	<u>256,828</u>	<u>100,669</u>	<u>1,787</u>	<u>359,284</u>
Investments, at Fair Value (Note 5)				
Domestic Equity	14,202,366	7,197,425	160,978	21,560,769
Domestic Fixed Income	3,482,694	1,781,122	77,637	5,341,453
International Equities	3,492,991	1,775,891	43,757	5,312,639
Real Estate	2,367,682	1,148,110	4,080	3,519,872
Short-Term	2,066,603	1,134,949	27,435	3,228,987
Total Investments	<u>25,612,336</u>	<u>13,037,497</u>	<u>313,887</u>	<u>38,963,720</u>
Invested Securities Lending Collateral (Note 5)	703,046	429,656	6,104	1,138,806
Property and Equipment less				
Accumulated Depreciation (Note 8)	104,458	46,307	-	150,765
Total Assets	<u>26,742,357</u>	<u>13,637,674</u>	<u>325,142</u>	<u>40,705,173</u>
Deferred Outflows of Resources - Pensions	5,875	2,156	45	8,076
Deferred Outflows of Resources - Other Postemployment Benefits	2,399	1,071	6	3,476
Total Assets and Deferred Outflows of Resources	<u>26,750,631</u>	<u>13,640,901</u>	<u>325,193</u>	<u>40,716,725</u>
<b>Liabilities</b>				
Accounts Payable and Other Liabilities	8,381	4,663	75	13,119
Transfers Payable to Employees' Retirement System	234	-	-	234
Transfers Payable to Judicial Retirement Fund	-	21	-	21
Investment Purchases Payable	48,668	26,120	28	74,816
Net Other Postemployment Benefits Liability (Note 9)	9,902	6,716	54	16,672
Net Pension Liability (Note 10)	24,246	16,713	322	41,281
Securities Lending Collateral (Note 5)	703,046	429,656	6,104	1,138,806
Total Liabilities	<u>794,477</u>	<u>483,889</u>	<u>6,583</u>	<u>1,284,949</u>
Deferred Inflows of Resources - Pensions	814	270	2	1,086
Deferred Inflows of Resources - Other Postemployment Benefits	8,951	6,204	50	15,205
Total Liabilities and Deferred Inflows of Resources	<u>804,242</u>	<u>490,363</u>	<u>6,635</u>	<u>1,301,240</u>
<b>Net Position Restricted for Pension Benefits (Note 3)</b>	<b><u>\$ 25,946,389</u></b>	<b><u>\$ 13,150,538</u></b>	<b><u>\$ 318,558</u></b>	<b><u>\$ 39,415,485</u></b>

See accompanying Notes to the Combined Financial Statements.

	2019			
	Teachers' Retirement System	Employees' Retirement System	Judicial Retirement Fund	Total
<b>Assets</b>				
Cash	\$ 71,531	\$ 17,875	\$ 3,100	\$ 92,506
Receivables				
Employee Contributions	52,968	14,276	162	67,406
Employer Contributions	90,488	27,711	639	118,838
Transfers Receivable from Teachers' Retirement System	-	235	-	235
Transfers Receivable from Employees' Retirement System	111	-	18	129
Investment Sales Receivable	7,678	4,249	-	11,927
Real Estate Investment Receivable	764	382	-	1,146
Dividends and Interest	71,155	34,359	992	106,506
Miscellaneous Receivable	153	194	-	347
Total Receivables	<u>223,317</u>	<u>81,406</u>	<u>1,811</u>	<u>306,534</u>
Investments, at Fair Value				
Domestic Equity	13,785,646	6,925,941	156,306	20,867,893
Domestic Fixed Income	3,434,749	1,693,333	78,997	5,207,079
International Equities	3,385,579	1,594,696	42,977	5,023,252
Real Estate	2,470,955	1,198,136	4,227	3,673,318
Short-Term	2,187,771	1,043,998	25,584	3,257,353
Total Investments	<u>25,264,700</u>	<u>12,456,104</u>	<u>308,091</u>	<u>38,028,895</u>
Invested Securities Lending Collateral	699,940	256,550	5,297	961,787
Property and Equipment less				
Accumulated Depreciation	112,159	49,265	-	161,424
Total Assets	<u>26,371,647</u>	<u>12,861,200</u>	<u>318,299</u>	<u>39,551,146</u>
Deferred Outflows of Resources - Pensions	5,412	2,247	41	7,700
Deferred Outflows of Resources - Other Postemployment Benefits	1,647	290	3	1,940
Total Assets and Deferred Outflows of Resources	<u>26,378,706</u>	<u>12,863,737</u>	<u>318,343</u>	<u>39,560,786</u>
<b>Liabilities</b>				
Accounts Payable and Other Liabilities	7,882	4,295	68	12,245
Transfers Payable to Teachers' Retirement System	-	111	-	111
Transfers Payable to Employees' Retirement System	235	-	-	235
Transfers Payable to Judicial Retirement Fund	-	18	-	18
Investment Purchases Payable	8,818	4,666	21	13,505
Net Other Postemployment Benefits Liability	16,182	10,902	91	27,175
Net Pension Liability	20,897	14,845	284	36,026
Securities Lending Collateral	699,940	256,550	5,297	961,787
Total Liabilities	<u>753,954</u>	<u>291,387</u>	<u>5,761</u>	<u>1,051,102</u>
Deferred Inflows of Resources - Pensions	2,271	1,645	24	3,940
Deferred Inflows of Resources - Other Postemployment Benefits	3,033	2,232	17	5,282
Total Liabilities and Deferred Inflows of Resources	<u>759,258</u>	<u>295,264</u>	<u>5,802</u>	<u>1,060,324</u>
<b>Net Position Restricted for Pension Benefits</b>	<u><u>\$ 25,619,448</u></u>	<u><u>\$ 12,568,473</u></u>	<u><u>\$ 312,541</u></u>	<u><u>\$ 38,500,462</u></u>

## RETIREMENT SYSTEMS OF ALABAMA

## Financial Section

Combining Statement of Changes in Fiduciary Net Position

For the Fiscal Year Ended September 30, 2020 with comparative figures for 2019

(Dollar Amounts in Thousands)

	2020			Total
	Teachers' Retirement System	Employees' Retirement System	Judicial Retirement Fund	
<b>Additions</b>				
Contributions				
Employee	\$ 510,818	\$ 266,056	\$ 4,025	\$ 780,899
Employer	862,475	519,806	18,099	1,400,380
New Units	-	344,352	-	344,352
Transfers from Teachers' Retirement System	-	4,891	-	4,891
Transfers from Employees' Retirement System	4,185	-	159	4,344
Transfers from an Internal Service Fund	602	395	-	997
Total Contributions	<u>1,378,080</u>	<u>1,135,500</u>	<u>22,283</u>	<u>2,535,863</u>
Investment Income (Note 5)				
From Investing Activities				
Net Increase in Fair Value of Investments	801,465	425,632	16,173	1,243,270
Interest and Dividends	576,193	298,770	6,928	881,891
Total Investment Income from Investing Activities	<u>1,377,658</u>	<u>724,402</u>	<u>23,101</u>	<u>2,125,161</u>
Less: Investment Expenses, Net	9,719	3,828	-	13,547
Net Investment Income from Investing Activities	<u>1,367,939</u>	<u>720,574</u>	<u>23,101</u>	<u>2,111,614</u>
From Securities Lending Activities				
Securities Lending Income	13,960	6,534	128	20,622
Less Securities Lending Expenses:				
Borrower Rebates	4,423	1,996	41	6,460
Management Fees	3,120	1,482	29	4,631
Total Securities Lending Expenses	<u>7,543</u>	<u>3,478</u>	<u>70</u>	<u>11,091</u>
Net Income from Securities Lending Activities	<u>6,417</u>	<u>3,056</u>	<u>58</u>	<u>9,531</u>
Total Net Investment Income	<u>1,374,356</u>	<u>723,630</u>	<u>23,159</u>	<u>2,121,145</u>
Total Additions	<u>2,752,436</u>	<u>1,859,130</u>	<u>45,442</u>	<u>4,657,008</u>
<b>Deductions</b>				
Retirement Allowance Payments	2,328,892	1,209,437	38,812	3,577,141
Return of Contributions and Death Benefits	60,601	46,745	256	107,602
Transfers to Employees' Retirement System	4,891	-	-	4,891
Transfers to Teachers' Retirement System	-	4,185	-	4,185
Transfers to Judicial Retirement Fund	-	159	-	159
Administrative Expenses	21,957	13,128	357	35,442
Depreciation (Note 8)	9,154	3,411	-	12,565
Total Deductions	<u>2,425,495</u>	<u>1,277,065</u>	<u>39,425</u>	<u>3,741,985</u>
<b>Net Increase</b>	<b>326,941</b>	<b>582,065</b>	<b>6,017</b>	<b>915,023</b>
<b>Net Position Restricted for Pension Benefits (Note 3)</b>				
Beginning of Year	25,619,448	12,568,473	312,541	38,500,462
End of Year	<u>\$ 25,946,389</u>	<u>\$ 13,150,538</u>	<u>\$ 318,558</u>	<u>\$ 39,415,485</u>

See accompanying Notes to the Combined Financial Statements.

	<b>2019</b>			
	<b>Teachers' Retirement System</b>	<b>Employees' Retirement System</b>	<b>Judicial Retirement Fund</b>	<b>Total</b>
<b>Additions</b>				
Contributions				
Employee	\$ 516,675	\$ 250,253	\$ 3,912	\$ 770,840
Employer	869,336	467,553	18,022	1,354,911
Transfers from Teachers' Retirement System	-	4,187	-	4,187
Transfers from Employees' Retirement System	6,234	-	189	6,423
Total Contributions	<u>1,392,245</u>	<u>721,993</u>	<u>22,123</u>	<u>2,136,361</u>
Investment Income				
<i>From Investing Activities</i>				
Net Increase in Fair Value of Investments	33,671	30,092	3,476	67,239
Interest and Dividends	583,329	291,011	7,463	881,803
Total Investment Income from Investing Activities	<u>617,000</u>	<u>321,103</u>	<u>10,939</u>	<u>949,042</u>
Less: Investment Expenses, Net	9,205	3,661	-	12,866
Net Investment Income from Investing Activities	<u>607,795</u>	<u>317,442</u>	<u>10,939</u>	<u>936,176</u>
<i>From Securities Lending Activities</i>				
Securities Lending Income	28,905	13,884	327	43,116
Less Securities Lending Expenses:				
Borrower Rebates	19,431	9,394	218	29,043
Management Fees	2,842	1,347	32	4,221
Total Securities Lending Expenses	<u>22,273</u>	<u>10,741</u>	<u>250</u>	<u>33,264</u>
Net Income from Securities Lending Activities	<u>6,632</u>	<u>3,143</u>	<u>77</u>	<u>9,852</u>
Total Net Investment Income	<u>614,427</u>	<u>320,585</u>	<u>11,016</u>	<u>946,028</u>
Total Additions	<u>2,006,672</u>	<u>1,042,578</u>	<u>33,139</u>	<u>3,082,389</u>
<b>Deductions</b>				
Retirement Allowance Payments	2,233,514	1,123,150	36,909	3,393,573
Return of Contributions and Death Benefits	56,861	48,675	646	106,182
Unit Withdrawals	-	380	-	380
Transfers to Employees' Retirement System	4,187	-	-	4,187
Transfers to Teachers' Retirement System	-	6,234	-	6,234
Transfers to Judicial Retirement Fund	-	189	-	189
Administrative Expenses	20,583	12,934	357	33,874
Depreciation	7,512	2,895	-	10,407
Total Deductions	<u>2,322,657</u>	<u>1,194,457</u>	<u>37,912</u>	<u>3,555,026</u>
<b>Net (Decrease)</b>	<b>(315,985)</b>	<b>(151,879)</b>	<b>(4,773)</b>	<b>(472,637)</b>
<b>Net Position Restricted for Pension Benefits</b>				
Beginning of Year	25,935,433	12,720,352	317,314	<b>38,973,099</b>
End of Year	<u>\$ 25,619,448</u>	<u>\$ 12,568,473</u>	<u>\$ 312,541</u>	<u>\$ 38,500,462</u>

# RETIREMENT SYSTEMS OF ALABAMA

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## *Financial Section*

### Notes to the Combined Financial Statements For the Fiscal Year Ended September 30, 2020

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(Dollar Amounts in Thousands)

#### 1) PLAN DESCRIPTION

The Teachers' Retirement System (TRS), Employees' Retirement System (ERS), and Judicial Retirement Fund (JRF) operate under common management and are collectively referred to as the Retirement Systems of Alabama (RSA or Systems). In addition to executive management, the TRS, ERS, and JRF share investment management, accounting, and information system services, the costs of which are allocated to the funds on an equitable basis.

The TRS, a cost-sharing multiple-employer public employee retirement plan, was established as of September 15, 1939, pursuant to the *Code of Alabama 1975, Title 16, Chapter 25* (Act 419 of the Legislature of 1939) for the purpose of providing retirement allowances and other specified benefits for qualified persons employed by State-supported educational institutions. The responsibility for the general administration and operation of the TRS is vested in its Board of Control, which consists of 15 trustees as follows:

- 1) The State Superintendent of Education, ex officio.
- 2) The State Treasurer, ex officio.
- 3) The State Director of Finance, ex officio.
- 4) Twelve members of the TRS who are elected by members from the same category of the TRS for a term of three years as follows:
  - a. Teacher Place #1.
  - b. Teacher Place #2.
  - c. Teacher Place #3.
  - d. Educational Support Personnel Place #1.
  - e. Educational Support Personnel Place #2.
  - f. Retired Place #1.
  - g. Retired Place #2.
  - h. Superintendents' Place.
  - i. Principals' Place.
  - j. Postsecondary Place.
  - k. Higher Education Place #1.
  - l. Higher Education Place #2.

The ERS, an agent multiple-employer public employee retirement plan, was established as of October 1, 1945, pursuant to the *Code of Alabama 1975, Title 36, Chapter 27* (Act 515 of the Legislature of 1945). The purpose of the ERS is to provide retirement allowances and other specified benefits for state employees, State Police, and, on an elective basis, to all cities, counties, towns, and quasi-public organizations. Assets of the ERS are pooled for investment purposes. However, separate accounts are maintained for each individual employer so that each employer's share of the pooled assets is legally available to pay the benefits of its employees only. The responsibility for the general administration and operation of the ERS is vested in its Board of Control, which consists of 13 trustees as follows:

- 1) The Governor, ex officio.
- 2) The State Treasurer, ex officio.
- 3) The State Personnel Director, ex officio.
- 4) The State Director of Finance, ex officio.
- 5) Three vested members of the ERS appointed by the Governor for a term of four years, no two of whom are from the same department of state government nor from any department of which an ex officio trustee is the head.
- 6) Six members of the ERS who are elected by members from the same category of the ERS for a term of four years as follows:
  - a. Two retired members with one from the ranks of retired state employees and one from the ranks of retired employees of a city, county, or a public agency each of whom is an active beneficiary of the ERS.
  - b. Two vested active state employees.
  - c. Two vested active employees of an employer participating in the ERS pursuant to the *Code of Alabama 1975, Section 36-27-6*.

The JRF, a cost-sharing multiple-employer public employee retirement plan, was established as of September 18, 1973, pursuant to the *Code of Alabama 1975, Title 12, Chapter 18* (Act 1163 of the Legislature of 1973) for the purpose of providing retirement allowances and other specified benefits for any Justice of the Supreme Court of Alabama, Judge of the Court of Civil Appeals, Judge of the Court of Criminal Appeals, Judge of the Circuit Court, or office holder of any newly created judicial office receiving compensation from the State Treasury. The *Code of Alabama 1975, Title 12, Chapter 18, Articles 3 & 4* (Act 1205 of the Legislature of 1975) enlarged the scope and coverage of the JRF to include District and Probate Judges, respectively. The *Code of Alabama 1975, Title 12, Chapter 18, Article 7* (Act 498 of the Legislature of 2015) established the Judges' and Clerks' Plan within the JRF for any Judge or Clerk who was first elected or appointed on or after November 8, 2016, and was not a member of the JRF or the Clerks' and Registers' Supernumerary Fund prior to that date. The *Code of Alabama 1975, Section 12-17-22* (Act 498 of the Legislature of 2015) established the District Attorneys' Plan within the JRF for any District Attorney serving in the capacity of District Attorney on or after November 8, 2016. The responsibility for the general administration and operation of the JRF is vested in the Board of Control of the ERS.

At September 30, 2020, the number of participating units in each system was as follows:

	<u>TRS</u>	<u>ERS</u>	<u>JRF</u>
Cities	-	293	-
Counties	-	65	67
Other Public Entities	-	494	-
Universities	13	-	-
Postsecondary			
Institutions	25	-	-
City and County			
Boards of Education	138	-	-
State Agencies & Other	36	1	1
<b>Total</b>	<b><u>212</u></b>	<b><u>853</u></b>	<b><u>68</u></b>

At September 30, 2019, the date of the most recent actuarial valuation, membership consisted of:

	<u>TRS</u>	<u>ERS</u>	<u>JRF</u>
Retirees and beneficiaries currently receiving benefits:			
General	98,539	24,544	452
State Police	-	938	-
Employees of Local Employers	-	25,969	-
Terminated employees entitled to benefits but not yet receiving benefits:			
General	20,875	4,688	19
State Police	-	34	-
Employees of Local Employers	-	12,796	-
Non-vested inactive members who have not contributed for more than 5 years	29,660	19,076	28
Active Employees:			
General	136,325	28,533	366
State Police	-	681	-
Employees of Local Employers	-	55,320	-
<b>Total</b>	<b><u>285,399</u></b>	<b><u>172,579</u></b>	<b><u>865</u></b>

## RETIREMENT SYSTEMS OF ALABAMA

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### *Financial Section*

#### Notes to the Combined Financial Statements For the Fiscal Year Ended September 30, 2020

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(Dollar Amounts in Thousands)

State law establishes retirement benefits as well as death and disability benefits and any ad hoc increase in postretirement benefits for the TRS, ERS, and JRF. Benefits for TRS and ERS members vest after 10 years of creditable service. Teachers and state employees who retire after age 60 (52 for State Police) with 10 years or more of creditable service or with 25 years of service (regardless of age) are entitled to an annual retirement benefit, payable monthly for life. Local employees who retire after age 60 with 10 years or more of creditable service or with 25 or 30 years of service (regardless of age), depending on the particular entity's election, are entitled to an annual retirement benefit, payable monthly for life. Service and disability retirement benefits are based on a guaranteed minimum or a formula method, with the member receiving payment under the method that yields the highest monthly benefit. Under the formula method, members of the TRS and ERS (except State Police) are allowed 2.0125% of their average final compensation (highest 3 of the last 10 years) for each year of service. State Police are allowed 2.875% for each year of State Police service in computing the formula method.

Act 377 of the Legislature of 2012 established a new tier of benefits (Tier 2) for members hired on or after January 1, 2013. Tier 2 TRS and ERS members are eligible for retirement after age 62 (56 for State Police) with 10 years or more of creditable service and are entitled to an annual retirement benefit, payable monthly for life. Service and disability retirement benefits are based on a guaranteed minimum or a formula method, with the member receiving payment under the method that yields the highest monthly benefit. Under the formula method, Tier 2 members of the TRS and ERS (except State Police) are allowed 1.65% of their average final compensation (highest 5 of the last 10 years) for each year of service. State Police are allowed 2.375% for each year of state police service in computing the formula method.

Act 316 of the Legislature of 2019 established the Partial Lump Sum Option Plan (PLOP) in addition to the annual service retirement benefit payable for life for Tier 1 and Tier 2 members of the TRS and ERS. A member can elect to receive a one-time lump sum distribution at the time that they receive their first monthly retirement benefit payment. The member's annual retirement benefit is then actuarially reduced based on the amount of the PLOP distribution which is not to exceed the sum of 24 months of the maximum monthly retirement benefit that the member could receive. Members are eligible to receive a PLOP distribution if they are eligible for a service retirement benefit as defined above from the TRS or ERS on or after October 1, 2019. A TRS or ERS member who receives an annual disability retirement benefit or who has participated in the Deferred Retirement Option Plan (DROP) is not eligible to receive a PLOP distribution.

The JRF benefits vest from five to eighteen years. Except for justices or judges who were either disabled, elected prior to July 30, 1979, or have at least 25 years of creditable service, no justice or judge is eligible to receive judicial service retirement pay prior to attaining age 60. Service retirement benefits for justices and judges are dependent upon the particular office held in the judicial branch of government. A retirement benefit is payable upon the request of any member who has: (1) 25 years of creditable service (regardless of age), (2) completed 12 years of creditable service and has attained age 65, (3) completed 15 years of creditable service and whose age plus service equals or exceeds 77, (4) completed 10 years of creditable service and has attained age 70 or (5) been elected prior to July 30, 1979, and has 18 years of service (regardless of age). A member eligible to retire who has not requested his or her retirement benefit to commence at the end of the term in which the member's 70th birthday occurs is entitled only to the refund of his or her contributions (except for members with at least 25 years of creditable service). The service retirement benefit for circuit, appellate, and probate judges is 75% of the member's salary at the time of separation from service. The service retirement benefit for a district judge is 75% of the position's salary immediately prior to retirement.

Act 498 of the Legislature of 2015 established a new group (Group 3) of members within the JRF which consists of all justices, judges, and circuit clerks first elected or appointed on or after November 8, 2016, and district attorneys serving in the capacity of district attorney on or after November 8, 2016. Group 3 members are eligible for retirement after age 62 with 10 years or more of creditable service and are entitled to an annual retirement benefit, payable monthly for life. A district attorney who has Tier 1 ERS transferred service as an assistant or deputy district attorney is eligible for service retirement with 25 years of service credit, regardless of age. Service and disability retirement benefits are calculated using a retirement formula. Group 3 members who are judges or justices are allowed 4% of their average final compensation (highest 5 of the last 10 years) for each year of service up to 75% of their average final compensation. Group 3 members who are clerks or district attorneys are allowed 3% of their average final compensation (highest 5 of the last 10 years) for each year of service up to 80% of their average final compensation.



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Covered members of the TRS and ERS (except State Police and certified law enforcement, correctional officers, and firefighters) contributed 5% of earnable compensation to the TRS and ERS as required by statute until September 30, 2011. From October 1, 2011, to September 30, 2012, covered members of the TRS and ERS (except State Police and certified law enforcement, correctional officers, and firefighters) were required by statute to contribute 7.25% of earnable compensation. Effective October 1, 2012, covered members of the TRS and ERS (except State Police and certified law enforcement, correctional officers, and firefighters) are required by statute to contribute 7.50% of earnable compensation. JRF members and certified law enforcement, correctional officers, and firefighters of the TRS and ERS contributed 6% of earnable compensation as required by statute until September 30, 2011. From October 1, 2011, to September 30, 2012, JRF members and certified law enforcement, correctional officers, and firefighters of the TRS and ERS were required by statute to contribute 8.25% of earnable compensation. Effective October 1, 2012, JRF members and certified law enforcement, correctional officers, and firefighters of the TRS and ERS are required by statute to contribute 8.50% of earnable compensation. State Police members of the ERS contribute 10% of earnable compensation. ERS local participating employers are not required by statute to increase contribution rates for their members.

Tier 2 covered members of the TRS and ERS (except State Police and certified law enforcement, correctional officers, and firefighters) contribute 6% of earnable compensation to the TRS and ERS as required by statute. Tier 2 certified law enforcement, correctional officers, and firefighters of the TRS and ERS are required by statute to contribute 7% of earnable compensation. Tier 2 State Police members of the ERS contribute 10% of earnable compensation. These contribution rates are the same for Tier 2 covered members of ERS local participating employers.

Group 3 members of the JRF contribute 8.50% of earnable compensation to the JRF as required by statute.

**2) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

**A. Basis of Accounting**

The TRS, ERS, and JRF financial statements are prepared using the economic resources measurement focus and accrual basis of accounting. Contributions are recognized as revenues when earned, pursuant to plan requirements. Benefits and refunds are recognized when due and payable in accordance with the terms of the plans. Expenses are recognized when the corresponding liability is incurred, regardless of when the payment is made. The accompanying financial statements are prepared in accordance with the requirements of the Governmental Accounting Standards Board (GASB). Under these requirements, the TRS, ERS, and JRF are considered component units of the State of Alabama and are included in the State's Comprehensive Annual Financial Report. Subsequent events were evaluated by management through the date the financial statements were issued.

**B. Investments**

The Boards of Control of the Systems have the responsibility and authority to invest and reinvest available funds, through the Secretary-Treasurer (CEO) and Investment Committee, in bonds, mortgage-backed securities, common and preferred stock, and other investment vehicles with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with such matters would use. All plan assets are carried at fair value. Securities traded on national or international exchanges are valued at the last reported sales price at current exchange rates. Short-term investments are reported at cost, which approximates fair value. Mortgage-backed securities are reported based on future principal and interest payments discounted at the prevailing interest rate for similar instruments. The fair value of real estate investments is based on independent appraisals or cost, when cost approximates fair value. Generally, private placements are valued based on the selling price of similar investments sold in the open market. In those instances where there are no similar investments sold in the open market, an independent appraisal is performed to determine the fair value of the private placements. RSA invests in limited partnerships which are long-term and generally illiquid. As a result, investors are subject to redemption restrictions which generally limit distributions and restrict the ability of limited partners to exit a partnership investment prior to its dissolution. These partnership investments are valued using their respective net asset values (NAV) and are generally audited annually. The most significant element of the NAV is the fair value of the investment holdings. These holdings are valued by the general partners in conjunction with management, investment advisors, and valuation specialists. The valuation techniques vary based on investment type and involve a certain degree of expert judgment. The fair value for these investments could differ significantly if a ready market for these assets existed.

**C. Comparative Combining Statements**

The basic financial statements include the prior year Combining Statement of Fiduciary Net Position and Combining Statement of Changes in Fiduciary Net Position (Statements) for comparative purposes only. Prior year note disclosures are not included. Therefore, the prior year basic financial statement presentation does not meet the minimum level of detail required for a presentation in conformity with accounting principles generally accepted in the United States of America. Accordingly, the prior year Statements should be read in conjunction with the RSA's prior year financial report from which the prior year Statements were derived.

**D. Interfund Transfers**

Interfund transfers result from transfers of members between retirement systems.

**E. Use of Estimates**

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts and disclosure in the financial statements. Actual results may differ from these estimates.

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## **F. Deferred Outflows & Inflows of Resources**

In addition to assets, the Combining Statement of Fiduciary Net Position reports a separate section for deferred outflows of resources. This separate financial statement element, *Deferred Outflows of Resources*, represents a consumption of fiduciary net position that applies to future periods and will not be recognized as an outflow of resources until that period. Employer contributions subsequent to the measurement date related to both the employer's net pension liability and net other postemployment benefits liability are reported as deferred outflows of resources until the next measurement date.

In addition to liabilities, the Combining Statement of Fiduciary Net Position reports a separate section for *Deferred Inflows of Resources*. This separate financial statement element represents an acquisition of fiduciary net position that applies to future periods and will not be recognized until then. Net differences between projected and actual experience, projected and actual earnings on plan investments and changes in assumptions between employer contributions and the proportionate share of contributions identified during the measurement period are deferred and amortized as a component of pension expense and other postemployment benefits expense.

## **3) LEGALLY REQUIRED RESERVES**

### **A. Annuity Savings**

Member contributions are credited to the Annuity Savings account. Interest at 4% per annum is credited to the annuity savings account of each member on the basis of the average of the beginning and end of year balances (as of June 30 for the TRS and September 30 for the ERS and JRF).

When a member withdraws from service prior to becoming vested, the member's accumulated contributions and a portion of accumulated interest credited to the Annuity Savings account are returned to the member. The portion of accumulated interest that, by law, is not payable to the member is transferred to the Expense fund.

When a TRS or ERS member dies prior to becoming eligible for retirement, the member's accumulated contributions and accumulated interest credited to the Annuity Savings account are returned to the member's designated beneficiary. If the preretirement death benefit defined below is not payable, an additional death benefit equal to the member's accumulated contributions, up to five thousand dollars, is paid from the Pension Accumulation account to the member's beneficiary.

When a member retires or when a survivor allowance becomes payable, the amount of the member's accumulated contributions and accumulated interest is transferred from the Annuity Savings account to the Pension Accumulation account.

### **B. Pension Accumulation**

The Pension Accumulation account is credited with contributions made by the employer and net investment income. The lump sum death benefit is paid from this account when a TRS or ERS member dies prior to becoming eligible for the preretirement death benefit or retirement. Periodic interest representing member's earnings is transferred from the Pension Accumulation account to the Annuity Savings account. When a TRS, ERS, or JRF member retires or when a survivor allowance becomes payable, the member's accumulated contributions and accumulated interest is credited to the Pension Accumulation account, and all monthly benefit payments are paid from this account.

**C. Preretirement Death Benefit**

The Preretirement Death Benefit (PRDB) was established as of October 1, 1983, pursuant to the *Code of Alabama 1975, Title 36, Chapter 27B* (Act 616 of the Legislature of 1983). The PRDB account is credited with contributions made by TRS, ERS, and JRF Group 3 members' employers and investment income on such funds. The preretirement death benefit (in the form of group term life insurance) is paid in addition to the return of member contributions upon the death of an active TRS, ERS, and JRF Group 3 member who has completed at least one year of active membership in the system and whose date of death was within 180 days of such member's last date of actual service. However, a surviving spouse beneficiary of a deceased member who was eligible for service retirement may elect a survivor allowance in lieu of this benefit. The preretirement death benefit is equal to the annual earnable compensation of the member as reported to the System for the preceding year ending June 30 for the TRS and September 30 for the ERS and the JRF. These assets are not included in the actuarial valuation and the liabilities associated with these death benefits are not included in the actuarial valuation.

**D. Term Life Insurance**

The Alabama Teacher's Group Term Life Insurance Plan (established October 1, 1987) is credited with a portion of the employer contributions. All active contributing members of the TRS are covered by this plan. Contingent on availability of funds, upon death, a benefit is paid to the designated beneficiary of an insured member of the TRS. Beneficiaries of full-time employees receive fifteen thousand dollars while beneficiaries of part-time employees receive a prorated amount of fifteen thousand dollars. These assets are not included in the actuarial valuation and the liabilities associated with these life insurance benefits are not included in the valuation.

**E. Expense**

The Expense fund is used to pay the administrative expenses of the RSA. A portion of the employer contributions and the interest not payable upon member withdrawal provide the funding of the expense fund. The majority of expenses are directly identifiable as expenses of the TRS, ERS, or JRF. As discussed in Note 1, certain administrative salaries and other expenses are shared on an equitable basis between the TRS and ERS. These assets are not included in the actuarial valuation.

**F. Deferred Retirement Option Plan (DROP)**

The DROP was established for election to participate on or after June 1, 2002, pursuant to the *Code of Alabama 1975, Title 16, Chapter 25, Article 9* for TRS participants and the *Code of Alabama 1975, Title 36, Chapter 27, Article 9* for ERS participants (Act 23 of the Legislature of 2002). Eligible members may elect to retire, and, in lieu of immediate withdrawal from service, continue employment for a period of three to five years. The retirement allowance, employee contributions, and interest earned are accumulated in an account for the benefit of the member. At the end of participation, the account balance is paid to the member. DROP participation is an option available to eligible members that have at least 25 years of service (exclusive of sick leave), are at least 55 years of age, and are eligible for retirement. See the actuarial section for additional information.

The DROP was repealed by Act 27 of the Legislature of 2011. The effect of Act 27 is that no new participants were allowed to enter the DROP with an effective participation date after June 1, 2011.

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## G. Reserves

The reserves of the RSA included in the Net Position Restricted for Pension Benefits in the accompanying Combining Statement of Fiduciary Net Position are funded to the full extent required by statute. The reserve balances as of September 30, 2020, are as follows (dollar amounts in thousands):

	<u>TRS</u>	<u>ERS</u>	<u>JRF</u>
Annuity Savings	\$ 6,356,922	\$ 3,207,392	\$ 43,899
Pension Accumulation	19,286,298	9,810,724	271,636
Deferred Retirement Option Plan	133,181	72,162	-
Preretirement Death Benefit	53,291	24,563	103
Term Life Insurance	7,229	-	-
Plant Fund	104,458	46,307	-
Expense	5,010	(10,610)	2,920
<b>Net Position at 9/30/2020</b>	<b><u>\$ 25,946,389</u></b>	<b><u>\$ 13,150,538</u></b>	<b><u>\$ 318,558</u></b>

## 4) CASH

Cash consists of deposits held by the State Treasurer in the respective retirement systems' name. Deposits are entirely insured by the Federal Deposit Insurance Corporation or protected under the Security for Alabama Funds Enhancement (SAFE) Program. The *Code of Alabama 1975*, as amended, requires all State organizations to participate in the SAFE Program. The SAFE Program is a multiple financial institution collateral pool. The SAFE Program requires all public funds to be deposited in a financial institution designated by the State Treasurer as a qualified public depository. Each qualified public depository is required to pledge collateral in accordance with the rules established by the SAFE Board of Directors. In the event that a qualified public depository defaults or becomes insolvent and the pledged collateral is insufficient to satisfy the claims of public depositors, the *Code of Alabama 1975, Section 41-14A-9(3)* authorizes the State Treasurer to make assessments against the other qualified public depositories in the pool so that there will be no loss of public funds. Virtually all cash on hand at September 30, 2020, was held for administrative expenses.

# RETIREMENT SYSTEMS OF ALABAMA

## Financial Section

### Notes to the Combined Financial Statements For the Fiscal Year Ended September 30, 2020

(Dollar Amounts in Thousands)

#### 5) INVESTMENTS

##### A. Investment Authority

Investment authority is granted to the Boards of Control, as Trustees of the Teachers' Retirement System and Employees' Retirement System (Systems), by Alabama statutes. Each System's Board of Control, therefore, has full power, through each System's Secretary-Treasurer, to invest and reinvest System funds in accordance with the Prudent Person Rule: "with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent man acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims." An important component of any investment strategy is the decision regarding allocation of investments among the various asset classes. The purpose of formulating asset allocation guidelines is to maximize investment returns within the standards of prudence established for the whole portfolio.

Each System's Board of Control is responsible for approving an Investment Policy Statement (IPS) that outlines investment strategies and the related asset allocation guidelines. The Boards of Control adopted a revised IPS that was effective on October 1, 2018, as outlined below. Below are the asset allocation guidelines for both Systems.

Asset Class	TRS		ERS		JRF	
	Target Allocation	Strategic Range	Target Allocation	Strategic Range	Target Allocation	Strategic Range
Domestic Equity	45%	30-60%	45%	30-60%	55%	30-60%
International Equity	15%	10-25%	15%	10-25%	15%	10-25%
Fixed Income	15%	10-50%	15%	10-40%	22%	10-40%
Alternative Investments	10%	0-20%	10%	0-15%	1%	0-15%
Real Estate	10%	0-15%	10%	0-15%	2%	0-15%
Short-Term Investments	5%	1-10%	5%	1-10%	5%	1-10%

##### B. Money-Weighted Rate of Return

The annual money-weighted rates of return for the TRS, ERS, and JRF are 5.53%, 5.74%, and 7.70%, respectively. A money-weighted rate of return expresses investment performance, which is net of investment expense and is adjusted for the changing amounts actually invested. The annual money-weighted rate of return on investments is calculated as the internal rate of return on plan investments, net of plan investment expense.

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### C. Investment Risks

Investments are subject to certain types of risks, including interest rate risk, custodial credit risk, credit quality risk, foreign currency risk, and concentration of credit risk. The following describes those risks and the RSA's policies regarding those risks:

*Interest Rate Risk* – The fair value of fixed-maturity investments fluctuates in response to changes in market interest rates. Increases in prevailing interest rates generally translate into decreases in fair value of those instruments. There is no stated limitation on the duration level of the fixed income portfolio; however, this level is assessed on a regular basis to determine if adjustments are needed. The fair value of interest sensitive instruments may also be affected by the creditworthiness of the issuer, prepayment options, relative values of alternative investments, and other general market conditions. Certain fixed maturity investments have call provisions that could result in shorter maturity periods.

*Custodial Credit Risk* – For an investment, custodial credit risk is the risk that an entity will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party if the counterparty fails. The RSA's custodial credit risk policy requires the custodial agent to hold or direct its agents or sub custodians to hold, for the account of the RSA, all securities and other non-cash property other than securities in the Federal Reserve book-entry system, in a clearing agency which acts as a securities depository, or in another book-entry system. The RSA's safekeeping agent holds all investments of the RSA in the RSA's name with the exception of securities purchased with securities lending cash collateral.

*Credit Quality Risk* – Nationally recognized statistical rating organizations provide ratings of debt securities' quality based on a variety of factors, such as the financial condition of the issuers, which provide investors with some idea of the issuer's ability to meet its obligations. Domestic fixed-maturity investments may consist of rated or non-rated securities. There are no stated limitations on the credit quality of the fixed income portfolio; however, ratings are assessed on a regular basis. The Systems may hedge against the possible adverse effects of currency fluctuations on each System's portfolio of international fixed income obligations when it is considered appropriate. Short-term investments may consist of commercial paper rated at least A-2 and/or P-2, repurchase agreements, short-term U.S. securities, and other money market investments.

*Foreign Currency Risk* – The risk that changes in exchange rates will adversely affect the fair value of an investment. In order for an international security to be eligible for purchase by the Systems, the issuing company must be incorporated in a country whose debt securities are eligible for purchase and the fair value of the aggregate outstanding equity of the issuing company must be at least \$100 million.

*Concentration of Credit Risk* – As of September 30, 2020, neither the TRS, ERS, nor JRF owned any debt or equity securities with approximated values greater than 5% of their total investments.

# RETIREMENT SYSTEMS OF ALABAMA

## Financial Section

### Notes to the Combined Financial Statements For the Fiscal Year Ended September 30, 2020

(Dollar Amounts in Thousands)

The following tables provide information as of September 30, 2020, concerning the fair value of investments, interest rate risk, and foreign currency risk:

Type of Investment	TRS				Total Fair Value	Cost
	Maturity in Years at Fair Value					
	Less Than 1	1-5	6-10	More Than 10		
<i>Fixed Maturity</i>						
Domestic						
Money Market Funds	\$ 1,349,032	\$ -	\$ -	\$ -	\$ 1,349,032	\$ 1,349,032
Commercial Paper	717,571	-	-	-	717,571	717,571
U.S. Agency	32,459	66,029	59,837	7,241	165,566	155,221
U.S. Government Guaranteed	99,540	394,330	106,514	212,350	812,734	735,253
Corporate Bonds	162,344	486,818	431,016	508,510	1,588,688	1,419,213
Private Placements	51,657	129,013	25,407	115,379	321,456	312,754
GNMAs	9	707	1,786	81,947	84,449	79,764
CMOs	30	236	34,780	474,755	509,801	491,174
Total Domestic Fixed Maturity	<u>\$ 2,412,642</u>	<u>\$ 1,077,133</u>	<u>\$ 659,340</u>	<u>\$ 1,400,182</u>	<u>5,549,297</u>	<u>5,259,982</u>
<i>Equities</i>						
Preferred						
					24,208	24,441
Domestic						
					13,103,766	7,767,101
Private						
					1,074,392	987,130
International						
Australian Dollar					169,026	116,964
Swiss Franc					300,904	120,335
Danish Krone					72,249	26,426
Euro					787,544	637,943
Pound Sterling					347,383	428,799
Hong Kong Dollar					86,921	50,388
New Israeli Shekel					10,573	15,353
Japanese Yen					717,668	504,308
Norwegian Krone					14,392	12,561
New Zealand Dollar					1,971	2,218
Swedish Krona					88,819	42,939
Singapore Dollar					26,674	27,909
US Dollar					868,867	813,261
South African Rand					-	5
Total International Equities					<u>3,492,991</u>	<u>2,799,409</u>
Total Equities					<u>17,695,357</u>	<u>11,578,081</u>
Real Estate					<u>2,367,682</u>	<u>1,872,035</u>
<b>Total Investments</b>					<b><u>\$ 25,612,336</u></b>	<b><u>\$ 18,710,098</u></b>



Type of Investment	ERS Maturity in Years at Fair Value				Total Fair Value	Cost
	Less			More		
	Than 1	1-5	6-10	Than 10		
<i>Fixed Maturity</i>						
Domestic						
Money Market Funds	\$ 783,592	\$ -	\$ -	\$ -	\$ 783,592	\$ 783,592
Commercial Paper	351,357	-	-	-	351,357	351,357
U.S. Agency	15,566	32,666	32,678	3,643	84,553	79,280
U.S. Government Guaranteed	52,534	201,123	54,267	103,198	411,122	373,512
Corporate Bonds	82,801	244,089	236,617	250,971	814,478	729,249
Private Placements	25,443	63,544	10,163	57,937	157,087	153,355
GNMAs	-	315	611	41,456	42,382	40,073
CMOs	-	110	16,156	255,234	271,500	261,667
Total Domestic Fixed Maturity	<u>\$1,311,293</u>	<u>\$541,847</u>	<u>\$350,492</u>	<u>\$712,439</u>	<u>2,916,071</u>	<u>2,772,085</u>
<i>Equities</i>						
Preferred					11,006	11,112
Domestic					6,514,586	3,847,450
Private					671,833	623,761
International						
Australian Dollar					82,182	59,921
Swiss Franc					146,169	65,445
Danish Krone					35,114	14,427
Euro					382,881	316,554
Pound Sterling					168,913	206,719
Hong Kong Dollar					42,211	26,628
New Israeli Shekel					5,141	7,281
Japanese Yen					348,334	253,524
Norwegian Krone					6,993	6,315
New Zealand Dollar					958	1,083
Swedish Krona					43,188	22,582
Singapore Dollar					12,964	13,772
US Dollar					500,843	479,245
South African Rand					-	2
Total International Equities					<u>1,775,891</u>	<u>1,473,498</u>
Total Equities					<u>8,973,316</u>	<u>5,955,821</u>
Real Estate					<u>1,148,110</u>	<u>933,487</u>
<b>Total Investments</b>					<u><b>\$ 13,037,497</b></u>	<u><b>\$ 9,661,393</b></u>

RETIREMENT SYSTEMS OF ALABAMA

*Financial Section*

Notes to the Combined Financial Statements  
For the Fiscal Year Ended September 30, 2020

(Dollar Amounts in Thousands)

Type of Investment	Maturity in Years at Fair Value				Total Fair Value	Cost
	Less Than 1	1-5	6-10	More Than 10		
<i>Fixed Maturity</i>						
Domestic						
Money Market Funds	\$ 23,431	\$ -	\$ -	\$ -	\$ 23,431	\$ 23,431
Commercial Paper	4,004	-	-	-	4,004	4,004
U.S. Agency	1,147	1,591	1,229	184	4,151	3,916
U.S. Government Guaranteed	2,867	10,684	1,716	4,873	20,140	18,270
Corporate Bonds	4,474	12,814	8,275	11,379	36,942	33,413
Private Placements	-	-	-	1,144	1,144	996
GNMAs	-	-	-	1,958	1,958	1,843
CMOs	-	5	1,355	11,942	13,302	12,805
Total Domestic Fixed Maturity	<u>\$ 35,923</u>	<u>\$ 25,094</u>	<u>\$ 12,575</u>	<u>\$ 31,480</u>	<u>105,072</u>	<u>98,678</u>
<i>Equities</i>						
Preferred						
Domestic					601	607
Private					78	71
International						
Australian Dollar					2,220	2,117
Swiss Franc					3,918	2,115
Danish Krone					957	427
Euro					10,356	9,192
Pound Sterling					4,567	6,071
Hong Kong Dollar					1,161	778
New Israeli Shekel					138	201
Japanese Yen					9,508	7,055
Norwegian Krone					189	223
New Zealand Dollar					26	23
Swedish Krona					1,167	735
Singapore Dollar					343	388
US Dollar					9,207	8,376
Total International Equities					<u>43,757</u>	<u>37,701</u>
Total Equities					<u>204,735</u>	<u>112,476</u>
Real Estate					<u>4,080</u>	<u>1,067</u>
<b>Total Investments</b>					<u><b>\$ 313,887</b></u>	<u><b>\$ 212,221</b></u>

The following tables provide information as of September 30, 2020, concerning credit risk (dollar amounts in thousands):

TRS

Moody's Ratings	Cost	Fair Value	Fair Value as a Percentage of Total Fair Value of Fixed Maturities
Aaa	\$ 169,034	\$ 183,578	3.31
Aa1	16,433	18,032	0.32
Aa2	21,592	21,829	0.39
Aa3	10,580	10,838	0.19
P-1	30,144	30,144	0.54
P-2	687,427	687,427	12.39
A1	90,469	105,505	1.90
A2	120,797	142,238	2.56
A3	263,930	297,913	5.37
Baa1	288,577	323,289	5.82
Baa2	435,216	485,013	8.74
Baa3	80,377	86,529	1.56
Ba1	28,657	30,329	0.55
Ba2	19,928	18,106	0.33
Ba3	8,014	8,144	0.15
B1	2,126	2,012	0.04
NR	1,680,490	1,691,387	30.48
<b>Total Moody's Rated Fixed Maturities</b>	<b>3,953,791</b>	<b>4,142,313</b>	<b>74.64</b>
U.S. Agency Mortgage-Backed Securities	491,174	509,801	9.19
U.S. Government Guaranteed	815,017	897,183	16.17
<b>Total Fixed Maturities</b>	<b>\$ 5,259,982</b>	<b>\$ 5,549,297</b>	<b>100.00</b>

Standard & Poor's Ratings	Cost	Fair Value	Fair Value as a Percentage of Total Fair Value of Fixed Maturities
AAA	\$ 14,887	\$ 18,765	0.34
AA+	163,562	175,343	3.16
AA	5,176	6,360	0.11
AA-	15,393	18,739	0.34
A-1	19,995	19,995	0.36
A-2	697,576	697,576	12.57
A+	86,155	96,654	1.74
A	97,007	111,739	2.01
A-	261,609	301,097	5.43
BBB+	372,784	411,875	7.42
BBB	384,460	429,615	7.74
BBB-	101,721	111,565	2.01
BB+	33,734	32,946	0.59
BB	2,126	2,012	0.04
BB-	8,014	8,144	0.15
NR	1,689,592	1,699,888	30.63
<b>Total S&amp;P Rated Fixed Maturities</b>	<b>3,953,791</b>	<b>4,142,313</b>	<b>74.64</b>
U.S. Agency Mortgage-Backed Securities	491,174	509,801	9.19
U.S. Government Guaranteed	815,017	897,183	16.17
<b>Total Fixed Maturities</b>	<b>\$ 5,259,982</b>	<b>\$ 5,549,297</b>	<b>100.00</b>

RETIREMENT SYSTEMS OF ALABAMA

Financial Section

Notes to the Combined Financial Statements  
For the Fiscal Year Ended September 30, 2020

(Dollar Amounts in Thousands)

ERS			
Moody's Ratings	Cost	Fair Value	Fair Value as a Percentage of Total Fair Value of Fixed Maturities
Aaa	\$ 85,506	\$ 92,701	3.18
Aa1	9,148	10,003	0.34
Aa2	11,313	11,437	0.39
Aa3	5,529	5,659	0.19
P-1	19,091	19,091	0.66
P-2	332,266	332,266	11.39
A1	44,588	51,967	1.78
A2	72,643	83,958	2.88
A3	128,076	143,890	4.93
Baa1	147,935	165,766	5.69
Baa2	227,515	253,273	8.69
Baa3	39,530	42,674	1.46
Ba1	13,085	13,843	0.48
Ba2	10,363	9,509	0.33
Ba3	3,626	3,681	0.13
B1	989	939	0.03
NR	945,630	950,410	32.59
<b>Total Moody's Rated Fixed Maturities</b>	<b>2,096,833</b>	<b>2,191,067</b>	<b>75.14</b>
U.S. Agency Mortgage-Backed Securities	261,667	271,500	9.31
U.S. Government Guaranteed	413,585	453,504	15.55
<b>Total Fixed Maturities</b>	<b>\$ 2,772,085</b>	<b>\$ 2,916,071</b>	<b>100.00</b>

Standard & Poor's Ratings	Cost	Fair Value	Fair Value as a Percentage of Total Fair Value of Fixed Maturities
AAA	\$ 6,896	\$ 8,682	0.30
AA+	84,265	90,310	3.10
AA	2,348	2,884	0.10
AA-	7,232	8,762	0.30
A-2	351,357	351,357	12.05
A+	43,647	48,776	1.67
A	46,211	53,026	1.82
A-	133,799	153,451	5.26
BBB+	198,982	219,433	7.52
BBB	199,975	223,236	7.66
BBB-	49,049	53,834	1.85
BB+	17,367	17,066	0.58
BB	989	939	0.03
BB-	3,626	3,681	0.13
NR	951,090	955,630	32.77
<b>Total S&amp;P Rated Fixed Maturities</b>	<b>2,096,833</b>	<b>2,191,067</b>	<b>75.14</b>
U.S. Agency Mortgage-Backed Securities	261,667	271,500	9.31
U.S. Government Guaranteed	413,585	453,504	15.55
<b>Total Fixed Maturities</b>	<b>\$ 2,772,085</b>	<b>\$ 2,916,071</b>	<b>100.00</b>

**JRF**

<u>Moody's Ratings</u>	<u>Cost</u>	<u>Fair Value</u>	<u>Fair Value as a Percentage of Total Fair Value of Fixed Maturities</u>
Aaa	\$ 4,323	\$ 4,678	4.45
Aa1	508	555	0.53
Aa2	584	591	0.56
Aa3	288	295	0.28
P-1	1,004	1,004	0.96
P-2	3,000	3,000	2.85
A1	1,496	1,746	1.66
A2	2,373	2,757	2.63
A3	6,095	6,817	6.49
Baa1	7,263	8,074	7.68
Baa2	10,301	11,318	10.77
Baa3	2,318	2,458	2.34
Ba1	748	793	0.76
Ba2	423	380	0.36
Ba3	179	182	0.17
B1	63	59	0.06
NR	24,794	24,965	23.76
<b>Total Moody's Rated Fixed Maturities</b>	<b>65,760</b>	<b>69,672</b>	<b>66.31</b>
U.S. Agency Mortgage-Backed Securities	12,805	13,302	12.66
U.S. Government Guaranteed	20,113	22,098	21.03
<b>Total Fixed Maturities</b>	<b>\$ 98,678</b>	<b>\$ 105,072</b>	<b>100.00</b>

<u>Standard &amp; Poor's Ratings</u>	<u>Cost</u>	<u>Fair Value</u>	<u>Fair Value as a Percentage of Total Fair Value of Fixed Maturities</u>
AAA	\$ 436	\$ 549	0.52
AA+	4,228	4,507	4.29
AA	124	152	0.14
AA-	387	469	0.45
A-2	4,004	4,004	3.81
A+	1,862	2,051	1.95
A	2,059	2,386	2.27
A-	5,537	6,301	6.00
BBB+	9,479	10,371	9.87
BBB	8,565	9,401	8.95
BBB-	2,653	2,874	2.73
BB+	1,182	1,184	1.13
BB	63	59	0.06
BB-	179	182	0.17
NR	25,002	25,182	23.97
<b>Total S&amp;P Rated Fixed Maturities</b>	<b>65,760</b>	<b>69,672</b>	<b>66.31</b>
U.S. Agency Mortgage-Backed Securities	12,805	13,302	12.66
U.S. Government Guaranteed	20,113	22,098	21.03
<b>Total Fixed Maturities</b>	<b>\$ 98,678</b>	<b>\$ 105,072</b>	<b>100.00</b>

(Dollar Amounts in Thousands)

**D. Fair Value Measurement**

The RSA categorizes its fair value measurements within the fair value hierarchy established by accounting principles generally accepted in the United States of America. The hierarchy prioritizes the inputs to valuation used to measure the fair value of the asset, giving the highest priority to quoted prices in an active market for identical assets (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). The inputs to the three levels of the fair value hierarchy are described as follows:

- Level 1: Quoted (unadjusted) prices in an active market for identical assets or liabilities.
- Level 2: Significant other inputs which are observable either directly or indirectly, including quoted prices for similar assets or liabilities, quoted prices for identical or similar assets or liabilities in a less active market, or other market-corroborated inputs.
- Level 3: Valuations derived from valuation techniques using significant unobservable inputs for the asset or liabilities.

The categorization of investments within the hierarchy is based upon pricing transparency of the instrument and should not be perceived as the particular investment's risk.

Investments in equity securities classified as Level 1 are valued using quoted prices in an active market for those securities.

Investments in securities classified as Level 2 are valued using non-proprietary information that is readily available to market participants from multiple independent sources, which are known to be actively involved in the market. Pricing inputs may include market quotation, yields, maturities, call features, and ratings.

Investments in non-market traded private equity, debt, and direct investments in real estate are classified as Level 3 due to lack of observable pricing inputs and are valued using annual appraisals based on a combination of market data and projected cash flows.

The following tables provide information as of September 30, 2020, concerning fair value measurement (dollar amounts in thousands):

	TRS			
	9/30/2020	Fair Value Measurements Using:		
		Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
<b><i>Domestic Fixed Maturity</i></b>				
Money Market Funds	\$ 1,349,032	\$ -	\$ 1,349,032	\$ -
Commercial Paper	717,571	-	717,571	-
U.S. Agency	165,566	-	165,566	-
U.S. Government Guaranteed	812,734	-	812,734	-
Corporate Bonds	1,588,688	-	1,588,688	-
Private Placements	321,456	-	-	321,456
GNMAs	84,449	-	84,449	-
CMOs	509,801	-	509,801	-
Total Domestic Fixed Maturity	<u>5,549,297</u>	<u>-</u>	<u>5,227,841</u>	<u>321,456</u>
<b><i>Equities</i></b>				
Preferred	24,208	24,208	-	-
Domestic	13,103,766	12,100,279	1,003,487	-
Private	1,074,392	57,265	31,942	985,185
International	3,492,991	3,307,043	185,948	-
Total Equities	<u>17,695,357</u>	<u>15,488,795</u>	<u>1,221,377</u>	<u>985,185</u>
<b><i>Real Estate</i></b>				
Real Estate	2,367,682	-	-	2,367,682
Total Real Estate	<u>2,367,682</u>	<u>-</u>	<u>-</u>	<u>2,367,682</u>
<b>Total Investments</b>	<b><u>25,612,336</u></b>	<b><u>15,488,795</u></b>	<b><u>6,449,218</u></b>	<b><u>3,674,323</u></b>
Securities Lending Collateral	703,046	-	703,046	-
<b>Total Fair Value</b>	<b><u>\$ 26,315,382</u></b>	<b><u>\$ 15,488,795</u></b>	<b><u>\$ 7,152,264</u></b>	<b><u>\$ 3,674,323</u></b>

RETIREMENT SYSTEMS OF ALABAMA

*Financial Section*

Notes to the Combined Financial Statements  
For the Fiscal Year Ended September 30, 2020

(Dollar Amounts in Thousands)

	ERS	Fair Value Measurements Using:		
		Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
	9/30/2020			
<b><i>Domestic Fixed Maturity</i></b>				
Money Market Funds	\$ 783,592	\$ -	\$ 783,592	\$ -
Commercial Paper	351,357	-	351,357	-
U.S. Agency	84,553	-	84,553	-
U.S. Government Guaranteed	411,122	-	411,122	-
Corporate Bonds	814,478	-	814,478	-
Private Placements	157,087	-	-	157,087
GNMAs	42,382	-	42,382	-
CMOs	271,500	-	271,500	-
Total Domestic Fixed Maturity	2,916,071	-	2,758,984	157,087
<b><i>Equities</i></b>				
Preferred	11,006	11,006	-	-
Domestic	6,514,586	6,107,390	407,196	-
Private	671,833	40,870	15,733	615,230
International	1,775,891	1,669,801	106,090	-
Total Equities	8,973,316	7,829,067	529,019	615,230
<b><i>Real Estate</i></b>				
Real Estate	1,148,110	-	-	1,148,110
Total Real Estate	1,148,110	-	-	1,148,110
<b>Total Investments</b>	<b>13,037,497</b>	<b>7,829,067</b>	<b>3,288,003</b>	<b>1,920,427</b>
Securities Lending Collateral	429,656	-	429,656	-
<b>Total Fair Value</b>	<b>\$ 13,467,153</b>	<b>\$ 7,829,067</b>	<b>\$ 3,717,659</b>	<b>\$ 1,920,427</b>



		<b>JRF</b>		
		<b>Fair Value Measurements Using:</b>		
	<b>9/30/2020</b>	<b>Quoted Prices in Active Markets (Level 1)</b>	<b>Significant Other Observable Inputs (Level 2)</b>	<b>Significant Unobservable Inputs (Level 3)</b>
<b><i>Domestic Fixed Maturity</i></b>				
Money Market Funds	\$ 23,431	\$ -	\$ 23,431	\$ -
Commercial Paper	4,004	-	4,004	-
U.S. Agency	4,151	-	4,151	-
U.S. Government Guaranteed	20,140	-	20,140	-
Corporate Bonds	36,942	-	36,942	-
Private Placements	1,144	-	-	1,144
GNMAs	1,958	-	1,958	-
CMOs	13,302	-	13,302	-
Total Domestic Fixed Maturity	<u>105,072</u>	<u>-</u>	<u>103,928</u>	<u>1,144</u>
<b><i>Equities</i></b>				
Preferred	601	601	-	-
Domestic	160,299	151,991	8,308	-
Private	78	-	-	78
International	43,757	41,609	2,148	-
Total Equities	<u>204,735</u>	<u>194,201</u>	<u>10,456</u>	<u>78</u>
<b><i>Real Estate</i></b>				
Real Estate	4,080	-	-	4,080
Total Real Estate	<u>4,080</u>	<u>-</u>	<u>-</u>	<u>4,080</u>
<b>Total Investments</b>	<b><u>313,887</u></b>	<b><u>194,201</u></b>	<b><u>114,384</u></b>	<b><u>5,302</u></b>
Securities Lending Collateral	6,104	-	6,104	-
<b>Total Fair Value</b>	<b><u><u>\$ 319,991</u></u></b>	<b><u><u>\$ 194,201</u></u></b>	<b><u><u>\$ 120,488</u></u></b>	<b><u><u>\$ 5,302</u></u></b>

**E. Securities Lending Program**

The TRS, ERS, and JRF are authorized by the Boards of Control to participate in a securities lending program. The Systems' custodian, State Street Bank and Trust Company (State Street), administers the program. Certain securities from the TRS, ERS, and JRF are loaned to borrowers approved by the Systems for collateral that will be returned for the same type of securities. Approved borrowers of securities provide acceptable collateral in the form of cash (U.S. and foreign currency), any other assets permissible under Rule 15c3-3 under the Exchange Act of 1934, U.S. and non-U.S. equities, and such other collateral as the parties may agree to in writing from time to time. All security loans are open loans and can be terminated on demand by the TRS, ERS, JRF, or borrower. The initial collateral received shall have (depending on the nature of the loaned securities and the collateral received) a value of 102% or 105% of the fair value of the loaned securities, or such other value, but not less than 102% of the fair value of the loaned securities, as may be applicable in the jurisdiction in which such loaned securities are customarily traded. Pursuant to the terms of the applicable securities loan agreement, State Street shall, in accordance with State Street's reasonable and customary practices, mark loaned securities and collateral to their fair value each business day based upon the fair value of the collateral and the loaned securities at the close of the business day employing the most recently available pricing information and shall receive and deliver collateral in order to maintain the value of the collateral at no less than 100% of the fair value of the loaned securities.

The TRS, ERS, and JRF cannot pledge or sell collateral securities received unless the borrower defaults. Cash collateral is invested in the State Street Quality D Short-term Investments Fund (QDF). The collateral fund is separated into two pools, a liquidity pool and a duration pool. This split allows greater flexibility in managing the available liquidity in the investment in the fund and the outstanding balance of securities on loan.

The following describes the QDF's guidelines. The QDF's Investment Manager (State Street Bank) shall maintain the dollar-weighted average maturity of QDF in a manner that the Investment Manager believes is appropriate to the objective of QDF; provided, that (i) in no event shall any eligible security be acquired with a remaining legal final maturity (i.e., the date on which principal must be repaid) of greater than 18 months, (ii) the Investment Manager shall endeavor to maintain a dollar-weighted average maturity of the QDF not to exceed 75 calendar days, and (iii) the Investment Manager shall endeavor to maintain a dollar-weighted average maturity to final of the QDF not to exceed 180 calendar days. At the time of purchase (i) all eligible securities with maturities of 13 months or less shall (x) be rated at least A1, P1, or F1 by at least any two of the following nationally recognized statistical rating organizations: Standard & Poor's Corp. ("S&P"), Moody's Investor Services, Inc. ("Moody's"), or Fitch, Inc. ("Fitch"), or (y) be determined by the Investment Manager to be of comparable quality and (ii) all eligible securities with maturities in excess of 13 months shall (x) be rated at least A-, A3, or A- by at least any two of S & P, Moody's, or Fitch, or (y) be determined by the Investment Manager to be of comparable quality. The QDF may invest up to 10% of its assets at a time of purchase in commingled vehicles managed by State Street Global Advisors or its affiliates that conform to the Investment Policy Guidelines. The QDF duration pool includes all asset-backed securities (regardless of maturity) and securities of any type with a remaining maturity of 91 days or greater. Each QDF investor owns a specified percentage interest in the duration pool which is redeemable only in kind, not in cash. The QDF duration pool will not make additional investments.

As of September 30, 2020, the average term of the loans secured by QDF was 24 days for the TRS and ERS and 38 days for the JRF. Cash collateral investments in the QDF are matured as needed to fulfill loan obligations. There is no direct matching of the maturities of the loans with the investments made with cash collateral.

At September 30, 2020, the fair value of the securities on loan was \$2,316,816, \$1,210,789, and \$23,839 for the TRS, ERS, and JRF, respectively. The fair value of the collateral pledged by the borrowers was \$2,446,795, \$1,272,789, and \$24,768 for the TRS, ERS, and JRF, respectively. Since the amounts owed by the TRS, ERS, and JRF exceeded the amounts the borrowers owed to the TRS, ERS, and JRF, there was no credit risk exposure as of September 30, 2020. There were no significant violations of legal or contractual provisions, no borrower or lending agent default losses, and no recoveries of prior period losses during the year.

Investments purchased with cash collateral are held by the custodial agent, but not in the name of the Systems. Securities pledged as collateral are held by the custodial agent, but not in the name of the Systems. Letters of credit pledged as collateral are issued by the borrower's bank and are irrevocable. Tri Party Collateral is held by a third-party bank in the name of the custodial agent. State Street, as custodial agent, is authorized to request a third-party bank to undertake certain custodial functions in connection with holding of the collateral provided by a borrower. State Street may instruct the third-party bank to establish and maintain a borrower's account and a State Street account wherein all collateral, including cash shall be maintained by the third-party bank in accordance with the terms of the agreement.

The following table provides information as of September 30, 2020, concerning securities lent (dollar amounts in thousands):

<b>Securities Lending - Investments Lent &amp; Collateral Received</b>				
<b>(at Fair Value)</b>				
<b>Type of Investment Lent</b>	<b>TRS</b>	<b>ERS</b>	<b>JRF</b>	<b>Total</b>
<i>For Cash Collateral</i>				
Domestic Fixed Maturities	\$ 107,212	\$ 48,687	\$ 60	\$ 155,959
Domestic Equity	125,831	90,337	1,111	217,279
International Equity - JPY	421,646	264,302	4,261	690,209
International Equity - USD	23,997	11,340	439	35,776
Total Lent for Cash Collateral	<u>678,686</u>	<u>414,666</u>	<u>5,871</u>	<u>1,099,223</u>
<i>For Non-Cash Collateral</i>				
Domestic Fixed Maturities	585,604	318,837	11,580	916,021
Domestic Equity	988,468	448,072	5,652	1,442,192
International Equity	64,058	29,214	736	94,008
Total Lent for Non-Cash Collateral	<u>1,638,130</u>	<u>796,123</u>	<u>17,968</u>	<u>2,452,221</u>
<b>Total Securities Lent</b>	<b><u>\$2,316,816</u></b>	<b><u>\$1,210,789</u></b>	<b><u>\$23,839</u></b>	<b><u>\$3,551,444</u></b>
<b>Type of Collateral Received</b>				
<i>Cash Collateral</i>				
Invested in State Street Global Securities Lending Trust - JPY	\$ 441,072	\$ 276,752	\$ 4,460	\$ 722,284
Invested in State Street Global Securities Lending Trust - USD	261,974	152,904	1,644	416,522
Total Cash Collateral Denominated in USD	<u>703,046</u>	<u>429,656</u>	<u>6,104</u>	<u>1,138,806</u>
<i>Non-Cash Collateral</i>				
Domestic Fixed Securities				
USD	351,685	139,171	6,278	497,134
Domestic Equity Securities				
USD	1,073,737	501,824	5,853	1,581,414
International Fixed Maturities & Equity				
DKK	2,107	1,606	-	3,713
EUR	2,662	2,033	-	4,695
GBP	662	469	-	1,131
SEK	11,499	8,766	-	20,265
USD	301,397	189,264	6,533	497,194
Total Non-Cash Collateral	<u>1,743,749</u>	<u>843,133</u>	<u>18,664</u>	<u>2,605,546</u>
<b>Total Collateral Received</b>	<b><u>\$2,446,795</u></b>	<b><u>\$1,272,789</u></b>	<b><u>\$24,768</u></b>	<b><u>\$3,744,352</u></b>

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Financial Section

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(Dollar Amounts in Thousands)

**F. Mortgage-backed Securities**

As of September 30, 2020, the TRS, ERS, and JRF had investments in mortgaged-backed securities. Embedded prepayment options cause these investments to be highly sensitive to changes in interest rates. Prepayments of the underlying assets reduce the total interest payments to be received. Generally, when interest rates fall, obligees tend to prepay the mortgages thus eliminating the stream of interest payments that would have been received under the original amortization schedule. The resulting reduction in cash flow diminishes the fair value of the mortgage-backed securities. Additionally, the prepayment activity associated with this type of security can lead to changes in the average life and duration of the security; higher prepayments will effectively shorten the expected life of the security while slower prepayments can lengthen the expected life of the security.

**G. Investment Derivatives**

Derivative instruments are financial arrangements used by governments to manage specific risks or to make investments. From time to time, the RSA enters into certain derivative transactions, specifically call options and put options. The RSA uses these derivative instruments to make an investment, control risk with certain investment positions, or as a yield enhancement strategy. During the fiscal year, these investment derivative instruments were used exclusively within the RSA's domestic and international equity portfolios and are presented in the financial statements in their respective equity classifications. These derivative instruments are either listed options or executed in the over-the-counter (OTC) market using only credit worthy counterparties. The fair value of the investment derivative instruments is based on market prices. Investment risks related to investment derivatives have been considered and included in the Investment Risks note in the preceding pages. The following table presents the investment derivative instruments outstanding as of September 30, 2020, as reported in the System's Combining Statement of Fiduciary Net Position and Combining Statement of Changes in Fiduciary Net Position:

<b>Investment Derivative Instruments</b>					
	<b>Changes in Fair Value</b>		<b>Fair Value as of September 30, 2020</b>		
	<b>Classification</b>	<b>Amount</b>	<b>Classification</b>	<b>Amount</b>	<b>Notional</b>
<b>TRS</b>					
Domestic Options Written	Investment Income	\$ 113,021	Domestic Equity	\$ (72,131)	\$ (6,743,934)
Domestic Options Purchased	Investment Income	(184,253)	Domestic Equity	-	3,289,499
Total Domestic Options		(71,232)		(72,131)	(3,454,435)
International Options Written	Investment Income	66	International Equity	(118)	(103,873)
<b>Grand Total TRS Options</b>		<b><u>\$ (71,166)</u></b>		<b><u>\$ (72,249)</u></b>	<b><u>\$ (3,558,308)</u></b>
<b>ERS</b>					
Domestic Options Written	Investment Income	\$ 59,947	Domestic Equity	\$ (35,436)	\$ (3,285,558)
Domestic Options Purchased	Investment Income	(94,877)	Domestic Equity	-	1,602,558
Total Domestic Options		(34,930)		(35,436)	(1,683,000)
International Options Written	Investment Income	32	International Equity	(56)	(49,361)
<b>Grand Total ERS Options</b>		<b><u>\$ (34,898)</u></b>		<b><u>\$ (35,492)</u></b>	<b><u>\$ (1,732,361)</u></b>
<b>JRF</b>					
Domestic Options Written	Investment Income	\$ 2,277	Domestic Equity	\$ (1,382)	\$ (125,283)
Domestic Options Purchased	Investment Income	(3,659)	Domestic Equity	-	61,187
Total Domestic Options		(1,382)		(1,382)	(64,096)
International Options Written	Investment Income	1	International Equity	(2)	(1,797)
<b>Grand Total JRF Options</b>		<b><u>\$ (1,381)</u></b>		<b><u>\$ (1,384)</u></b>	<b><u>\$ (65,893)</u></b>
<b>Total</b>					
Domestic Options Written	Investment Income	\$ 175,245	Domestic Equity	\$ (108,949)	\$ (10,154,775)
Domestic Options Purchased	Investment Income	(282,789)	Domestic Equity	-	4,953,244
Total Domestic Options		(107,544)		(108,949)	(5,201,531)
International Options Written	Investment Income	99	International Equity	(176)	(155,031)
<b>Grand Total Options</b>		<b><u>\$ (107,445)</u></b>		<b><u>\$ (109,125)</u></b>	<b><u>\$ (5,356,562)</u></b>

## 6) NET PENSION LIABILITY OF THE PLANS

The components of the net pension liability related to the TRS, ERS, and JRF retirement plans determined in accordance with GASB Statement No. 67, *Financial Reporting for Pension Plans*, as of September 30, 2020, were as follows (dollar amounts in thousands):

	<u>TRS</u>	<u>ERS</u>	<u>JRF</u>
Total Pension Liability	\$ 38,316,039	\$ 19,706,965	\$ 481,205
Less: Plan Net Position (see Note 3G)	(25,946,389)	(13,150,538)	(318,558)
<b>Net Pension Liability</b>	<b><u>\$ 12,369,650</u></b>	<b><u>\$ 6,556,427</u></b>	<b><u>\$ 162,647</u></b>
 <b>Plan Net Position as a Percentage of the Total Pension Liability</b>	 <b>67.72%</b>	 <b>66.73%</b>	 <b>66.20%</b>

The net pension liability is allocated to employers in accordance with GASB Statement No. 68, *Accounting and Financial Reporting for Pensions*. The net pension liability was determined by an actuarial valuation as of September 30, 2018, and rolled forward in accordance with GASB Statement No. 67 to the measurement date of September 30, 2020, using the following actuarial assumptions, applied to all periods included in the measurement:

	<u>TRS</u>	<u>ERS</u>	<u>JRF</u>
Inflation	2.75%	2.75%	2.75%
Projected Salary Increases	3.25% - 5.00%	3.25% - 5.00%	3.25% - 3.50%
Investment Rate of Return*	7.70%	7.70%	7.65%

\*Net of pension plan investment expense.

There were no ad hoc postemployment benefit changes, including ad hoc COLAs, during fiscal year 2020.

The actuarial assumptions used in the actuarial valuation as of September 30, 2018, were based on the results of an investigation of the economic and demographic experience for the TRS, ERS, and JRF based upon participant data as of September 30, 2015, completed by the RSA and its actuaries. The purpose of the investigation was to assess the reasonableness of the actuarial assumptions and methods currently used by the RSA. This investigation resulted in changes to the actuarial assumptions. The Boards of Control for each accepted and approved these changes in September 2016 which became effective at the beginning of fiscal year 2016.

The assumed investment rates of return used to prepare the actuarial valuations as of September 30, 2018, were 7.70% for the TRS & ERS and 7.65% for the JRF. The Boards of Control accepted and approved these new assumed investment rates of return in December 2018 which became effective September 30, 2018. The new assumed investment rates of return were used to measure the total pension liability as of September 30, 2020.

Mortality rates for the TRS and JRF were based on the sex distinct RP-2000 White Collar Mortality Table projected to 2020 using scale BB and adjusted 115% for males and 112% for females age 78 and older. The rates of disabled mortality for the TRS and JRF were based on the sex distinct RP-2000 Disabled Mortality Table projected to 2020 using scale BB and adjusted 105% for males and 120% for females. Mortality rates for the ERS were based on the sex distinct RP-2000 Blue Collar Mortality Table projected to 2020 using scale BB with an adjustment of 125% for males and 120% for females age 78 and older. The rates of disabled mortality for the ERS were based on the sex distinct RP-2000 Disabled Retiree Mortality Table projected to 2020 using scale BB with an adjustment of 130% for females.

# RETIREMENT SYSTEMS OF ALABAMA

## Financial Section

### Notes to the Combined Financial Statements For the Fiscal Year Ended September 30, 2020

(Dollar Amounts in Thousands)

The total pension liability related to the cost-sharing retirement plans is based on the actuarial valuation as of September 30, 2018. The expected total pension liability is determined as of September 30, 2020, using standard roll-forward techniques as shown in the following table:

	<b>TRS</b>				
	<b>Expected</b>	<b>Actual</b>			
Total Pension Liability					
as of 9/30/2019 (a)	\$ 36,676,350	\$ 37,256,437			
Entry Age Normal Cost* for					
10/1/2019 - 9/30/2020 (b)	\$ 677,424	\$ 677,424			
Actual Benefit Payments (including refunds) for					
10/1/2019 - 9/30/2020 (c)	\$ 2,394,384	\$ 2,394,384			
Total Pension Liability					
as of 9/30/2020	\$ 37,691,285	\$ 38,316,039			
[(a) x (1.0770)] + (b) - [(c) x (1.0385)]					
Difference between Expected & Actual Experience (Gain)/Loss		\$ 624,754			
			<b>ERS</b>		
			<b>Expected</b>	<b>Actual Before Act 2019-132</b>	<b>Actual</b>
Total Pension Liability					
as of 9/30/2019 (a)	\$ 18,353,891	\$ 19,140,860			\$ 19,195,870
Total Pension Liability for the City of Montgomery					
as of 10/1/2019 (b)	\$ 560,498				
Entry Age Normal Cost* for					
10/1/2019 - 9/30/2020 (c)	\$ 329,995	\$ 329,995			\$ 342,069
Actual Benefit Payments (including refunds) for					
10/1/2019 - 9/30/2020 (d)	\$ 1,260,526	\$ 1,260,526			\$ 1,260,526
Total Pension Liability					
as of 9/30/2020	\$ 19,391,736	\$ 19,635,645			\$ 19,706,965
[((a)+(b)) x (1.0770)] + (c) - [(d) x (1.0385)]					
Difference between Expected & Actual Experience (Gain)/Loss		\$ 243,909			
Difference between Actual Total Pension Liability					
Before & After Act 2019-132 Benefit Change (Gain)/Loss					\$ 71,320
			<b>JRF</b>		
	<b>Expected</b>	<b>Actual</b>			
Total Pension Liability					
as of 9/30/2019 (a)	\$ 463,451	\$ 475,853			
Entry Age Normal Cost* for					
10/1/2019 - 9/30/2020 (b)	\$ 9,512	\$ 9,512			
Actual Benefit Payments (including refunds) for					
10/1/2019 - 9/30/2020 (c)	\$ 39,068	\$ 39,068			
Total Pension Liability					
as of 9/30/2020	\$ 467,855	\$ 481,205			
[(a) x (1.0765)] + (b) - [(c) x (1.03825)]					
Difference between Expected & Actual Experience (Gain)/Loss		\$ 13,351			

\*Also called the Service Cost.

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 geometric real rates of return for each major asset class are as follows:

	Target Allocation			Long-Term Expected Rate of Return*		
	TRS	ERS	JRF	TRS	ERS	JRF
Fixed Income	17.00%	17.00%	25.00%	4.40%	4.40%	5.00%
U.S. Large Stocks	32.00%	32.00%	34.00%	8.00%	8.00%	9.00%
U.S. Mid Stocks	9.00%	9.00%	8.00%	10.00%	10.00%	12.00%
U.S. Small Stocks	4.00%	4.00%	3.00%	11.00%	11.00%	15.00%
International Developed Market Stocks	12.00%	12.00%	15.00%	9.50%	9.50%	11.00%
International Emerging Market Stocks	3.00%	3.00%	3.00%	11.00%	11.00%	16.00%
Alternatives	10.00%	10.00%	0.00%	10.10%	10.10%	0.00%
Real Estate	10.00%	10.00%	10.00%	7.50%	7.50%	7.50%
Cash	3.00%	3.00%	2.00%	1.50%	1.50%	1.50%
<b>Total</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>			

\*Includes assumed rate of inflation of 2.50%.

The discount rate used to measure the total pension liability was 7.70% for the TRS and ERS and 7.65% for the JRF. 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, components of the pension plan's fiduciary net position were 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.

The following table presents the net pension liability of the TRS, ERS, and JRF calculated using their respective discount rates, as well as what the net pension liability would be if it were calculated using a discount rate that is one percentage point lower or one percentage point higher than the current rate (dollar amounts in thousands):

	Current		
	1% Decrease (6.70%)	Discount Rate (7.70%)	1% Increase (8.70%)
<b>TRS</b>	\$ 16,503,709	\$ 12,369,650	\$ 8,871,759
<b>ERS</b>	\$ 8,667,554	\$ 6,556,427	\$ 4,766,518

	Current		
	1% Decrease (6.65%)	Discount Rate (7.65%)	1% Increase (8.65%)
<b>JRF</b>	\$ 205,539	\$ 162,347	\$ 125,464

# RETIREMENT SYSTEMS OF ALABAMA

## Financial Section

### Notes to the Combined Financial Statements For the Fiscal Year Ended September 30, 2020

(Dollar Amounts in Thousands)

#### 7) CONTRIBUTIONS REQUIRED AND MADE

The actuary has computed, as of the date of the latest available actuarial valuations, the estimated present value of benefits payable to retired members, beneficiaries, and active members. The actuarial valuations for the TRS, ERS, and JRF are prepared on the projected benefit basis utilizing the entry age normal method. The present value of all expected benefits payable from each system to the present group of members and beneficiaries is calculated by adding the present value of the expected benefits payable to the active members to the present value of the expected future payments to retired members and beneficiaries.

As required by statute, the TRS, ERS, and JRF provide for employer contributions at actuarially determined rates (expressed as percentages of annual covered payroll) that accumulate sufficient assets to pay benefits when due. The employer contributions required to support the benefits of each system are determined following a level funding approach and consist of a normal contribution, an accrued liability contribution, and a portion to finance administrative costs. Additionally, a portion of the TRS and ERS employer contributions fund a preretirement death benefit. Also, a portion of the TRS employer contributions fund a term-life benefit.

For the TRS, ERS, and JRF, the normal contribution is determined using the "entry age normal" method. Under this method, a calculation is made to determine the uniform and constant percentage rate of employer contributions which, if applied to the compensation of the average new member during the entire period of the member's anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on the member's behalf.

The 2020 retirement contributions were made in accordance with actuarially determined contribution requirements.

The RSA and its actuaries completed an investigation of the economic and demographic experience for the TRS, ERS, and JRF based upon participant data as of September 30, 2015. The purpose of the investigation was to assess the reasonableness of the actuarial assumptions and methods currently used by the RSA. This investigation resulted in changes to actuarial assumptions which are outlined in Note 6. The Boards of Control for each accepted and approved these changes in September 2016, which became effective at the beginning of fiscal year 2016.

#### 8) PROPERTY AND EQUIPMENT

Plan assets used in plan operations are reported at historical cost less accumulated depreciation. Depreciation is determined on the straight-line basis using estimated useful lives of 30 years for buildings and 3 to 10 years for furniture and equipment. Property and equipment was comprised of the following amounts as of September 30, 2020:

	<u>TRS</u>	<u>ERS</u>
Land	\$ 5,085	\$ 2,535
Building and Improvements	107,896	53,948
Software	42,889	14,264
Furniture and Equipment	9,821	2,494
Intangible Assets in Progress	-	-
Total Property and Equipment	<u>165,691</u>	<u>73,241</u>
Less: Accumulated Depreciation	<u>(61,233)</u>	<u>(26,934)</u>
<b>Net Property and Equipment</b>	<b><u>\$ 104,458</u></b>	<b><u>\$ 46,307</u></b>

Software represents the capitalizable of software and professional services related to RSA's pension administration system. RSA entered into a contract with Deloitte Consulting, LLP, for an initial term of 3 years beginning October 24<sup>th</sup>, 2014, with an option to renew for two additional 1-year periods for a total term of no more than 5 years. The cost of the system is being split between the TRS and ERS with the TRS incurring 75% of the cost and the ERS incurring 25%. This project is being accounted for pursuant to the requirements of GASB Statement No. 51, *Accounting and Financial Reporting for Intangible Assets*.



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## 9) POSTEMPLOYMENT BENEFITS OTHER THAN PENSIONS FOR RSA EMPLOYEES

The Alabama Retired State Employees' Health Care Trust (SEIF Retired - Trust) financial statements are prepared by using the economic resources measurement focus and accrual basis of accounting. This includes for purposes of measuring the net OPEB liability, deferred outflows of resources and deferred inflows of resources related to OPEB, and OPEB expense, information about the fiduciary net position of the SEIF Retired - Trust and additions to/deductions from its fiduciary net position. Plan member contributions are recognized in the period in which the contributions are due. Employer contributions are recognized when due pursuant to plan requirements. Benefits are recognized when due and payable in accordance with the terms of the plan. Subsequent events were evaluated by management through the date the financial statements were issued.

The SEIF - Retired Trust is a single employer defined benefit health care plan, also known as other postemployment benefits (OPEB) trust, established in 2007 under the provisions of the Alabama Retiree Health Care Funding Act of 2007 (2007-16) as an irrevocable trust fund. Constitutional amendment 798 provides further legal authority to the SEIF - Retired Trust as an irrevocable trust fund. Active and retiree health insurance benefits are paid through the State Employees' Insurance Board (SEIB) pursuant to Act 833 of the Legislature of 1965. The assets of the SEIF - Retired Trust may not be used for any purpose other than to acquire permitted investments, pay administrative expenses, and provide postemployment health care benefits to or for retired employees and their dependents in accordance with the terms of the plan. Plan assets of SEIF - Retired Trust are legally protected from creditors. The legislature has no authority or power to appropriate the assets of the SEIF - Retired Trust. Responsibility for the general administration and operations of the SEIF - Retired Trust is vested in its trustees who consist of the Board's members. In accordance with GASB pronouncements, the SEIF Retired - Trust is considered a component unit of the State of Alabama (State) and is included in the State's Comprehensive Annual Financial Report.

The SEIF plan (the Plan) provides basic medical coverage for up to 365 days of care during each hospital confinement, outpatient care, physicians' benefits, radiation therapy, and major medical benefits with no lifetime maximum. A group dental contract provides basic dental maintenance coverage with a maximum benefit amount of \$1,500 during each year for each eligible participant who elects coverage.

At September 30, 2019, the membership covered by the benefit terms consisted of:

Active Members	32,133
Inactive Members	<u>23,956</u>
<b>Total</b>	<b><u>56,089</u></b>

The Plan provides that the employers contribute monthly for the medical and dental insurance of participating employees. Coverage is also available to dependents of employees with their medical premiums typically being paid by the employee. Employee and dependent premium amounts are determined annually and are set at a rate necessary to provide sufficient funds to pay all claims and reasonable expenses of administering the plans.

At September 30, 2020, the TRS reported a liability of \$9,902 (dollar amount in thousands) for its proportionate share of the net OPEB liability. The net OPEB liability was measured as of September 30, 2019, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of September 30, 2018. The TRS's proportion of the net OPEB liability was based on a projection of the TRS's long-term share of contributions to the OPEB plan relative to the projected contributions of all participating employers, actuarially determined. At September 30, 2019, the TRS's proportion was 0.572452%, which was an increase of 0.015536% from its proportion measured as of September 30, 2018.

## RETIREMENT SYSTEMS OF ALABAMA

### Financial Section

#### Notes to the Combined Financial Statements For the Fiscal Year Ended September 30, 2020

(Dollar Amounts in Thousands)

For the year ended September 30, 2020, the TRS recognized OPEB expense of \$674. At September 30, 2020, the TRS reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
Differences between Expected & Actual Experience	\$ -	\$ 6,856
Changes of Assumptions	729	2,095
Net Difference between Projected & Actual		
Earnings on OPEB Plan Investments	6	-
Changes in Proportion & Differences between Employer		
Contributions & Proportionate Share of Contributions	1,351	-
Employer Contributions Subsequent to the Measurement Date	313	-
<b>Total</b>	<b>\$ 2,399</b>	<b>\$ 8,951</b>

The TRS will recognize \$313 of reported deferred outflows of resources related to OPEB resulting from contributions subsequent to the measurement date as a reduction of net OPEB liability in the fiscal year ended September 30, 2021. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

<b>Fiscal Year Ended September 30:</b>	
2021	\$ (1,746)
2022	\$ (1,746)
2023	\$ (1,563)
2024	\$ (1,333)
2025	\$ (477)
Thereafter	\$ -

At September 30, 2020, the ERS reported a liability of \$6,716 for its proportionate share of the net OPEB liability. The net OPEB liability was measured as of September 30, 2019, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of September 30, 2018. The ERS's proportion of the net OPEB liability was based on a projection of the ERS's long-term share of contributions to the OPEB plan relative to the projected contributions of all participating employers, actuarially determined. At September 30, 2019, the ERS's proportion was 0.388279%, which was an increase of 0.013084% from its proportion measured as of September 30, 2018.

For the year ended September 30, 2020, the ERS recognized OPEB expense of \$147. At September 30, 2020, the ERS reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
Differences between Expected & Actual Experience	\$ -	\$ 4,651
Changes of Assumptions	495	1,421
Net Difference between Projected & Actual		
Earnings on OPEB Plan Investments	4	-
Changes in Proportion & Differences between Employer		
Contributions & Proportionate Share of Contributions	367	132
Employer Contributions Subsequent to the Measurement Date	205	-
<b>Total</b>	<b>\$ 1,071</b>	<b>\$ 6,204</b>

The ERS will recognize \$205 of reported deferred outflows of resources related to OPEB resulting from contributions subsequent to the measurement date as a reduction of net OPEB liability in the fiscal year ended September 30, 2021 (dollar amount in thousands). Other amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows (dollar amounts in thousands):

<b>Fiscal Year Ended</b>	
<b>September 30:</b>	
2021	\$ (1,428)
2022	\$ (1,428)
2023	\$ (1,218)
2024	\$ (937)
2025	\$ (327)
Thereafter	\$ -

At September 30, 2020, the JRF reported a liability of \$54 for its proportionate share of the net OPEB liability (dollar amount in thousands). The net OPEB liability was measured as of September 30, 2019, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of September 30, 2018. The JRF's proportion of the net OPEB liability was based on a projection of the JRF's long-term share of contributions to the OPEB plan relative to the projected contributions of all participating employers, actuarially determined. At September 30, 2019, the JRF's proportion was 0.003119%, which was a decrease of 0.000029% from its proportion measured as of September 30, 2018.

For the year ended September 30, 2020, the JRF recognized OPEB expense of \$ (dollar amount in thousands). At September 30, 2020, the JRF reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources (dollar amounts in thousands):

	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
Differences between Expected & Actual Experience	\$ -	\$ 37
Changes of Assumptions	3	12
Net Difference between Projected & Actual		
Earnings on OPEB Plan Investments	-	-
Changes in Proportion & Differences between Employer		
Contributions & Proportionate Share of Contributions	1	1
Employer Contributions Subsequent to the Measurement Date	2	-
<b>Total</b>	<b>\$ 6</b>	<b>\$ 50</b>

The JRF will recognize \$2 of reported deferred outflows of resources related to OPEB resulting from contributions subsequent to the measurement date as a reduction of net OPEB liability in the fiscal year ended September 30, 2021 (dollar amount in thousands). Other amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows (dollar amounts in thousands):

<b>Fiscal Year Ended</b>	
<b>September 30:</b>	
2021	\$ (12)
2022	\$ (12)
2023	\$ (10)
2024	\$ (8)
2025	\$ (3)
Thereafter	\$ -

## RETIREMENT SYSTEMS OF ALABAMA

### Financial Section

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(Dollar Amounts in Thousands)

The total OPEB liability was determined by an actuarial valuation as of September 30, 2018, using the following actuarial assumptions, applied to all periods included in the measurement:

<b>Inflation</b>	2.75%
<b>Salary Increases*</b>	3.25% - 5.00% for State and Local Employees 4.50% for State Police 3.25% - 3.50% for Judges
<b>Long-Term Investment Rate of Return**</b>	7.50%
<b>Municipal Bond Index Rate at Measurement Date</b>	3.00%
<b>Municipal Bond Index Rate at Prior Measurement Date</b>	4.18%
<b>Projected Year for Fiduciary Net Position to be Depleted</b>	2035
<b>Single Equivalent Interest Rate at Measurement Date</b>	3.63%
<b>Single Equivalent Interest Rate at Prior Measurement Date</b>	4.25%
<b>Healthcare Cost Trend Rate</b>	
Pre-Medicare Eligible	6.75%
Medicare Eligible	***
Ultimate Trend Rate	
Pre-Medicare Eligible	4.75%
Medicare Eligible	4.75%
Year of Ultimate Trend Rate	2026 for Pre-Medicare Eligible 2024 for Medicare Eligible
Dental Trend Rate	4.50%

\*Includes 3.00% wage inflation.

\*\*Compounded annually, net of investment expense, and includes inflation.

\*\*\*Initial Medicare claims are set based on scheduled increases through plan year 2022.

The rates of mortality for the period after service retirement are according to the sex distinct RP-2000 Blue Collar Mortality Table projected to 2020 using scale BB with an adjustment of 125% for males and 120% for females age 78 and older. The rates of mortality for the period after disability retirement are according to the sex distinct RP-2000 Disabled Retiree Mortality Table projected to 2020 using scale BB with an adjustment of 130% for females.

The decremental assumptions and methods used in the valuation were selected based on the actuarial experience study prepared as of September 30, 2015, submitted to and adopted by the State Employees' Insurance Board on September 29, 2016.

The remaining actuarial assumptions (e.g., initial per capita costs, health care cost trends, rate of plan participation, rates of plan election, etc.) used in the September 30, 2018 valuation were based on a review of recent plan experience done concurrently with the September 30, 2018 valuation.

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 geometric real rates of return for each major asset class are as follows:

	<b>Target Allocation</b>	<b>Long-Term Expected Rate of Return*</b>
Fixed Income	28.20%	4.40%
U.S. Domestic Stocks	55.20%	8.70%
International Developed Market Stocks	10.80%	9.80%
Cash	5.80%	1.50%
<b>Total</b>	<b><u>100.00%</u></b>	

\*Includes assumed rate of inflation of 2.50%.

The discount rate (also known as the Single Equivalent Interest Rate (SEIR), as described by GASB 74) used to measure the total OPEB liability was 3.63% at September 30, 2019. The discount rate used to measure the total OPEB liability at the prior measurement date was 4.25%. The projection of cash flows used to determine the discount rate assumed that plan contributions will be equal to the lesser of the prior year's contributions indexed with inflation or actual benefit payments plus expenses. The discount rate determination will use a municipal bond rate to the extent the trust is projected to run out of money before all benefits are paid. The rate used, if necessary, for this purpose is the average of the Bond Buyer General Obligation 20-year Municipal Bond Index Rate, the Fidelity General Obligation AA 20-year Municipal Bond Index Rate, and the S & P High Grade 20-Year Municipal Bond Index Rate. The rates as of September 30, 2019, were 2.66%, 2.75%, and 3.58%, respectively, which resulted in an average Municipal Bond Index Rate of 3.00%. Projected future benefit payments for all current plan members were projected through 2117.

The following table presents the TRS, ERS, and JRF's proportionate shares of the net OPEB liability of the Trust calculated using the current healthcare trend rate, as well as what the net OPEB liability would be if calculated using one percentage point lower or one percentage point higher than the current rate (dollar amounts in thousands):

	<b>1% Decrease (5.75% decreasing to 3.75% for Pre-Medicare and Known decreasing to 3.75% Medicare Eligible)</b>	<b>Current Healthcare Trend Rate (6.75% decreasing to 4.75% for Pre-Medicare and Known decreasing to 4.75% for Medicare Eligible)</b>	<b>1% Increase (7.75% decreasing to 5.75% for Pre-Medicare and Known decreasing to 5.75% for Medicare Eligible)</b>
<b>TRS</b>	\$ 8,253	\$ 9,902	\$ 11,999
<b>ERS</b>	\$ 5,598	\$ 6,716	\$ 8,138
<b>JRF</b>	\$ 45	\$ 54	\$ 65

# RETIREMENT SYSTEMS OF ALABAMA

## Financial Section

### Notes to the Combined Financial Statements For the Fiscal Year Ended September 30, 2020

(Dollar Amounts in Thousands)

The following table presents the proportionate share of the net OPEB liability for the TRS, ERS, and JRF calculated using the discount rate of 3.63%, as well as what the net OPEB liability would be if calculated using one percentage point lower or one percentage point higher than the current rate:

	<b>1% Decrease</b>	<b>Current</b>	<b>1% Increase</b>
	<b>(2.63%)</b>	<b>Discount Rate</b>	<b>(4.63%)</b>
		<b>(3.63%)</b>	
<b>TRS</b>	\$ 11,614	\$ 9,902	\$ 8,509
<b>ERS</b>	\$ 7,877	\$ 6,716	\$ 5,772
<b>JRF</b>	\$ 63	\$ 54	\$ 46

#### 10) PENSION PLAN FOR RSA EMPLOYEES

A portion of the RSA employees participates in the TRS pension plan, which is a cost-sharing plan, and a portion of the RSA employees participates in the ERS pension plan, which is an agent multiple-employer pension plan. As a component unit, RSA employees participating in the ERS pension plan are valued with all other State of Alabama employees, and therefore, report under the requirements of a cost-sharing unit.

##### A. Teachers' Retirement System of Alabama

The TRS, a cost-sharing multiple-employer public employee retirement plan, was established as of September 15, 1939, pursuant to the *Code of Alabama 1975, Title 16, Chapter 25* (Act 419 of the Legislature of 1939) for the purpose of providing retirement allowances and other specified benefits for qualified persons employed by State-supported educational institutions. The responsibility for the general administration and operation of the TRS is vested in its Board of Control. The TRS Board of Control consists of 15 trustees. Note 1 of this report outlines the composition of the TRS Board of Control. The Plan is administered by RSA and the Plan issues a Comprehensive Annual Financial Report each year. It is available at [www.rsa-al.gov](http://www.rsa-al.gov).

State law establishes retirement benefits as well as death and disability benefits and any ad hoc increase in postretirement benefits for the TRS. Benefits for TRS members vest after 10 years of creditable service. TRS members who retire after age 60 with 10 years or more of creditable service or with 25 years of service (regardless of age) are entitled to an annual retirement benefit, payable monthly for life. Service and disability retirement benefits are based on a guaranteed minimum or a formula method, with the member receiving payment under the method that yields the highest monthly benefit. Under the formula method, members of the TRS are allowed 2.0125% of their average final compensation (highest 3 of the last 10 years) for each year of service.

Act 377 of the Legislature of 2012 established a new tier of benefits (Tier 2) for members hired on or after January 1, 2013. Tier 2 TRS members are eligible for retirement after age 62 with 10 years or more of creditable service and are entitled to an annual retirement benefit, payable monthly for life. Service and disability retirement benefits are based on a guaranteed minimum or a formula method, with the member receiving payment under the method that yields the highest monthly benefit. Under the formula method, Tier 2 members of the TRS are allowed 1.65% of their average final compensation (highest 5 of the last 10 years) for each year of service. Members are eligible for disability retirement if they have 10 years of credible service, are currently in-service, and determined by the RSA Medical Board to be permanently incapacitated from further performance of duty. Preretirement death benefits are calculated and paid to the beneficiary based on the member's age, service credit, employment status, and eligibility for retirement.

Covered members of the TRS contributed 5% of earnable compensation to the TRS as required by statute until September 30, 2011. From October 1, 2011, to September 30, 2012, covered members of the TRS were required by statute to contribute 7.25% of earnable compensation. Effective October 1, 2012, covered members of the TRS are required by statute to contribute 7.50% of earnable compensation. Certified law enforcement, correctional officers, and firefighters of the TRS contributed 6% of earnable compensation as required by statute until September 30, 2011. From October 1, 2011, to September 30, 2012, certified law enforcement, correctional officers, and firefighters of the TRS were required by statute to contribute 8.25% of earnable compensation. Effective October 1, 2012, certified law

enforcement, correctional officers, and firefighters of the TRS are required by statute to contribute 8.50% of earnable compensation. Tier 2 covered members of the TRS contribute 6% of earnable compensation to the TRS as required by statute. Tier 2 certified law enforcement, correctional officers, and firefighters of the TRS are required by statute to contribute 7% of earnable compensation.

Participating employers' contractually required contribution rate for the fiscal year ended September 30, 2020, was 12.43% of annual pay for Tier 1 members and 11.34% of annual pay for Tier 2 members. These required contribution rates are a percent of annual payroll, actuarially determined as an amount that, when combined with member contributions, is expected to finance the costs of benefits earned by members during the year, with an additional amount to finance any unfunded accrued liability. Total TRS employer contributions to the pension plan from the System were \$1,946 for the fiscal year ended September 30, 2020 (dollar amounts in thousands).

At September 30, 2020, in accordance with GASB Statement No. 68, the TRS reported a net pension liability of \$24,246 for its proportionate share of the TRS pension plan's total net pension liability as determined under GASB Statement No. 67 (dollar amount in thousands). The TRS pension plan's total pension liability used to calculate the TRS's net pension liability was determined by an actuarial valuation as of September 30, 2018 and rolled forward to TRS's measurement date of September 30, 2019. The TRS's share of the net pension liability was based on TRS's share of contributions to the pension plan relative to the total employer contributions of all participating TRS employers. At September 30, 2019, the TRS's proportion was 0.219288%, which was an increase of 0.009107% from its proportion measured as of September 30, 2018.

For the year ended September 30, 2020, the TRS recognized pension expense of \$3,231 (dollar amounts in thousands). At September 30, 2020, the TRS reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources (dollar amounts in thousands):

	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
Differences between Expected & Actual Experience	\$ 358	\$ 804
Changes of Assumptions	747	-
Net Difference between Projected & Actual		
Earnings on Pension Plan Investments	844	-
Changes in Proportion & Differences between Employer		
Contributions & Proportionate Share of Contributions	1,980	10
Employer Contributions Subsequent to the Measurement Date	1,946	-
<b>Total</b>	<b>\$ 5,875</b>	<b>\$ 814</b>

The TRS will recognize \$1,946 of reported deferred outflows of resources related to pensions resulting from contributions subsequent to the measurement date as a reduction of net pension liability in the fiscal year ended September 30, 2021 (dollar amount in thousands). Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows (dollar amounts in thousands):

<b>Fiscal Year Ended September 30:</b>	
2021	\$ 792
2022	\$ 645
2023	\$ 913
2024	\$ 758
2025	\$ 7
Thereafter	\$ -

## RETIREMENT SYSTEMS OF ALABAMA

### Financial Section

#### Notes to the Combined Financial Statements For the Fiscal Year Ended September 30, 2020

(Dollar Amounts in Thousands)

The total pension liability was determined by an actuarial valuation as of September 30, 2018, using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.75%
Projected Salary Increases	3.25% - 5.00%
Investment Rate of Return*	7.70%

\*Net of pension plan investment expense

The actuarial assumptions used in the actuarial valuation as of September 30, 2018, were based on the results of an investigation of the economic and demographic experience for the TRS based upon participant data as of September 30, 2015. This investigation resulted in changes to the actuarial assumptions. The Board of Control accepted and approved these changes in September 2016, which became effective at the beginning of fiscal year 2016.

Mortality rates for the TRS were based on the sex distinct RP-2000 White Collar Mortality Table projected to 2020 using scale BB and adjusted 115% for males and 112% for females age 78 and older. The rates of disabled mortality were based on the sex distinct RP-2000 Disabled Mortality Table projected to 2020 using scale BB and adjusted 105% for males and 120% for females.

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 geometric real rates of return for each major asset class are as follows:

	<b>Target Allocation</b>	<b>Long-Term Expected Rate of Return*</b>
Fixed Income	17.00%	4.40%
U.S. Large Stocks	32.00%	8.00%
U.S. Mid Stocks	9.00%	10.00%
U.S. Small Stocks	4.00%	11.00%
International Developed Market Stocks	12.00%	9.50%
International Emerging Market Stocks	3.00%	11.00%
Alternatives	10.00%	10.10%
Real Estate	10.00%	7.50%
Cash	3.00%	1.50%
<b>Total</b>	<b>100.00%</b>	

\*Includes assumed rate of inflation of 2.50%.

The discount rate used to measure the total pension liability was 7.70%. 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, components of the pension plan's fiduciary net position were 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.



The following table presents the net pension liability of the TRS calculated using the discount rate of 7.70%, as well as what the net pension liability would be if it were calculated using a discount rate that is one percentage point lower or one percentage point higher than the current rate (dollar amounts in thousands):

	<b>1% Decrease (6.70%)</b>	<b>Current Discount Rate (7.70%)</b>	<b>1% Increase (8.70%)</b>
TRS's Proportionate Share of Collective Net Pension Liability	\$ 32,916	\$ 24,246	\$ 16,910

Detailed information about the pension plan's fiduciary net position is available in the separately issued RSA Comprehensive Annual Financial Report for the fiscal year ended September 30, 2019. The supporting actuarial information is included in the GASB Statement No. 67 Report for the TRS prepared as of September 30, 2019. The auditor's report dated August 18, 2020, on the total pension liability, total deferred outflows of resources, total deferred inflows of resources, and total pension expense for the sum of all participating entities as of September 30, 2019, along with supporting schedules is also available. The additional financial and actuarial information is available at [www.rsa-al.gov](http://www.rsa-al.gov).

#### **B. Employees' Retirement System of Alabama**

The ERS, an agent multiple-employer public employee retirement plan, was established as of October 1, 1945, pursuant to the *Code of Alabama 1975, Title 36, Chapter 27* (Act 515 of the Legislature of 1945). The purpose of the ERS is to provide retirement allowances and other specified benefits for state employees, State Police, and on an elective basis, to all cities, counties, towns, and quasi-public organizations. RSA employees who participate in the ERS are employees of the ERS and JRF. The responsibility for the general administration and operation of the ERS is vested in its Board of Control. The ERS Board of Control consists of 13 trustees. Note 1 of this report outlines the composition of the ERS Board of Control. The Plan is administered by RSA and the Plan issues a Comprehensive Annual Financial Report each year. It is available at [www.rsa-al.gov](http://www.rsa-al.gov).

State law establishes retirement benefits as well as death and disability benefits and any ad hoc increase in postretirement benefits for the ERS. Benefits for ERS members vest after 10 years of creditable service. State employees who retire after age 60 (52 for State Police) with 10 years or more of creditable service or with 25 years of service (regardless of age) are entitled to an annual retirement benefit, payable monthly for life. Local employees who retire after age 60 with 10 years or more of creditable service or with 25 or 30 years of service (regardless of age), depending on the particular entity's election, are entitled to an annual retirement benefit, payable monthly for life. Service and disability retirement benefits are based on a guaranteed minimum or a formula method, with the member receiving payment under the method that yields the highest monthly benefit. Under the formula method, members of the ERS (except State Police) are allowed 2.0125% of their average final compensation (highest 3 of the last 10 years) for each year of service. State Police are allowed 2.875% for each year of State Police service in computing the formula method.

Act 377 of the Legislature of 2012 established a new tier of benefits (Tier 2) for members hired on or after January 1, 2013. Tier 2 ERS members are eligible for retirement after age 62 (56 for State Police) with 10 years or more of creditable service and are entitled to an annual retirement benefit, payable monthly for life. Service and disability retirement benefits are based on a guaranteed minimum or a formula method, with the member receiving payment under the method that yields the highest monthly benefit. Under the formula method, Tier 2 members of the ERS (except State Police) are allowed 1.65% of their average final compensation (highest 5 of the last 10 years) for each year of service. State Police are allowed 2.375% for each year of state police service in computing the formula method.

## RETIREMENT SYSTEMS OF ALABAMA

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### *Financial Section*

#### Notes to the Combined Financial Statements For the Fiscal Year Ended September 30, 2020

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(Dollar Amounts in Thousands)

Members are eligible for disability retirement if they have 10 years of credible service, are currently in-service, and determined by the RSA Medical Board to be permanently incapacitated from further performance of duty. Preretirement death benefits are calculated and paid to the beneficiary on the member's age, service credit, employment status, and eligibility for retirement.

As of September 30, 2019, ERS membership included approximately 93,986 active participants. Note 1 of this report contains details about the classifications of participants and the number of participants within each classification.

Covered members of the ERS contributed 5% of earnable compensation to the ERS as required by statute until September 30, 2011. From October 1, 2011, to September 30, 2012, covered members of the ERS were required by statute to contribute 7.25% of earnable compensation. Effective October 1, 2012, covered members of the ERS are required by statute to contribute 7.50% of earnable compensation. Certified law enforcement, correctional officers, and firefighters of the ERS contributed 6% of earnable compensation as required by statute until September 30, 2011. From October 1, 2011, to September 30, 2012, certified law enforcement, correctional officers, and firefighters of the ERS were required by statute to contribute 8.25% of earnable compensation. Effective October 1, 2012, certified law enforcement, correctional officers, and firefighters of the ERS are required by statute to contribute 8.50% of earnable compensation. State Police of the ERS contribute 10% of earnable compensation. ERS local participating employers are not required by statute to increase contribution rates for their members. Tier 2 covered members of the ERS contribute 6% of earnable compensation to the ERS as required by statute. Tier 2 certified law enforcement, correctional officers, and firefighters of the ERS are required by statute to contribute 7% of earnable compensation. Tier 2 State Police members of the ERS contribute 10% of earnable compensation. These contributions rates are the same for Tier 2 covered members of ERS local participating employers.

The participating employer contribution rate for the ERS State Regular Employees contractually required contribution rate for the year ended September 30, 2020, was 15.24% of annual pay for Tier 1 members and 14.87% of annual pay for Tier 2 members. These required contribution rates are a percent of annual payroll, actuarially determined as an amount that, when combined with member contributions, is expected to finance the costs of benefits earned by members during the year, with an additional amount to finance any unfunded accrued liability. Total employer contributions to the pension plan from ERS were \$1,302 and from JRF were \$26 for the fiscal year ended September 30, 2020.

At September 30, 2020, in accordance with GASB Statement No. 68, the ERS reported a net pension liability of \$16,713 and the JRF reported a net pension liability of \$322 for their respective proportionate shares of the total net pension liability of the ERS State Regular Employees' retirement plan. The ERS pension plan's total net pension liability was measured as of September 30, 2019, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of September 30, 2018 and rolled forward to the ERS and JRF's measurement date of September 30, 2019. ERS and JRF's proportion of the total net pension liability was based on the employers' shares of contributions to the pension plan relative to the total employer contributions of all participating ERS State Regular employers. At September 30, 2019, ERS's proportion was 0.580982%, which was an increase of 0.013579% from its proportion measured as of September 30, 2018. At September 30, 2019, the JRF's proportion was 0.011177%, which was an increase of 0.000314% from its proportion measured as of September 30, 2018.

For the fiscal year ended September 30, 2020, the ERS recognized pension expense of \$1,759 (dollar amounts in thousands). At September 30, 2020, ERS reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources (dollar amounts in thousands):

	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
Differences between Expected & Actual Experience	\$ 1	\$ 95
Changes of Assumptions	89	-
Net Difference between Projected & Actual		
Earnings on Pension Plan Investments	291	-
Changes in Proportion & Differences between Employer		
Contributions & Proportionate Share of Contributions	473	175
Employer Contributions Subsequent to the Measurement Date	1,302	-
<b>Total</b>	<b>\$ 2,156</b>	<b>\$ 270</b>

The ERS will recognize \$1,302 of reported deferred outflows of resources related to pensions resulting from contributions subsequent to the measurement date as a reduction of net pension liability in the fiscal year ended September 30, 2021 (dollar amount in thousands). Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows (dollar amounts in thousands):

<b>Fiscal Year Ended September 30:</b>	
2021	\$ (104)
2022	\$ (116)
2023	\$ (31)
2024	\$ 15
2025	\$ -
Thereafter	\$ -

For the fiscal year ended September 30, 2020, the JRF recognized pension expense of \$38 (dollar amount in thousands). At September 30, 2020, the JRF reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources (dollar amounts in thousands):

	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
Differences between Expected & Actual Experience	\$ -	\$ 2
Changes of Assumptions	2	-
Net Difference between Projected & Actual		
Earnings on Pension Plan Investments	6	-
Changes in Proportion & Differences between Employer		
Contributions & Proportionate Share of Contributions	11	-
Employer Contributions Subsequent to the Measurement Date	26	-
<b>Total</b>	<b>\$ 45</b>	<b>\$ 2</b>

# RETIREMENT SYSTEMS OF ALABAMA

## Financial Section

### Notes to the Combined Financial Statements For the Fiscal Year Ended September 30, 2020

(Dollar Amounts in Thousands)

The JRF will recognize \$26 of reported deferred outflows of resources related to pensions resulting from contributions subsequent to the measurement date as a reduction of net pension liability in the fiscal year ended September 30, 2021. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Fiscal Year Ended	
September 30:	
2021	\$ 2
2022	\$ 3
2023	\$ 5
2024	\$ 6
2025	\$ -
Thereafter	\$ -

The total pension liability was determined by an actuarial valuation as of September 30, 2018, using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.75%
Projected Salary Increases	3.25% - 5.00%
Investment Rate of Return*	7.70%

\*Net of pension plan investment expense.

Mortality rates for the ERS were based on the sex distinct RP-2000 Blue Collar Mortality Table projected to 2020 using scale BB with an adjustment of 125% for males and 120% for females age 78 and older. The rates of disabled mortality were based on the sex distinct RP-2000 Disabled Retiree Mortality Table projected to 2020 using scale BB with an adjustment of 130% for females.

The actuarial assumptions used in the actuarial valuation as of September 30, 2018, were based on the results of an investigation of the economic and demographic experience for the ERS based upon participant data as of September 30, 2015. This investigation resulted in changes to the actuarial assumptions. The Board of Control accepted and approved these changes in September 2016, which became effective at the beginning of fiscal year 2016.

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 geometric real rates of return for each major asset class are as follows:

	Target Allocation	Long-Term Expected Rate of Return*
Fixed Income	17.00%	4.40%
U.S. Large Stocks	32.00%	8.00%
U.S. Mid Stocks	9.00%	10.00%
U.S. Small Stocks	4.00%	11.00%
International Developed Market Stocks	12.00%	9.50%
International Emerging Market Stocks	3.00%	11.00%
Alternatives	10.00%	10.10%
Real Estate	10.00%	7.50%
Cash	3.00%	1.50%
<b>Total</b>	<b>100.00%</b>	

\*Includes assumed rate of inflation of 2.75%.

The discount rate used to measure the total pension liability was 7.70%. 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, components of the pension plan's fiduciary net position were 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.

The following table presents the net pension liability of the ERS and JRF calculated using the discount rate of 7.70%, as well as what the net pension liability would be if it were calculated using a discount rate that is one percentage point lower or one percentage point higher than the current rate (dollar amounts in thousands):

	<b>1% Decrease</b>	<b>Current</b>	<b>1% Increase</b>
	<b>(6.70%)</b>	<b>Discount Rate</b>	<b>(8.70%)</b>
	<b>(6.70%)</b>	<b>(7.70%)</b>	<b>(8.70%)</b>
ERS's Proportionate Share of			
Collective Net Pension Liability	\$ 21,318	\$ 16,713	\$ 12,795
JRF's Proportionate Share of			
Collective Net Pension Liability	\$ 410	\$ 322	\$ 246

Detailed information about the pension plan's fiduciary net position is available in the separately issued RSA Comprehensive Annual Financial Report for the fiscal year ended September 30, 2019. The supporting actuarial information is included in the GASB Statement No. 68 Report for the ERS prepared as of September 30, 2019. The auditor's report dated August 27, 2020, on the Schedule of Changes in Fiduciary Net Position by Employer and accompanying notes is also available. The additional financial and actuarial information is available at [www.rsa-al.gov](http://www.rsa-al.gov).

#### **11) RELATED PARTY TRANSACTIONS**

The TRS and ERS jointly own office buildings in Montgomery and Mobile and lease office space to agencies of the State of Alabama. These agencies are obligated to the TRS and ERS to lease space for varying terms through the year 2029. Rental payments and other agreed upon payments (reported as investment income) from leases with state agencies totaled \$36,536,380 (dollar amount not in thousands) during the 2020 fiscal year.

RETIREMENT SYSTEMS OF ALABAMA

Financial Section

Required Supplementary Information  
For the Fiscal Year Ended September 30, 2020

SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY  
& RELATED RATIOS

TRS

For the Fiscal Years Ended September 30  
(Dollar Amounts in Thousands)

	2020	2019	2018	2017	2016	2015	2014
<b>Total Pension Liability</b>							
Service Cost*	\$ 677,424	\$ 645,409	\$ 637,532	\$ 617,120	\$ 627,938	\$ 660,390	\$ 602,605
Interest	2,731,895	2,674,266	2,584,330	2,532,457	2,488,310	2,421,604	2,352,804
Benefit Changes	-	-	-	-	-	-	-
Difference Between Expected & Actual Experience	624,754	(226,777)	265,644	(261,067)	(290,388)	(70,200)	-
Changes of Assumptions	-	-	178,049	-	942,133	-	-
Benefit Payments	(2,335,705)	(2,238,966)	(2,208,925)	(2,117,351)	(2,161,570)	(2,080,896)	(1,997,877)
Refunds of Contributions	(58,679)	(55,596)	(58,552)	(53,526)	(57,566)	(55,898)	(56,145)
<b>Net Change in Total Pension Liability</b>	<b>1,639,689</b>	<b>798,336</b>	<b>1,398,078</b>	<b>717,633</b>	<b>1,548,857</b>	<b>875,000</b>	<b>901,387</b>
<b>Total Pension Liability - Beginning</b>	<b>36,676,350</b>	<b>35,878,014</b>	<b>34,479,936</b>	<b>33,762,303</b>	<b>32,213,446</b>	<b>31,338,446</b>	<b>30,437,059</b>
<b>Total Pension Liability - Ending (A)</b>	<b>\$ 38,316,039</b>	<b>\$ 36,676,350</b>	<b>\$ 35,878,014</b>	<b>\$ 34,479,936</b>	<b>\$ 33,762,303</b>	<b>\$ 32,213,446</b>	<b>\$ 31,338,446</b>

Plan Fiduciary Net Position reserved to fund Total Pension Liability

Contributions - Employer	\$ 862,475	\$ 869,336	\$ 802,598	\$ 782,702	\$ 751,909	\$ 737,677	\$ 716,753
Contributions - Member	515,003	522,909	493,466	489,638	475,980	477,918	480,849
Other	-	-	13,445	-	-	172,982	-
Net Investment Income	1,374,958	614,427	2,264,234	2,636,098	2,199,396	261,461	2,468,499
Benefit Payments	(2,335,705)	(2,238,966)	(2,208,925)	(2,117,351)	(2,161,570)	(2,080,896)	(1,997,877)
Refunds of Contributions	(58,679)	(55,596)	(58,552)	(53,526)	(57,566)	(55,898)	(56,145)
Administrative Expenses	(31,111)	(28,095)	(22,290)	(22,402)	(19,582)	(19,331)	-
<b>Net Change in Plan Fiduciary Net Position</b>	<b>326,941</b>	<b>(315,985)</b>	<b>1,283,976</b>	<b>1,715,159</b>	<b>1,188,567</b>	<b>(506,087)</b>	<b>1,612,079</b>
<b>Plan Fiduciary Net Position - Beginning</b>	<b>25,619,448</b>	<b>25,935,433</b>	<b>24,651,457</b>	<b>22,936,298</b>	<b>21,747,731</b>	<b>22,253,818</b>	<b>20,641,739</b>
<b>Plan Fiduciary Net Position - Ending (B)</b>	<b>\$ 25,946,389</b>	<b>\$ 25,619,448</b>	<b>\$ 25,935,433</b>	<b>\$ 24,651,457</b>	<b>\$ 22,936,298</b>	<b>\$ 21,747,731</b>	<b>\$ 22,253,818</b>
<b>Net Pension Liability - Ending (A - B)</b>	<b>\$ 12,369,650</b>	<b>\$ 11,056,902</b>	<b>\$ 9,942,581</b>	<b>\$ 9,828,479</b>	<b>\$ 10,826,005</b>	<b>\$ 10,465,715</b>	<b>\$ 9,084,628</b>

Plan Fiduciary Net Position as a

<b>Percentage of the Total Pension Liability Covered Payroll**</b>	<b>67.72%</b>	<b>69.85%</b>	<b>72.29%</b>	<b>71.50%</b>	<b>67.93%</b>	<b>67.51%</b>	<b>71.01%</b>
<b>Net Pension Liability as a Percentage of Covered Payroll</b>	<b>166.94%</b>	<b>158.88%</b>	<b>144.10%</b>	<b>148.38%</b>	<b>165.50%</b>	<b>160.00%</b>	<b>140.48%</b>

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

\*Also called the Entry Age Normal Cost.

\*\*Payroll from the annual actuarial valuation, which was used to calculate the total pension liability, increased with assumed annual payroll growth.

**SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY  
& RELATED RATIOS**

**ERS**

**For the Fiscal Years Ended September 30**  
(Dollar Amounts in Thousands)

	2020	2019	2018	2017	2016	2015	2014
<b>Total Pension Liability</b>							
Service Cost*	\$ 329,995	\$ 315,841	\$ 307,064	\$ 325,138	\$ 308,840	\$ 346,440	\$ 298,985
Interest	1,407,878	1,329,988	1,303,322	1,271,712	1,233,415	1,199,079	1,164,853
Benefit Changes	71,320	-	-	-	-	-	-
Difference Between Expected & Actual Experience	243,909	24,803	(79,478)	(64,111)	101	(35,546)	-
Changes of Assumptions	-	-	87,608	-	544,310	-	-
Benefit Payments	(1,215,223)	(1,123,150)	(1,102,478)	(1,056,006)	(1,043,293)	(1,023,732)	(948,645)
Refunds of Contributions	(45,303)	(55,478)	(44,890)	(46,374)	(44,660)	(49,865)	(49,767)
New Unit	560,498	-	-	-	-	-	-
<b>Net Change in Total Pension Liability</b>	<b>1,353,074</b>	<b>492,004</b>	<b>471,148</b>	<b>430,359</b>	<b>998,713</b>	<b>436,376</b>	<b>465,426</b>
<b>Total Pension Liability - Beginning</b>	<b>18,353,891</b>	<b>17,861,887</b>	<b>17,390,739</b>	<b>16,960,380</b>	<b>15,961,667</b>	<b>15,525,291</b>	<b>15,059,865</b>
<b>Total Pension Liability - Ending (A)</b>	<b>\$ 19,706,965</b>	<b>\$ 18,353,891</b>	<b>\$ 17,861,887</b>	<b>\$ 17,390,739</b>	<b>\$ 16,960,380</b>	<b>\$ 15,961,667</b>	<b>\$ 15,525,291</b>

**Plan Fiduciary Net Position reserved to fund Total Pension Liability**

Contributions - Employer	\$ 519,806	\$ 467,553	\$ 426,340	\$ 426,369	\$ 435,243	\$ 411,087	\$ 379,163
Contributions - Member	270,947	254,440	241,741	233,901	238,017	229,254	226,015
Contributions - New Unit	344,352	-	-	-	-	-	-
Other	-	-	(7,481)	-	-	68,897	-
Net Investment Income	724,025	320,585	1,098,412	1,402,009	1,052,886	126,335	1,183,377
Benefit Payments	(1,215,223)	(1,123,150)	(1,102,478)	(1,056,006)	(1,043,293)	(1,023,732)	(948,645)
Refunds of Contributions	(45,303)	(55,478)	(44,890)	(46,374)	(44,660)	(49,865)	(49,767)
Administrative Expenses	(16,539)	(15,829)	(13,763)	(14,502)	(13,023)	(13,182)	-
<b>Net Change in Plan Fiduciary Net Position</b>	<b>582,065</b>	<b>(151,879)</b>	<b>597,881</b>	<b>945,397</b>	<b>625,170</b>	<b>(251,206)</b>	<b>790,143</b>
<b>Plan Fiduciary Net Position - Beginning</b>	<b>12,568,473</b>	<b>12,720,352</b>	<b>12,122,471</b>	<b>11,177,074</b>	<b>10,551,904</b>	<b>10,803,110</b>	<b>10,012,967</b>
<b>Plan Fiduciary Net Position - Ending (B)</b>	<b>\$ 13,150,538</b>	<b>\$ 12,568,473</b>	<b>\$ 12,720,352</b>	<b>\$ 12,122,471</b>	<b>\$ 11,177,074</b>	<b>\$ 10,551,904</b>	<b>\$ 10,803,110</b>

**Net Pension Liability - Ending (A - B)**

	\$ 6,556,427	\$ 5,785,418	\$ 5,141,535	\$ 5,268,268	\$ 5,783,306	\$ 5,409,763	\$ 4,722,181
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**Plan Fiduciary Net Position as a**

**Percentage of the Total Pension Liability**

**Covered Payroll\*\***

**Net Pension Liability as a Percentage of**

**Covered Payroll**

	66.73%	68.48%	71.22%	69.71%	65.90%	66.11%	69.58%
	\$ 4,003,430	\$ 3,789,556	\$ 3,692,241	\$ 3,680,078	\$ 3,592,658	\$ 3,556,282	\$ 3,511,115
	163.77%	152.67%	139.25%	143.16%	160.98%	152.12%	134.49%

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

\*Also called the Entry Age Normal Cost.

\*\*Payroll from the annual actuarial valuation, which was used to calculate the total pension liability, increased with assumed annual payroll growth.

RETIREMENT SYSTEMS OF ALABAMA

Financial Section

Required Supplementary Information

For the Fiscal Year Ended September 30, 2020

SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY  
& RELATED RATIOS

JRF

For the Fiscal Years Ended September 30

(Dollar Amounts in Thousands)

	2020	2019	2018	2017	2016	2015	2014
<b>Total Pension Liability</b>							
Service Cost*	\$ 9,512	\$ 9,574	\$ 9,811	\$ 9,815	\$ 9,807	\$ 9,644	\$ 9,481
Interest	33,960	33,910	34,112	33,668	32,695	32,385	31,521
Benefit Changes	-	-	-	-	-	-	-
Difference Between Expected & Actual Experience	13,351	(4,518)	(9,134)	(4,399)	(2,487)	(7,391)	-
Changes of Assumptions	-	-	3,873	-	17,792	-	-
Benefit Payments	(38,812)	(36,909)	(33,419)	(32,807)	(30,902)	(30,356)	(29,838)
Refunds of Contributions	(256)	(646)	(130)	(353)	(106)	(147)	(46)
<b>Net Change in Total Pension Liability</b>	<b>17,755</b>	<b>1,411</b>	<b>5,113</b>	<b>5,924</b>	<b>26,799</b>	<b>4,135</b>	<b>11,118</b>
<b>Total Pension Liability - Beginning</b>	<b>463,451</b>	<b>462,040</b>	<b>456,927</b>	<b>451,003</b>	<b>424,204</b>	<b>420,069</b>	<b>408,951</b>
<b>Total Pension Liability - Ending (A)</b>	<b>\$ 481,206</b>	<b>\$ 463,451</b>	<b>\$ 462,040</b>	<b>\$ 456,927</b>	<b>\$ 451,003</b>	<b>\$ 424,204</b>	<b>\$ 420,069</b>

Plan Fiduciary Net Position reserved to fund Total Pension Liability

Contributions - Employer	\$ 18,099	\$ 18,022	\$ 17,180	\$ 17,373	\$ 17,529	\$ 15,077	\$ 15,250
Contributions - Member	4,184	4,101	3,867	3,972	3,723	3,683	3,764
Net Investment Income	23,159	11,016	27,622	32,685	28,322	(856)	31,343
Benefit Payments	(38,812)	(36,909)	(33,419)	(32,807)	(30,902)	(30,356)	(29,838)
Refunds of Contributions	(256)	(646)	(130)	(353)	(106)	(147)	(46)
Administrative Expenses	(357)	(357)	(328)	(334)	(398)	(356)	-
Other	-	-	(56)	-	-	1,854	-
<b>Net Change in Plan Fiduciary Net Position</b>	<b>6,017</b>	<b>(4,773)</b>	<b>14,736</b>	<b>20,536</b>	<b>18,168</b>	<b>(11,101)</b>	<b>20,473</b>
<b>Plan Fiduciary Net Position - Beginning</b>	<b>312,541</b>	<b>317,314</b>	<b>302,578</b>	<b>282,042</b>	<b>263,874</b>	<b>274,975</b>	<b>254,502</b>
<b>Plan Fiduciary Net Position - Ending (B)</b>	<b>\$ 318,558</b>	<b>\$ 312,541</b>	<b>\$ 317,314</b>	<b>\$ 302,578</b>	<b>\$ 282,042</b>	<b>\$ 263,874</b>	<b>\$ 274,975</b>
<b>Net Pension Liability - Ending (A - B)</b>	<b>\$ 162,648</b>	<b>\$ 150,910</b>	<b>\$ 144,726</b>	<b>\$ 154,349</b>	<b>\$ 168,961</b>	<b>\$ 160,330</b>	<b>\$ 145,094</b>

Plan Fiduciary Net Position as a

Percentage of the Total Pension Liability

Covered Payroll\*\*

Net Pension Liability as a Percentage of

Covered Payroll

66.20%	67.44%	68.68%	66.22%	62.54%	62.20%	65.46%
\$ 46,686	\$ 45,134	\$ 45,622	\$ 44,314	\$ 44,099	\$ 44,087	\$ 43,275
348.39%	334.36%	317.23%	348.31%	383.14%	363.67%	335.28%

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

\*Also called the Entry Age Normal Cost.

\*\*Payroll from the annual actuarial valuation, which was used to calculate the total pension liability, increased with assumed annual payroll growth.



**SCHEDULES OF EMPLOYER PENSION CONTRIBUTIONS**  
**For the Ten Fiscal Years Ended September 30**  
(Dollar Amounts in Thousands)

**TEACHERS' RETIREMENT SYSTEM §**

<b>Fiscal Year</b>	<b>Actuarially Determined Employer Contributions</b>	<b>Actual Employer Contributions</b>	<b>Annual Contribution Deficiency (Excess)</b>	<b>Covered Payroll*</b>	<b>Actual Contributions as a % of Covered Payroll**</b>
2020	\$ 862,475	\$ 862,475	\$ -	\$ 7,116,130	12.12
2019	869,336	869,336	-	7,160,923	12.14
2018	802,598	802,598	-	6,699,482	11.98
2017	782,702	782,702	-	6,633,068	11.80
2016	751,909	751,909	-	6,377,515	11.79
2015	737,677	737,677	-	6,331,991	11.65
2014	716,753	716,753	-	6,331,740	11.32
2013	605,465	605,465	-	6,241,907	9.70
2012	594,771	594,771	-	6,182,651	9.62
2011	755,944	755,944	-	6,232,020	12.13

**JUDICIAL RETIREMENT FUND ¥**

<b>Fiscal Year</b>	<b>Actuarially Determined Employer Contributions</b>	<b>Actual Employer Contributions</b>	<b>Annual Contribution Deficiency (Excess)</b>	<b>Covered Payroll*</b>	<b>Actual Contributions as a % of Covered Payroll***</b>
2020	\$ 18,099	\$ 18,099	\$ -	\$ 45,817	39.50
2019	18,022	18,022	-	43,530	41.40
2018	17,180	17,180	-	42,853	40.09
2017	17,373	17,373	-	42,738	40.65
2016	17,529	17,529	-	42,775	40.98
2015	15,077	15,077	-	42,784	35.24
2014	15,250	15,250	-	43,275	35.24
2013	13,903	13,903	-	43,366	32.06
2012	10,747	10,747	-	44,136	24.35
2011	10,906	10,906	-	45,066	24.20

§ There are no nonemployer contributing entities in TRS.

\*Estimated based on employer contribution rate and/or actual employer contributions.

\*\*Act No. 2012-377 established a new tier of benefits (Tier 2) for members hired on or after January 1, 2013, so this percentage represents a blended rate based on both the Tier 1 and Tier 2 employer contribution rates.

¥ The State of Alabama is a nonemployer contributing entity in JRF. The State pays the employer portion of the Probate Judges' contributions.

\*\*\*Act 2015-498 established new groups in JRF for Judges, Clerks, and District Attorneys first elected or appointed on or after November 8, 2016. Beginning with FY2020, this percentage represents a blended rate based on the groups' employer contribution rates.

**SCHEDULE OF INVESTMENT RETURNS**  
**For the Ten Fiscal Years Ended September 30**

<b>Fiscal Year</b>	<b>TRS</b>	<b>ERS</b>	<b>JRF</b>
2020	5.53%	5.74%	7.70%
2019	2.44%	2.58%	3.58%
2018	9.42%	9.29%	9.35%
2017	11.73%	12.80%	11.88%
2016	10.37%	10.19%	10.96%
2015	1.16%	1.15%	-0.37%
2014	12.17%	12.05%	12.55%
2013	14.85%	14.53%	14.05%
2012	18.32%	18.05%	19.17%
2011	2.04%	2.39%	0.89%

The following schedules pertain to employees of TRS, ERS, and JRF who participate in the TRS and ERS pension plans.

**SCHEDULES OF PROPORTIONATE SHARE OF THE NET PENSION LIABILITY**

(Dollar Amounts in Thousands)

**TEACHERS' RETIREMENT SYSTEM**

<b>Measurement Date</b>	<b>Fiscal Year Ended</b>	<b>Proportion of the Net Pension Liability (%)</b>	<b>Proportionate Share of the Net Pension Liability</b>	<b>Covered Payroll</b>	<b>Proportionate Share of the Net Pension Liability as a Percentage of Covered Payroll</b>	<b>Plan Fiduciary Net Position as a Percentage of the Total Pension Liability</b>
9/30/2019	9/30/2020	0.22	\$ 24,246	\$ 8,748	277.16	69.85
9/30/2018	9/30/2019	0.21	20,897	7,663	272.70	72.29
9/30/2017	9/30/2018	0.20	19,504	7,235	269.58	71.50
9/30/2016	9/30/2017	0.20	21,164	6,739	314.05	67.93
9/30/2015	9/30/2016	0.18	18,891	6,593	286.53	67.51
9/30/2014	9/30/2015	0.18	16,626	6,283	264.62	71.01

**EMPLOYEES' RETIREMENT SYSTEM**

<b>Measurement Date</b>	<b>Fiscal Year Ended</b>	<b>Proportion of the Net Pension Liability (%)</b>	<b>Proportionate Share of the Net Pension Liability</b>	<b>Covered Payroll</b>	<b>Proportionate Share of the Net Pension Liability as a Percentage of Covered Payroll</b>	<b>Plan Fiduciary Net Position as a Percentage of the Total Pension Liability</b>
9/30/2019	9/30/2020	0.58	\$ 16,713	\$ 5,848	285.79	63.38
9/30/2018	9/30/2019	0.57	14,845	5,197	285.65	66.20
9/30/2017	9/30/2018	0.55	14,468	5,113	282.96	65.44
9/30/2016	9/30/2017	0.59	16,850	4,904	343.60	62.07
9/30/2015	9/30/2016	0.52	14,146	4,695	301.30	62.35
9/30/2014	9/30/2015	0.49	11,991	4,526	264.94	65.58

**JUDICIAL RETIREMENT FUND**

<b>Measurement Date</b>	<b>Fiscal Year Ended</b>	<b>Proportion of the Net Pension Liability (%)</b>	<b>Proportionate Share of the Net Pension Liability</b>	<b>Covered Payroll</b>	<b>Proportionate Share of the Net Pension Liability as a Percentage of Covered Payroll</b>	<b>Plan Fiduciary Net Position as a Percentage of the Total Pension Liability</b>
9/30/2019	9/30/2020	0.01	\$ 322	\$ 176	182.95	63.38
9/30/2018	9/30/2019	0.01	284	157	180.89	66.20
9/30/2017	9/30/2018	0.01	275	152	180.92	65.44
9/30/2016	9/30/2017	0.01	302	144	209.72	62.07
9/30/2015	9/30/2016	0.01	272	136	200.00	62.35
9/30/2014	9/30/2015	0.01	170	89	191.01	65.58

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

RETIREMENT SYSTEMS OF ALABAMA

*Financial Section*

Required Supplementary Information  
For the Fiscal Year Ended September 30, 2020

The following schedules pertain to employees of TRS, ERS, and JRF who participate in the TRS and ERS pension plans.

**SCHEDULES OF PENSION CONTRIBUTIONS**

**For the Fiscal Years Ended September 30**

(Dollar Amounts in Thousands)

**TEACHERS' RETIREMENT SYSTEM**

	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>
Contractually Required Contribution	\$ 1,946	\$ 1,883	\$ 1,725	\$ 1,444	\$ 1,453	\$ 1,271
Contributions in relation to the						
Contractually Required Contribution	<u>(1,946)</u>	<u>(1,883)</u>	<u>(1,725)</u>	<u>(1,444)</u>	<u>(1,453)</u>	<u>(1,271)</u>
Contribution Deficiency/(Excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Covered Payroll	\$ 9,440	\$ 8,748	\$ 7,663	\$ 7,235	\$ 6,739	\$ 6,593
Contributions as a Percentage of						
Covered Payroll	20.61%	21.52%	22.51%	19.96%	21.56%	19.28%

**EMPLOYEES' RETIREMENT SYSTEM**

	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>
Contractually Required Contribution	\$ 1,302	\$ 1,209	\$ 1,059	\$ 1,014	\$ 1,133	\$ 896
Contributions in relation to the						
Contractually Required Contribution	<u>(1,302)</u>	<u>(1,209)</u>	<u>(1,059)</u>	<u>(1,014)</u>	<u>(1,133)</u>	<u>(896)</u>
Contribution Deficiency/(Excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Covered Payroll	\$ 6,350	\$ 5,848	\$ 5,197	\$ 5,113	\$ 4,904	\$ 4,695
Contributions as a Percentage of						
Covered Payroll	20.50%	20.67%	20.38%	19.83%	23.10%	19.08%

**JUDICIAL RETIREMENT FUND**

	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>
Contractually Required Contribution	\$ 26	\$ 23	\$ 21	\$ 19	\$ 21	\$ 17
Contributions in relation to the						
Contractually Required Contribution	<u>(26)</u>	<u>(23)</u>	<u>(21)</u>	<u>(19)</u>	<u>(21)</u>	<u>(17)</u>
Contribution Deficiency/(Excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Covered Payroll	\$ 189	\$ 176	\$ 157	\$ 152	\$ 144	\$ 136
Contributions as a Percentage of						
Covered Payroll	13.76%	13.07%	13.38%	12.50%	14.58%	12.50%

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

The following schedules pertain to employees of TRS, ERS, and JRF who participate in the State Employees' Health Insurance Plan (SEHIP) which is administered by the State Employees' Insurance Board (SEIB).

**SCHEDULES OF PROPORTIONATE SHARE OF THE NET OPEB LIABILITY**

(Dollar Amounts in Thousands)

**TEACHERS' RETIREMENT SYSTEM**

<b>Measurement Date</b>	<b>Fiscal Year Ended</b>	<b>Proportion of the Net OPEB Liability (%)</b>	<b>Proportionate Share of the Net OPEB Liability</b>	<b>Covered Payroll</b>	<b>Proportionate Share of the Net OPEB Liability as a Percentage of Covered Payroll</b>	<b>Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability</b>
9/30/2019	9/30/2020	0.57	\$ 9,902	\$ 8,748	113.19	9.94
9/30/2018	9/30/2019	0.57	16,182	7,663	211.17	5.96
9/30/2017	9/30/2018	0.53	16,708	7,235	230.93	5.05

**EMPLOYEES' RETIREMENT SYSTEM**

<b>Measurement Date</b>	<b>Fiscal Year Ended</b>	<b>Proportion of the Net OPEB Liability (%)</b>	<b>Proportionate Share of the Net OPEB Liability</b>	<b>Covered Payroll</b>	<b>Proportionate Share of the Net OPEB Liability as a Percentage of Covered Payroll</b>	<b>Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability</b>
9/30/2019	9/30/2020	0.39	\$ 6,716	\$ 5,848	114.84	9.94
9/30/2018	9/30/2019	0.38	10,902	5,197	209.77	5.96
9/30/2017	9/30/2018	0.38	11,871	5,113	232.17	5.05

**JUDICIAL RETIREMENT FUND**

<b>Measurement Date</b>	<b>Fiscal Year Ended</b>	<b>Proportion of the Net OPEB Liability (%)</b>	<b>Proportionate Share of the Net OPEB Liability</b>	<b>Covered Payroll</b>	<b>Proportionate Share of the Net OPEB Liability as a Percentage of Covered Payroll</b>	<b>Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability</b>
9/30/2019	9/30/2020	0.00	\$ 54	\$ 176	30.68	9.94
9/30/2018	9/30/2019	0.00	91	157	57.96	5.96
9/30/2017	9/30/2018	0.00	99	152	65.13	5.05

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

RETIREMENT SYSTEMS OF ALABAMA

Financial Section

Required Supplementary Information  
For the Fiscal Year Ended September 30, 2020

The following schedules pertain to employees of TRS, ERS, and JRF who participate in the State Employees' Health Insurance Plan (SEHIP) which is administered by the State Employees' Insurance Board (SEIB).

**SCHEDULES OF OPEB CONTRIBUTIONS**

**For the Fiscal Years Ended September 30**

(Dollar Amounts in Thousands)

**TEACHERS' RETIREMENT SYSTEM**

	<u>2020</u>	<u>2019</u>	<u>2018</u>
Contractually Required Contributions	\$ 313	\$ 428	\$ 454
Contributions in relation to the			
Contractually Required Contributions	(313)	(428)	(454)
Contribution Deficiency/(Excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Covered Payroll	\$9,440	\$8,748	\$7,663
Contributions as a Percentage of			
Covered Payroll	3.32%	4.89%	5.92%

**EMPLOYEES' RETIREMENT SYSTEM**

	<u>2020</u>	<u>2019</u>	<u>2018</u>
Contractually Required Contributions	\$ 205	\$ 290	\$ 306
Contributions in relation to the			
Contractually Required Contributions	(205)	(290)	(306)
Contribution Deficiency/(Excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Covered Payroll	\$6,350	\$5,848	\$5,197
Contributions as a Percentage of			
Covered Payroll	3.23%	4.96%	5.89%

**JUDICIAL RETIREMENT FUND**

	<u>2020</u>	<u>2019</u>	<u>2018</u>
Contractually Required Contributions	\$ 2	\$ 2	\$ 2
Contributions in relation to the			
Contractually Required Contributions	(2)	(2)	(2)
Contribution Deficiency/(Excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Covered Payroll	\$ 189	\$ 176	\$ 157
Contributions as a Percentage of			
Covered Payroll	1.06%	1.14%	1.27%

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

*Financial Section*

Notes to the Required Supplementary Information  
For the Fiscal Year Ended September 30, 2020

**1) NET PENSION LIABILITY**

**A. Schedules of Changes in the Net Pension Liability & Related Ratios**

The total pension liabilities presented in these schedules were provided by the Systems' actuarial consultants, Cavanaugh Macdonald Consulting, LLC. The net pension liability is measured as the total pension liability less plan fiduciary net position. The related ratios show plan net position as a percentage of the total pension liability and the net pension liability as a percentage of covered employee payroll.

**B. Schedules of Employer Contributions**

Contributions were made in accordance with actuarially determined contribution requirements. The employer contribution rate expressed as a percent of payroll is determined annually by reviewing a variety of factors including benefits promised, member contributions, investment earnings, mortality, and withdrawal experience. The employer contribution rates for fiscal year 2020 are in the table below. ERS local participating employer contribution rates differ for each employer.

	<u>Tier 1</u>	<u>Tier 2</u>
<b>TRS</b>	12.43%	11.34%
<b>ERS - State Employees</b>	15.24%	14.87%
<b>ERS - State Police</b>	52.29%	45.56%
<b>JRF - Groups 1 &amp; 2</b>	40.40%	-
<b>JRF - Group 3 - Judges &amp; Clerks</b>	35.05%	-
<b>JRF - District Attorneys</b>	19.77%	-

**C. Schedule of Investment Returns**

The annual money-weighted rate of return on investments is calculated as the internal rate of return on plan investments, net of plan investment expense. A money-weighted rate of return expresses investment performance, net of plan investment expense, adjusted for the changing amounts actually invested.

**D. Actuarial Assumptions**

The actuarially determined contribution rates in the schedules of employer contributions are calculated as of September 30, 2017, three years prior to the end of the fiscal year in which contributions are reported. The following actuarial methods and assumptions were used to determine the most recent contribution rate reported in that schedule.

	<u>TRS</u>	<u>ERS</u>	<u>JRF</u>
Actuarial Cost Method	Entry Age Normal	Entry Age Normal	Entry Age Normal
Asset Valuation Method	5-year smoothed market	5-year smoothed market	5-year smoothed market
Amortization Method	Level percent closed	Level percent closed	Level percent closed
Remaining Amortization Period	28.8 years	Within 28.8 years - Varies by Employer	21.4 years
Actuarial Assumptions:			
Investment Rate of Return* ‡	7.75%	7.75%	7.75%
Projected Salary Increases ‡	3.25% - 5.00%	3.25% - 5.00%	3.25% - 3.50%
Cost of Living Adjustments	None	None	3.00%†

\*Net of pension plan investment expense.

‡ Includes inflation at 2.75%.

† Per year for certain members hired prior to July 30, 1979, and for spousal benefits subject to increase.

**E. Changes to Benefit Terms**

The member contribution rates for covered members of the TRS and ERS increased from 5% (6% for certified law enforcement, correctional officers, and firefighters) of earnable compensation to 7.25% (8.25%) of earnable compensation effective October 1, 2011, and to 7.50% (8.50%) of earnable compensation effective October 1, 2012.

TRS and ERS members hired on or after January 1, 2013, are covered under a new benefit structure.

The member contribution rate for the JRF increased from 6% of earnable compensation to 8.25% of earnable compensation on October 1, 2011, and to 8.50% of earnable compensation on October 1, 2012.

Effective November 8, 2016, any Judge or Clerk first elected or appointed on or after that date and any District Attorney serving as a District Attorney on or after that date are covered members of the JRF under a new benefit structure.

**F. Changes of Assumptions**

In December 2018, the Boards of Control adopted new discount rates for the TRS, ERS, and JRF. The new discount rates were 7.70% for the TRS & ERS and 7.65% for the JRF.

In 2016, rates of withdrawal, retirement, disability, and mortality were adjusted to more closely reflect actual experience. In 2016, economic assumptions and the assumed rates of salary increase were adjusted to more closely reflect actual and anticipated experience. In 2016 and later, the expectation of retired life mortality was changed to the RP-2000 White Collar Mortality Table projected to 2020 using scale BB and adjusted 115% for males and 112% for females age 78 and older.

In 2010 and later, the expectation of retired life mortality was changed to the RP-2000 Mortality Tables rather than the 1994 Group Annuity Mortality Table, which was used prior to 2010. In 2010, rates of withdrawal, retirement, disability, and mortality were adjusted to more closely reflect actual experience. In 2010, assumed rates of salary increase were adjusted to more closely reflect actual and anticipated experience.

**2) NET OTHER POSTEMPLOYMENT BENEFITS LIABILITY**

**A. Actuarial Assumptions**

The actuarially determined contribution rates in the schedule of employer contributions are calculated as of September 30, 2018, two years prior to the end of the fiscal year in which contributions are reported. The following actuarial methods and assumptions were used to determine the recent contribution rate reported in that schedule.

<b>Actuarial Cost Method</b>	Projected Unit Credit
<b>Amortization Method</b>	Level Percent of Pay, Open
<b>Remaining Amortization Period</b>	30 years
<b>Asset Valuation Method</b>	Market Value of Assets
<b>Inflation</b>	2.75%
<b>Healthcare Cost Trend Rate</b>	
<b>Pre-Medicare Eligible</b>	7.00%
<b>Medicare Eligible</b>	5.50%
<b>Ultimate Trend Rate</b>	
<b>Pre-Medicare Eligible</b>	4.75% in 2026
<b>Medicare Eligible</b>	4.75% in 2024
<b>Dental Trend Rate</b>	4.50%
<b>Investment Rate of Return*</b>	5.00%

\*Includes inflation at 2.75%



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## **B. Changes to Benefit Terms**

Beginning in calendar year 2021, the MAPD plan premium rates exclude the ACA Health Insurer Fee which was repealed on December 20, 2019.

Effective January 1, 2017, Medicare eligible medical and prescription drug benefits are provided through a Medicare Advantage Prescription Drug (MAPD) plan.

## **C. Changes of Assumptions**

In 2016, rates of withdrawal, retirement, disability, and mortality were adjusted to more closely reflect actual experience. In 2016, economic assumptions and the assumed rates of salary increase were adjusted to more closely reflect actual and anticipated experience.

RETIREMENT SYSTEMS OF ALABAMA

*Financial Section*

Schedule of Administrative Expenses

For the Fiscal Year Ended September 30, 2020

(Dollar Amounts in Thousands)

	<b>Teachers' Retirement System</b>	<b>Employees' Retirement System</b>	<b>Judicial Retirement Fund</b>	<b>Totals</b>
<b>Personnel Services:</b>				
Salaries	\$ 9,440	\$ 6,350	\$ 189	\$ 15,979
Employee Fringe Benefits	3,320	1,810	52	5,182
Total Personnel Services	<u>12,760</u>	<u>8,160</u>	<u>241</u>	<u>21,161</u>
<b>Professional Services:</b>				
Actuarial	124	541	73	738
Accounting and Auditing	86	64	20	170
Information Technology	4,091	1,523	10	5,624
Mailing Services	106	63	-	169
Legal Services	113	75	-	188
Personnel Services	123	-	-	123
Other Professional Services and Fees	295	156	-	451
Total Professional Services	<u>4,938</u>	<u>2,422</u>	<u>103</u>	<u>7,463</u>
<b>Communications and Travel:</b>				
Telecommunications	153	79	-	232
Postage	1,083	703	-	1,786
Travel	32	22	-	54
Total Communications and Travel	<u>1,268</u>	<u>804</u>	<u>-</u>	<u>2,072</u>
<b>Rentals:</b>				
Office Space	534	356	9	899
Equipment Leasing	8	-	-	8
Total Rentals	<u>542</u>	<u>356</u>	<u>9</u>	<u>907</u>
<b>Miscellaneous:</b>				
Supplies	1,874	1,070	4	2,948
Maintenance	575	316	-	891
Total Miscellaneous	<u>2,449</u>	<u>1,386</u>	<u>4</u>	<u>3,839</u>
<b>Total Administrative Expenses</b>	<b><u>\$ 21,957</u></b>	<b><u>\$ 13,128</u></b>	<b><u>\$ 357</u></b>	<b><u>\$ 35,442</u></b>

RETIREMENT SYSTEMS OF ALABAMA

*Financial Section*

Schedule of Investment Expenses

For the Fiscal Year Ended September 30, 2020

(Dollar Amounts in Thousands)

	<b>Teachers' Retirement System</b>	<b>Employees' Retirement System</b>	<b>Judicial Retirement Fund</b>	<b>Totals</b>
<b><i>Investment Activity</i></b>				
<b>Investment Management Fees:</b>				
Salaries and Benefits	\$ 7,772	\$ 2,849	\$ -	\$ 10,621
Dues, Subscriptions, and Supplies	1,384	920	-	2,304
Travel	10	6	-	16
<b>Professional Services:</b>				
Investment Advisor	60	30	-	90
Appraisal of Private Placements and Real Estate	502	299	-	801
<b>Investment Activity Expenses before Reimbursement</b>	<b>9,728</b>	<b>4,104</b>	<b>-</b>	<b>13,832</b>
Less: Reimbursement for Investment Management Fees	9	276	-	285
<b>Total Investment Activity Expenses</b>	<b>9,719</b>	<b>3,828</b>	<b>-</b>	<b>13,547</b>
<b><i>Securities Lending Activity</i></b>				
Securities Lending Borrower Rebates	4,423	1,996	41	6,460
Securities Lending Management Fees	3,120	1,482	29	4,631
Total Securities Lending Activity Expenses	7,543	3,478	70	11,091
<b>Total Investment Expenses</b>	<b>\$ 17,262</b>	<b>\$ 7,306</b>	<b>\$ 70</b>	<b>\$ 24,638</b>

RETIREMENT SYSTEMS OF ALABAMA

*Financial Section*

Schedule of Professional/Consultant Fees

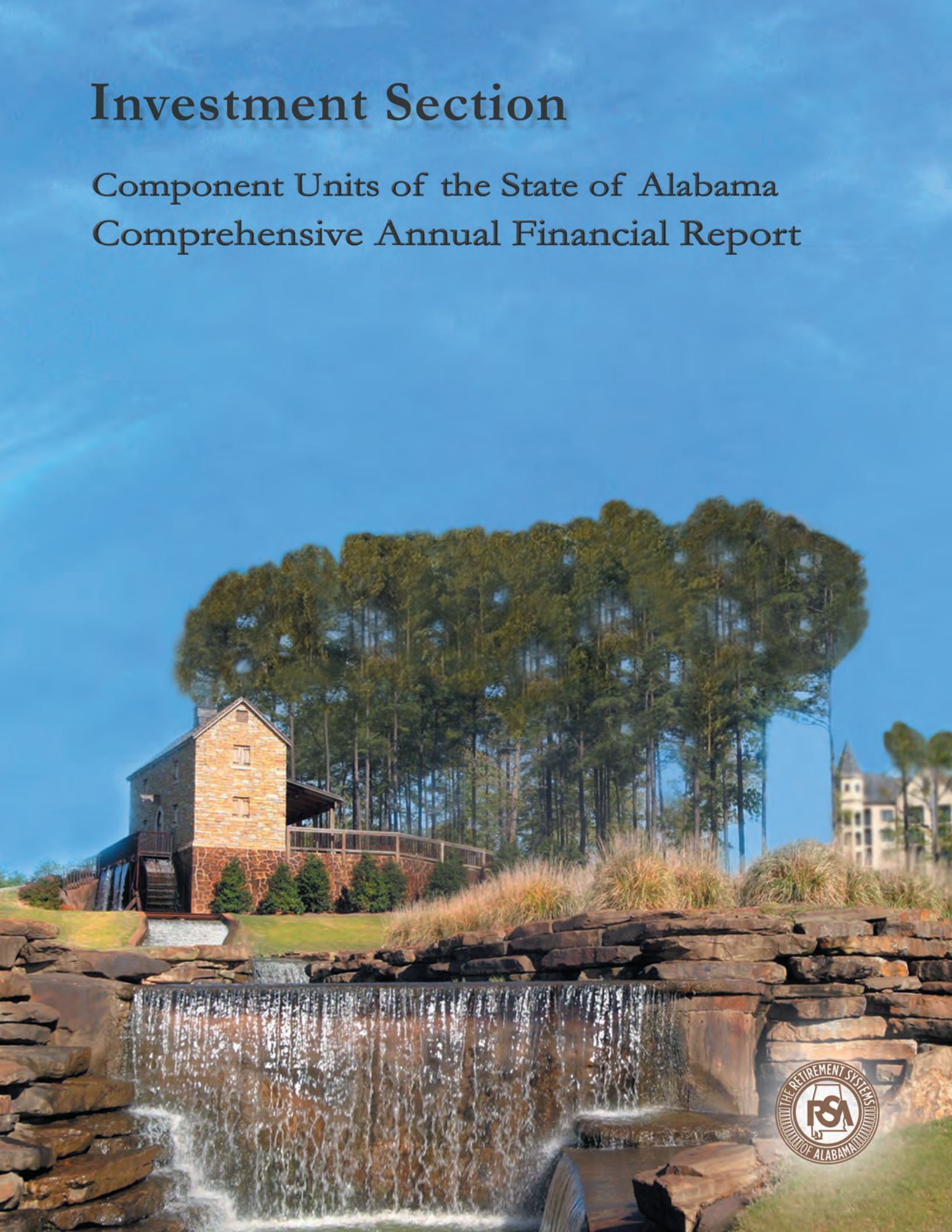
For the Fiscal Year Ended September 30, 2020

(Dollar Amounts in Thousands)

<b>Professional/Consultant</b>	<b>Nature of Service</b>	<b>Teachers' Retirement System</b>	<b>Employees' Retirement System</b>	<b>Judicial Retirement Fund</b>	<b>Totals</b>
Cavanaugh Macdonald Consulting, LLC	Actuary	\$ 124	\$ 541	\$ 73	\$ 738
Carr, Riggs & Ingram, LLC	Auditor	72	37	15	124
A-LIGN	Auditor	14	27	5	46
Baker & McKenzie	Legal	16	11	-	27
Balch & Bingham, LLP	Legal	50	33	-	83
Bradley Arant Boult Cummings, LLP	Legal	40	26	-	66
Morgan, Lewis & Blockius LLP	Legal	1	1	-	2
Ice Miller LLP	Legal	1	1	-	2
Reed Smith LLP	Legal	5	3	-	8
Wells Mailing	Mail	76	43	-	119
Alabama Department of Finance	Mail	30	20	-	50
State Personnel Department	Personnel	123	-	-	123
Fine Geddie & Associates, LLC	Consultant	75	-	-	75
Alabama Department of Finance	Comptroller's Accounting Services	59	30	10	99
Alabama Department of Finance	Information Technology	195	121	-	316
Deloitte Consulting, LLP	Information Technology	3,581	1,274	-	4,855
GKR Systems, Inc.	Information Technology	8	5	-	13
iBridge Services	Information Technology	134	45	-	179
Stamp Idea Group	Information Technology	24	16	-	40
Packet Ninjas	Information Technology	39	26	-	65
Various	Other	271	162	-	433
<b>Total Professional/Consultant Fees - Administrative Services</b>		<b>4,938</b>	<b>2,422</b>	<b>103</b>	<b>7,463</b>
Regions Bank	Investment Advisor	60	30	-	90
Pearson Realty Services, Inc.	Real Estate Appraiser	222	148	-	370
Houlihan Lokey	Investment Appraiser	280	151	-	431
<b>Total Professional/Consultant Fees - Investment Services</b>		<b>562</b>	<b>329</b>	<b>-</b>	<b>891</b>
<b>Total Professional/Consultant Fees</b>		<b>\$ 5,500</b>	<b>\$ 2,751</b>	<b>\$ 103</b>	<b>\$ 8,354</b>

# Investment Section

Component Units of the State of Alabama  
Comprehensive Annual Financial Report



## RETIREMENT SYSTEMS OF ALABAMA

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### *Investment Section*

#### Report on Investment Activity

For the Fiscal Year Ended September 30, 2020

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Dear Members,

I am pleased to present the following report on investment activity for the fiscal year ended September 30, 2020. The report provides investment highlights in general as well as specific information on the Retirement Systems' investment activity for the fiscal year. The custodian calculated rates of return are based on normal industry standards using a time weighted rate of return methodology based upon market values.

The year started off rather benign with equity markets continuing to grind higher and interest rates remaining rather steady. Early in the second quarter of the fiscal year we became aware of a novel virus outbreak in Wuhan, China. Little did we know of the Covid-19 virus pandemic that would quickly unfold and turn global markets and economies upside down. The flight to quality that ensued was incredible in its speed, and equity markets as measured by the S&P 500 were down 34% in roughly one month.

As the world began shutting down economically, global central banks began to infuse massive amounts of liquidity to backstop financial markets. At the same time, fiscal policymakers put partisanship aside for a short while and pumped enormous amounts of money into both corporations and individuals that were affected by the shutdown. The last couple of quarters have brought many interesting dynamics into play, with the work-from-home phenomenon being one of them. It will be interesting to see how sticky work-from-home is going forward, and what the long-term ramifications are for the economy.

As quickly as the US and the world went into a recession, the economy made an enormous bounce back in our final fiscal quarter. The hit to earnings that unfolded was not nearly as deep as was originally thought. We are still experiencing some of the main street/wall street bifurcation that has been going on since the great recession. Larger corporations have witnessed a stronger recovery than smaller businesses, generally speaking. With the election looming there is a great deal of uncertainty as to what track the leadership may take. The RSA has continued to skew towards investing in large capitalization domestic stocks as well as continuing to hold a larger than normal short-term investment position.

As usual, we will continue to closely monitor the portfolio and look for the best risk adjusted investments possible. We will also continue to demand the best execution from all RSA counterparts, and will strive to produce results that strengthen the Retirement Systems of Alabama and its beneficiaries.

#### **RSA Performance Summary**

As of September 30, 2020, aggregate defined benefit assets under management totaled \$40.06 billion. During fiscal year 2020, annualized total returns of the TRS, ERS, and the JRF were 5.62%, 5.83%, and 7.87% respectively.

#### **Equities**

Looking back at all the events that transpired in 2020, a positive return in the equity portfolio seemed like a low probability event. Growth was slowing at the beginning of the fiscal year, yet we were at full employment and credit markets were on fire. Fast forward a quarter and the lower for longer interest rate and Gross Domestic Product (GDP) growth world we were living in was ambushed by the COVID-19 pandemic. We experienced a huge reset to earnings expectations, with many top down analysts cutting their numbers 50% for 2020. Markets roughly follow earnings growth and nearly all global markets were down over 1/3 from their peak in February by as early as mid-March.

Policy makers around the world quickly began to provide liquidity through all means possible to support financial markets and the economy. A lot of this money obviously found its way back into equity markets. With the economy shut down and people working from home, we saw an influx of retail money flow into the markets as saving rates went up at a very rapid clip. At the same time, credit markets remained very accommodative and corporations issued enormous amounts of debt to refinance old loans. As we got closer to the end of the year, GDP bounced back a record 33% in September. Earnings surprises were very pervasive as the street was slow to catch the rebound that unfolded. Now we are at a peculiar spot in the cycle. The markets have priced in a strong recovery, we are seeing a second wave of the virus ramping up, and the presidential election is looming. We

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continue to think that the mantra of “Don’t Fight the Fed” will lend support to financial markets but foresee continued volatility in the near term.

For the year, the RSA domestic equity portfolios returned 8.65%, 9.03%, and 10.61% for the TRS, ERS, and JRF funds, respectively. Both developed and emerging international equities performance lagged U.S. equities. Total international equity returns were 2.00% for the TRS, 2.22% for the ERS, and 1.51% for the JRF. The combined total returns for the overall equity portfolios were 7.22%, 7.54%, and 8.57% for the TRS, ERS, and JRF, respectively. Three-, five-, and ten-year annualized global equity returns were 7.44%, 10.81%, and 10.80% for the TRS, 7.64%, 10.92%, and 10.88% for the ERS, and 7.99%, 11.21%, and 11.20% for the JRF, respectively.

### **Fixed Income**

At the beginning of the fiscal year, global policymakers were providing monetary support in an effort to reignite economic growth. The Federal Reserve (Fed) had also expanded its balance sheet to meet the increased demand for liquidity in short-term funding markets. Primary issuance in the corporate credit market was proceeding at a blistering pace. Financial markets were being assisted with easy monetary policy and fresh capital from yield-seeking investors. Just a coincidence or a sign of things to come?

The Federal Open Market Committee (FOMC) delivered what was thought to be its last insurance rate cut in October. Treasury yields moved higher and the curve steepened throughout the remainder of the calendar year due to strong employment numbers and limited trade agreements with China. Risk assets, and high yield debt specifically, outperformed during this time. Investment grade securities also managed to produce positive returns despite their longer-duration profile as spreads tightened to two-year lows by mid-January.

The outperformance of risk assets came to a screeching halt soon after, as the rapid and deadly outbreak of Covid-19 began to take hold. Yields on risk-free assets collapsed, falling 40 basis points (bps) across the maturity spectrum. As the treasury curve flattened, long term corporate yields dropped to historic lows as well. This abrupt move was only the beginning. The flight to quality trade truly kicked into gear as lockdowns in the U.S. and Europe became a reality. Seemingly overnight, the domestic economy went from one with record low unemployment to one in recession and in the midst of a liquidity crisis. Panic ensued with credit curves inverting, as the most liquid assets to sell were anchored in the short end of the market. Mortgage-backed spreads were not spared, moving out approximately 100 bps in a four-week window as the benchmark treasury security dropped 80 bps. The FOMC lowered short term interest rates in early March and was forced to do so again within two weeks as the move was deemed insufficient by the market. Investment grade and high yield debt fell high single-digits and low double-digits respectively. True quantitative easing was reenacted with the Fed purchasing an unlimited amount of treasury and mortgage-backed securities. All tools were made available, as funding facilities for commercial paper, primary dealers, and corporate and asset-backed securities were put into place. These backstops allowed companies to opportunistically issue an egregious amount of debt to shore up liquidity in preparation for a very uncertain future. After witnessing the effects of the financial crisis over a decade ago, the Retirement Systems aggressively purchased these assets at highly-discounted levels. As the fiscal side provided cash payments to citizens within certain income thresholds and programs that aided small businesses as well as state and local governments, financial markets soon recovered. Over the next few months, risk assets had recovered and corporate credit posted double-digit percentage gains. By the end of summer, the spread tightening continued on the heels of a supportive Fed, a never-ending demand for yield, and hope for additional fiscal stimulus.

The question is where do we go from here? Hospitalizations have fallen and employment is recovering nicely. The FOMC has adopted an inflation-averaging framework going forward in hopes of reviving an economy that may take quite some time to fully recover. Volatility has fallen, and after issuing \$1.5 trillion of debt this calendar year, new issuance in the corporate credit market is likely to slow down significantly. Options in the fixed income markets have dwindled due to the vast amount of negative-yielding sovereign debt, historically low safety in the treasury market, and corporate debt trading levels fully valued due to Fed support. It appears that duration once again was a determining factor in producing returns within fixed income this fiscal year. Going forward, playing it close to the vest is likely to win the day due to the uncertainty of coronavirus outcomes and the upcoming election.

## RETIREMENT SYSTEMS OF ALABAMA

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### *Investment Section*

#### Report on Investment Activity

For the Fiscal Year Ended September 30, 2020

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For the fiscal year, the total annual returns for the public domestic fixed income portfolios were 7.95% for the TRS, 7.91% for the ERS and 7.28% for the JRF. The five-year annualized returns were 4.71% for the TRS, 4.69% for the ERS and 4.37% for the JRF. The ten-year annualized returns were 4.21% for the TRS, 4.20% for the ERS and 4.01% for the JRF.

Sincerely,



Marc Green  
Director of Investments



## *Investment Section*

### Teachers' Retirement System Investment Policy Statement For the Fiscal Year Ended September 30, 2020

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#### **Purpose**

This Investment Policy Statement (“IPS”) sets forth the investment policies by which the Teachers' Retirement System's (“TRS”) fund's investments will be managed. This IPS is consistent with and complements related Alabama statutes and is intended to be binding upon all persons with authority over the investments of the TRS. Deviation from the IPS is not permitted without explicit written permission, in advance, from the TRS Board of Control (“Board of Control” or “Board”). This IPS was adopted by the Board of Control on December 9, 2015 and is effective March 1, 2016.

#### **Roles and Responsibilities**

##### *Board of Control*

The Board of Control, as Trustees, shall carry out its functions solely in the interest of the members and benefit recipients and for the exclusive purpose of providing benefits and defraying reasonable expenses incurred in performing such duties. The Trustees shall act in accordance with the provisions of the laws and with the care, skill, prudence and diligence in light of the circumstances then prevailing that a prudent person acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims.

Specific responsibilities include:

- Approving a statement of investment philosophy that sets forth TRS's beliefs on key investment issues.
- Approving an IPS.
- Ensuring asset allocation strategies are in place to achieve the investment goals and objectives of the TRS.
- Reviewing adherence to the investment philosophy of the TRS.
- Reviewing compliance with, and the continued appropriateness of, the IPS.
- Reviewing the investment performance of the fund, including the performance of all investment classes.
- Elect an investment committee (Ala. Code § 16-25-20(a)(3)).
- Appoint an Investment Advisor (Ala. Code § 16-25-20(a)(4)).

##### *Investment Committee*

The Investment Committee will:

- Act as agent for its appointing Board of Control (Ala. Code § 16-25-20(a)(3)).
- Consider all investment recommendations made by the Secretary-Treasurer (Ala. Code § 16-25-20(a)(3)).
- Either approve or disapprove the recommended investments in accordance with policies set by the Board (Ala. Code § 16-25-20(a)(3)).
- Confirm by written authorization of at least two members the approval of all investments, with such authorization to be attached to the invoice for the transaction (Ala. Code § 16-25-20(a)(3)).

##### *Secretary-Treasurer*

The Secretary –Treasurer is elected by the Board of Control and serves as the chief executive officer for the TRS. Ala. Code § 16-25-19(i). Specific responsibilities of the Secretary-Treasurer include:

- Recommending to the Board a written IPS and reviewing that statement with the Board at least annually.
- Developing and executing, within the policy parameters approved by the Board, investment strategies for each asset category in which the TRS invests.
- Executing portfolio rebalancing in accordance with the policies of the Board.
- Advising the Board on any other investment matters and making recommendations for Board or committee action when necessary.
- Reporting to the Board all purchases and sales of investments made by him or her at least once semiannually (Ala. Code § 16-25-20(a)(5)).
- Carrying out the investment policies fixed by the Board (Ala. Code § 16-25-20(a)(2)).

## *Investment Section*

### Teachers' Retirement System Investment Policy Statement (Continued)

For the Fiscal Year Ended September 30, 2020

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- Examining all offers of investments made to the funds (Ala. Code § 16-25-20(a)(2)).
- Initiating inquiries as to available investments for the funds (Ala. Code § 16-25-20(a)(2)).
- Reviewing periodically the investment quality and desirability of retention of investments held (Ala. Code § 16-25-20(a)(2)).
- Making purchases and sales of investments as he or she shall deem to be to the best interests of the fund and in accordance with policies set by the Board, and as the Investment Committee shall approve (Ala. Code § 16-25-20(a)(2)).
- Other such responsibilities as the Board may delegate or the law shall provide.

#### ***Custodian***

The Custodian holds directly, through its agents, its sub-custodians, or designated clearing systems, assets as designated by the Board. The Custodian is accountable for registration of those designated assets in good delivery form, collection of income generated by those assets, and any corporate action notification. The Custodian is responsible for delivery and receipt of securities of the aforementioned transactions. The Custodian is required to provide online records and reports, performance reporting, accounting reports and other services included by contract. The Board may opt to designate other duties to the Custodian.

#### ***Investment Advisor***

The Investment Advisor may be appointed and employed by the Board of Control to act as a consultant to the Secretary-Treasurer in the purchase, sale, and review of the TRS's investments to the extent the Board may designate. The Investment Advisor must be a bank having principal office in the State of Alabama, must have capital, surplus and undivided profits of not less than \$300 million, and must have an organized investment department. Ala. Code § 16-25-20(a)(4). Specific responsibilities of the Investment Advisor include:

- Assist the Secretary-Treasurer with the development of quarterly strategies for investments.
- Confirm weekly list of investment activities.
- Meet at least quarterly with the Secretary-Treasurer and Board of Control members.

### **Investment Goals and Objectives**

The function of the TRS is to provide present and future retirement or survivor benefits for its members. This objective requires the prudent assumption of investment risk in seeking to maximize long-term investment returns while incorporating the fund's liability requirements. The future investment performance of the fund directly affects its future financial strength. However, the greater the expected return of the strategic asset allocation policy, the higher the risk, and thus the greater the volatility of expected returns. With this greater volatility, the volatility of the surplus (deficit) of the plan may also be greater. The optimal balancing of these return and risk considerations will be considered in the context of the fund's short-term and long-term benefit obligations.

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## Investment Philosophy

The investment philosophy for the TRS is determined with careful consideration of its primary fund purpose, fiduciary obligations, statutory requirements, actuarial assumptions, funding policy, liquidity needs, income sources, benefit obligations and other general business conditions. The investment philosophy embraces the following:

- Strategic asset allocation is the most significant factor influencing long-term investment performance and asset volatility. The asset allocation targets, determined by the Board of Control, will be adhered to through a clearly defined rebalancing program.
- In controlling the risk level that is appropriate for the fund, the Board will diversify the assets of the fund among various asset classes as the Board may from time to time adopt as appropriate asset classes with the goal of minimizing large losses. The specific asset classes to be used will be set in conjunction with the strategic asset allocation adopted from time to time by the Board. The Board will diversify investment assets within asset classes to avoid concentrations.
- The fund's liabilities are long term and the investment strategy will therefore be long term in nature. Strategic decisions will prevail in determining asset allocation rather than tactical or short-term market timing decisions.
- The asset allocation policy will be reexamined every three years to ensure its appropriateness to the then prevailing liability considerations.
- Market-related risk and non-market related risk investments will be utilized. Market related risk refers to risk systematic to a market or risk embedded in the strategic asset allocation policy. Non-market risk refers to risk derived from active management or tactical decisions. Market-related risks are expected to produce returns proportional to the level of those risks over long periods of time as a natural feature of reasonably efficient capital markets; non- market related risks may produce additional returns when capitalized upon through skilled active management in the presence of some degree of market inefficiency. As a long-term investor, the TRS will invest across a wide spectrum of market-related risk investments, categorized in asset classes, in a prudent manner consistent with the strategic asset allocation policy referred to above.
- Index funds can be a desirable way of obtaining market-related risk exposure to asset classes.
- Non-market-related risks, also known as active management risk, may be expected to add value over index funds with comparable benchmarks, under appropriate conditions, and can be employed by the fund with controls in place which are appropriate to the particular investment.
- Also TRS recognizes that a stronger Alabama equates to a stronger Teachers' Retirement System and, as such, investments in Alabama businesses are encouraged to the extent the investment return meets the criteria delineated by this policy statement. Any Alabama investment must be forecast to have a return comparable to other like investments in the same asset class.
- Investment returns may be adversely affected by excessive investment related fees. TRS will utilize in-house staff expertise to minimize the cost of investing as appropriate.

**Strategic Asset Allocation Policy**

The TRS current target asset allocation and ranges are specified below.

<b>Asset Class</b>	<b>Target Allocation</b>	<b>Strategic Range</b>
Domestic Equity	45%	30%-60%
International Equity	15%	10%-25%
Fixed Income	15%	10%-50%
Alternative Investments	10%	0%-20%
Real Estate	10%	0%-15%
Short-term investments	5%	1%-10%
<b>Total</b>	<b>100%</b>	

The strategic asset allocation policy will be periodically reviewed, as described under "Investment Philosophy" and "Roles and Responsibilities."

**Rebalancing Policy**

The purpose of the rebalancing policy is to ensure the adherence to the strategic allocation plan. Unexpected changes in market values may, on occasion, cause the actual asset allocation to fall outside of the allowable ranges. This policy applies to all asset classes in which the TRS invests and requires Investment Management Staff ("Staff") to implement rebalancing trades if, as of any quarter end, the allocation to any asset class is outside the allowable ranges. The Board recognizes, however, the inherent difficulty in managing the allocations to illiquid asset classes.

As such, with respect to TRS's illiquid asset classes, the Board expects the allocations to these areas to be managed as close as practical to the policy targets. The Board expects Staff to report illiquid asset class allocations that fall outside the prescribed ranges. In addition, the Board expects Staff to provide an implementation recommendation to bring the fund's allocation to these areas back within the allowable ranges.

Managing the allocations to the marketable asset classes involves a risk reduction tradeoff with increased transaction costs. As such, the Board expects Staff to implement this policy in a manner that seeks to minimize the impact of transaction costs. In particular, the Board expects Staff to use cash contributions and cash needs to move the fund's asset allocation as close as practical to the policy targets. When markets move such that the fund's normal cash flows are insufficient to maintain the fund's actual asset allocation within the permissible ranges as of any quarter end, the Board expects Staff to implement the necessary transactions to bring the fund's allocation back to within the allowable ranges. Before a rebalancing transaction is implemented, the Board expects Staff to identify those portfolios that are likely to have the lowest cost of trading. Absent any asset class structure considerations, the Board expects these low trading cost portfolios to be utilized more frequently to implement required total fund rebalancing.

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## **Eligible Asset Categories**

The Board is responsible for approving asset categories in which the fund will invest. Listed below are the asset categories in which TRS currently invests along with a discussion of market efficiency in each category.

The efficiency of markets is relevant to expected return opportunities. Highly efficient markets provide less opportunity to add value above market returns. Highly inefficient markets provide more opportunity to add return above what is available by the market. This above market return expectation can be referred to as alpha. Market return can be referred to as beta.

### ***Domestic Equities***

Investing in the domestic equity market is a way to participate in one of the largest and most diverse economies in the world through ownership of the companies that make up the economy of the United States. Investment theory and history suggest that the domestic equity markets provide long-term price appreciation in an amount that tends to mirror the overall growth in the economy. In addition, stocks have historically provided a return that served as an effective hedge relative to inflation (i.e., the historical return of stocks has been in excess of the rate of inflation).

It is expected that the TRS will have exposure to all segments of the domestic equity market including but not limited to growth and value stocks of large to small capitalization companies. The domestic equity market is considered by many to be one of the most efficient capital markets in the world. The availability of public information regarding the future prospects of individual companies combined with the numerous market participants rendering assessments of the information contribute to this market's efficiency. With this in mind, a large portion of the domestic equity portfolio will be managed through passive index funds. A portion of the portfolio will be utilized to add alpha relative to the benchmarks. While the market is very efficient, neither it nor any other market is perfectly efficient. When appropriate skill is available, it may be possible to successfully use active management techniques to improve upon benchmark returns, with acceptable levels of risk.

### ***International Equities***

The international equity markets are an increasingly larger share of the investment opportunity set. In addition, because international company stocks tend to react to local as well as global influences, the fluctuations in the returns of international equity markets are only partially related to the movements in the domestic equity market. Further, capital market theory suggests that we should be fully diversified in a global, not just in a local sense.

### ***Fixed Income***

Bonds provide a source of diversification relative to an equity-oriented portfolio. The rate of return volatility (investment risk) of fixed income securities is substantially lower than the volatility of equities. In addition, there are significant differences in the pattern of returns between stock and bond investments. When combined with equity securities, a fixed income allocation can serve to reduce the overall risk of the portfolio without materially sacrificing return potential.

The fixed income asset class is perhaps the most diverse capital market. Securities include government, mortgage-backed and corporate bonds of U.S. and non-U.S. issuers. It also includes bonds issued by high quality as well as low quality companies and countries. The fixed income market may be more efficient than once believed. However, fixed income can experience less efficiency at times and in certain segments such as lower quality bonds. It is expected that the fixed income portfolio will make use of both active and passive investment mandates and will include allocations to all major segments of the fixed income market.

### ***Alternative Investments***

The alternative investment asset class can encompass many different and distinct asset categories. These types of investments may exhibit high levels of risk, with a concomitant expectation for high rates of investment returns. Many of these investments may exhibit a high level of correlation with the publicly-traded equity markets.

The alternative investment asset class is considered highly inefficient, as the lack of publicly available company and pricing information suggest active management is critical in this asset class. Examples of such investments are venture capital partnerships, private equity, hedge funds, leveraged buy-out funds, private debt, and direct ownership of individual assets such as oil and gas partnerships. These investments shall only be entered into after significant due diligence.

#### ***Short-term Investments***

Short-term investments are an integral part of a public pension portfolio, primarily as a tool of principal preservation and as a provider of liquidity. Eligible securities within this asset class include but are not limited to, U.S. treasury bills, notes and bonds with maturities of one year or less, corporate debt obligations (primarily commercial paper), short-dated agency and mortgage backed debt with government backed principal and interest payments, various types of bank paper including time deposits, repurchase agreements as well as money market funds. Also included is any money held in the STIF (short-term investment fund) accounts at the custody bank of the RSA, State Street Corporation.

#### ***Real Estate***

Real estate investments can serve as a diversifier of a stock and bond portfolio. While the factors that influence real estate returns may also influence the returns of stock and bond portfolios, these factors impact real estate in a different manner than the other asset classes. This suggests that the return patterns of real estate have a lower correlation to other asset classes, providing a diversification benefit when combined with stocks and bonds.

#### **Risk Controls and Procedures**

- The fund is to be broadly diversified across and within asset classes to limit the volatility of the total fund investment returns and to limit the impact of large losses on individual investments of the fund.
- Individual portfolios will be managed according to written investment guidelines that are approved by the Staff. These guidelines are intended to ensure that the portfolio meets its objective and operates within acceptable risk parameters.
- A process will be established by which compliance with all elements of the IPS and portfolio guidelines are measured and monitored, with compliance exceptions being reported to the Board.
- The Investment Advisor will work with the Staff to develop a quarterly strategy for investments, which will be disseminated to the Board, as it is prepared each quarter.
- The Investment Committee shall approve all investments made within the IPS. The Investment Committee, in its approval, is considered to be signing for the Board of Control. If any purchase or sale is questioned by two members of the Investment Committee as to whether it is within policy, the Board shall decide if further action is required.
- Each week, the Secretary-Treasurer will send to the Investment Advisor the list of actual activities for written confirmation, which will then be distributed to the Board of Control members upon receipt.
- All investment security purchases will be documented with an individual worksheet setting out the reason for the purchase, rating, market history and other general data relevant to the decision making process.
- An annual survey will be made of all fixed income investments held with emphasis on credit quality. A holding that has been downgraded in rating will be examined as to the reason for the downgrade and a determination should be made as to whether the security should remain in the portfolio.
- The rules of the Securities and Exchange Commission, the general policies of the Board of Control, and the Alabama Ethics Commission shall govern the ethical conduct of employees. The Investment Management Staff will provide the Alabama Ethics Commission with a quarterly report of all purchases and sales of any and all securities for personal accounts occurring within each reported quarter.
- All Alternative Investments will be documented with a comprehensive financial analysis setting out the reasons for the investment and showing the projected return on investment.

## Performance Measurement

The investment objective of the TRS total fund is to earn the rate of return of the Total Plan Policy Portfolio. A Policy Portfolio is a passive representation of the specific asset allocation strategy pursued and is the most objective performance evaluation metric. The Total Plan Policy Portfolio weights each individual portfolio and its return versus the actual relative index returns. This process accounts for asset allocation shifts within and between any asset classes.

### *Total Plan Benchmark*

The Total Plan Benchmark is calculated monthly. It is a weighted average of the asset classes and their corresponding benchmarks. The weights are calculated using the beginning market values. The asset class benchmarks are listed in the table below.

<b>Domestic Equity</b>	Custom Benchmark	(see description below)
<b>International Equity</b>	MSCI EAFE Net & Emerging Markets Net	Beginning of month weighted custom benchmark
<b>Domestic Fixed Income</b>	<b>Custom Benchmark</b>	<b>(see description below)</b>
<b>International Fixed Income</b>	WGBI Non-US	Currently, there are no International Fixed Income portfolios in the plan.
<b>Cash</b>	ML 90-Day T-Bill	
<b>Alternative Investments</b>	-If an equity investment, the Russell 3000 plus 3%.  -If a debt investment, the Barclay Capital Agency plus 3%.	
<b>Real Estate</b>	CPI+3%	

### *Domestic Equity Benchmark*

The Domestic Equity Benchmark is calculated monthly. It is a weighted average of the domestic equity portfolios and their corresponding benchmarks. The weights are calculated using the beginning markets' values. The portfolio benchmarks are listed in the table below:

<b>Core Fund</b>	<b>S&amp;P 500</b>
<b>S&amp;P 500 Fund</b>	S&P 500
<b>MidCap Active Fund (SSF)</b>	S&P 400 MidCap
<b>S&amp;P MidCap Index</b>	S&P 400 MidCap
<b>S&amp;P SmallCap Index</b>	S&P 600 SmallCap
<b>Policy Fund</b>	S&P 500
<b>Value Fund</b>	S&P 500

## RETIREMENT SYSTEMS OF ALABAMA

### *Investment Section*

#### Teachers' Retirement System Investment Policy Statement (Continued)

For the Fiscal Year Ended September 30, 2020

#### ***Fixed Income Benchmark***

The Fixed Income Benchmark is calculated monthly. It is a weighted average of the Fixed Income sectors and their corresponding benchmarks. The weights are calculated using the beginning markets' values. The sector benchmarks are listed in the table below:

<b>Agency</b>	Barclay Capital Agency
<b>Asset Backed</b>	Barclay Capital ABS Index
<b>CMO</b>	Barclay Capital MTGE
<b>Corporate</b>	Barclay Capital Corp
<b>Municipal</b>	N/A
<b>Mortgage Pass-Through</b>	Barclay Capital MTGE
<b>Private Placement</b>	N/A
<b>US Treasury</b>	Barclay Capital Treasury
<b>Yankee - Agency</b>	Barclay Capital Agency
<b>Yankee – Other Yankee</b>	Barclay Capital Corp



Employees' Retirement System Investment Policy Statement  
For the Fiscal Year Ended September 30, 2020

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**Purpose**

This Investment Policy Statement (IPS) sets forth the investment policies by which the fund's investments will be managed. This IPS is consistent with and complements related Alabama Statutes and is intended to be binding upon all persons with authority over the investments of the Employee Retirement System of Alabama ("ERS"). Deviation from the IPS is not permitted without explicit written permission, in advance, from the ERS Board of Control ("Board of Control" or "Board"). This IPS shall be effective April 1, 2015.

The Judicial Retirement Fund is a defined benefit plan created by and administered in accordance with Ala. Code §§ 12-18-1, et seq.. Section 12-18-2(a) states in its pertinent part as follows:

"The Judicial Retirement Fund shall be administered by the Secretary-Treasurer of the State Employees' Retirement System under the supervision of the Board of Control of the said State Employees' Retirement System and said board of control shall be the trustee of such fund and shall handle such fund in the same manner and pursuant to the same rules and regulations that it handles funds in the State Employees' Retirement System."

Therefore, the Board of Control is the trustee and responsible for handling such funds in the same manner as ERS. This IPS, therefore, will also apply to the JRF.

**Roles and Responsibilities**

***Board of Control***

The Board of Control, as Trustees, shall carry out its functions solely in the interest of the members and benefit recipients and for the exclusive purpose of providing benefits and defraying reasonable expenses incurred in performing such duties. The Trustees shall act in accordance with the provisions of the laws and with the care, skill, prudence and diligence in light of the circumstances then prevailing that a prudent person acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims by diversifying the investments of the ERS so as to minimize the risk of large losses.

Specific responsibilities include:

- Working with the Investment Management Committee to provide oversight of the investment program of the ERS.
- Approving a statement of investment philosophy that sets forth ERS's beliefs on key investment issues.
- Approving an IPS.
- Ensuring asset allocation strategies are in place to achieve the investment goals and objectives of the ERS.
- Reviewing adherence to the investment philosophy of the ERS.
- Reviewing compliance with, and the continued appropriateness of, the IPS.
- Reviewing the investment performance of the fund, including the performance of all investment classes.
- Elect an investment committee (Ala. Code §§36-27-25(d)).
- Appoint an Investment Advisor (Ala. Code §§36-27-25(e)).

*Investment Section*

Employees' Retirement System Investment Policy Statement (Continued)

For the Fiscal Year Ended September 30, 2020

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***Investment Management Committee***

The Investment Management Committee is responsible for overseeing the ERS investment program. Specific responsibilities include recommending to/advising the Board:

- A written statement of investment philosophy for the fund.
- A written IPS.
- Strategies to achieve the investment goals and objectives of the ERS.
- On any other investment matters and make recommendations for Board action when necessary.
- Keeping minutes of Investment Management Committee meetings and ensure the minutes are made available to Trustees.
- Monitoring all the investment activities of the Investment Committee, Secretary-Treasurer, Staff, Investment Advisor, and Custodian.
- Ensuring the investment reporting policies are designed to provide transparency and aggregate information on target investments regardless of the investment vehicles used.

***Investment Committee***

The Investment Committee will:

- Act as agent for its appointing Board of Control (Ala. Code §§36-27-25(d)).
- Consider all investment recommendations made by the Secretary-Treasurer (Ala. Code §§36-27-25(d)).
- Either approve or disapprove the recommended investments in accordance with policies set by the Board (Ala. Code §§36-27-25(d)).
- Confirm by written authorization the approval of all investments, with such authorization to be attached to the invoice for the transaction (Ala. Code §§36-27-25(d)).

***Secretary-Treasurer***

The Secretary –Treasurer is elected by the Board of Control and serves as the chief executive officer for the ERS. Ala. Code §§36-27-23(h). Specific responsibilities of the Secretary-Treasurer include:

- Recommending to the Investment Management Committee a written statement of investment philosophy and review that statement with the committee at least every three years.
- Recommending to the Investment Management Committee a written IPS and review that statement with the committee at least annually.
- Recommending to the Investment Management Committee strategies to achieve the investment goals and objectives of ERS.
- Developing, and executing, within the policy parameters approved by the Board, investment strategies for each asset category in which the ERS invests.
- Executing portfolio rebalancing in accordance with the policies of the Board.
- Advising the Board and the Investment Management Committee on any other investment matters and making recommendations for Board or committee action when necessary.
- Reporting to the Board of Control all purchases and sales of investments made by him or her at least once semiannually (Ala. Code §§36-27-25(c)).
- Carrying out the investment policies fixed by the Board of Control (Ala. Code §§26-27-25(c)).
- Examining all offers of investments made to the funds (Ala. Code §§36-27-25(c)).
- Initiating inquiries as to available investments for the funds (Ala. Code §§36-27-25(c)).
- Reviewing periodically the investment quality and desirability of retention of investments held (Ala. Code §§36-27-25(c)).
- Making purchases and sales of investments as he or she shall deem to be to the best interests of the fund and in accordance with policies set by the Board, and as the Investment Committee shall approve (Ala. Code §§36-27-25(c)).

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### ***Custodian***

The Custodian holds directly, through its agents, its sub-custodians, or designated clearing systems, assets as designated by the Board. The Custodian is accountable for registration of those designated assets in good delivery form, collection of income generated by those assets, and any corporate action notification. The Custodian is responsible for delivery and receipt of securities of the aforementioned transactions. The Custodian is required to provide online records and reports, performance reporting, accounting reports and other services included by contract. The Board may opt to designate other duties to the Custodian.

### ***Investment Advisor***

The Investment Advisor may be appointed and employed by the Board of Control to act as a consultant to the Secretary-Treasurer in the purchase, sale, and review of the ERS's investments to the extent the Board may designate. The Investment Advisor must be a bank having principal office in the State of Alabama, must have capital, surplus and undivided profits of not less than \$300 million, and must have an organized investment department. Specific responsibilities of the Investment Advisor include:

- Assist the Secretary-Treasurer with the development of quarterly strategies for investments.
- Confirm weekly list of investment activities.
- Meet at least quarterly with the Secretary-Treasurer and Board of Control members.

### **Investment Goals and Objectives**

The function of the ERS is to provide present and future retirement or survivor benefits for its members. This objective requires the prudent assumption of investment risk in seeking to maximize long-term investment returns while incorporating the fund's liability requirements. The future investment performance of the fund directly affects its future financial strength. However, the greater the expected return of the strategic asset allocation policy, the higher the risk, and thus the greater the volatility of expected returns. With this greater volatility, the volatility of the surplus (deficit) of the plan may also be greater. The optimal balancing of these return and risk considerations will be considered in the context of the fund's short-term and long-term benefit obligations.

### **Investment Philosophy**

The investment philosophy for the ERS is determined with careful consideration of its primary fund purpose, fiduciary obligations, statutory requirements, actuarial assumptions, funding policy, liquidity needs, income sources, benefit obligations and other general business conditions. The investment philosophy embraces the following:

- Strategic asset allocation is the most significant factor influencing long-term investment performance and asset volatility. The asset allocation targets, determined by the Board of Control, will be adhered to through a clearly defined rebalancing program.
- In controlling the risk level that is appropriate for the fund, the Board will diversify the assets of the fund among various asset classes as the Board may from time to time adopt as appropriate asset classes. The specific asset classes to be used will be set in conjunction with the strategic asset allocation adopted from time to time by the Board. The Board will diversify investment assets within asset classes to avoid concentrations.
- The fund's liabilities are long term and the investment strategy will therefore be long term in nature. Strategic decisions will prevail in determining asset allocation rather than tactical or short-term market timing decisions.
- The asset allocation policy will be reexamined every three years to ensure its appropriateness to the then prevailing liability considerations.

- Market-related risk and non-market related risk investments will be utilized. Market related risk refers to risk systematic to a market or risk embedded in the strategic asset allocation policy. Non-market risk refers to risk derived from active management or tactical decisions. Market-related risks are expected to produce returns proportional to the level of those risks over long periods of time as a natural feature of reasonably efficient capital markets; non- market related risks may produce additional returns when capitalized upon through skilled active management in the presence of some degree of market inefficiency. As a long-term investor, the ERS will invest across a wide spectrum of market-related risk investments, categorized in asset classes, in a prudent manner consistent with the strategic asset allocation policy referred to above.
- Index funds can be a desirable way of obtaining market-related risk exposure to asset classes.
- Non-market-related risks, also known as active management risk, may be expected to add value over index funds with comparable benchmarks, under appropriate conditions, and can be employed by the fund with controls in place which are appropriate to the particular investment.
- Also ERS recognizes that a stronger Alabama equates to a stronger Employee Retirement System, and as such, investments in Alabama businesses are encouraged to the extent the investment return meets the criteria delineated by this policy statement. Any Alabama investment must be forecast to have a return comparable to other investments in the same asset class. The forecast and the accompanying analysis must be presented to the Investment Committee and Investment Management Committee prior to making the investment.

**Strategic Asset Allocation Policy**

The ERS current target asset allocation and ranges are specified below.

<b>Asset Class</b>	<b>JRF Target Allocation</b>	<b>ERS Target Allocation</b>	<b>Strategic Range</b>
Domestic Equity	55%	45%	30%-60%
International Equity	15%	15%	10%-25%
Fixed Income	22%	15%	10%-40%
Alternative Investments	1%	10%	0%-15%
Real Estate	2%	10%	0%-15%
Short-term investments	5%	5%	1%-10%

The strategic asset allocation policy will be periodically reviewed, as described under “Investment Philosophy” and “Roles and Responsibilities.”

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## **Rebalancing Policy**

The purpose of the rebalancing policy is to ensure the adherence to the strategic allocation plan. Unexpected changes in market values may, on occasion, cause the actual asset allocation to fall outside of the allowable ranges. This policy applies to all asset classes in which the ERS invests and requires Investment Management Staff (“Staff”) to implement rebalancing trades if, as of any quarter end, the allocation to any asset class is outside the allowable ranges. The Board recognizes, however, the inherent difficulty in managing the allocations to illiquid asset classes.

As such, with respect to ERS’s investments in illiquid asset classes (alternative investments and real estate), the Board expects the allocations to these areas to be managed as close as practical to the policy targets. As of any quarter-end, the Board expects Staff to report illiquid asset class allocations that fall outside the prescribed ranges. In addition, the Board expects Staff to provide an implementation recommendation to bring the fund’s allocation to these areas back within the allowable ranges. The Staff will provide annually to the Investment Management Committee a schedule for valuations on such assets.

Managing the allocations to the marketable asset classes involves a risk reduction tradeoff with increased transaction costs. As such, the Board expects Staff to implement this policy in a manner that seeks to minimize the impact of transaction costs. In particular, the Board expects Staff to use cash contributions and cash needs to move the fund’s asset allocation as close as practical to the policy targets.

When markets move such that the fund’s normal cash flows are insufficient to maintain the fund’s actual asset allocation within the permissible ranges as of any quarter end, the Board expects Staff to implement the necessary transactions to bring the fund’s allocation back to within the allowable ranges. Before a rebalancing transaction is implemented, the Board expects Staff to identify those portfolios that are likely to have the lowest cost of trading. Absent any asset class structure considerations, the Board expects these low trading cost portfolios to be utilized more frequently to implement required total fund rebalancing.

## **Eligible Asset Categories**

The Board is responsible for approving asset categories in which the fund will invest. Listed below are the asset categories in which ERS currently invests along with a discussion of market efficiency in each category. The efficiency of markets is relevant to expected return opportunities. Highly efficient markets provide less opportunity to add value above market returns. Highly inefficient markets provide more opportunity to add return above what is available by the market. This above market return expectation can be referred to as alpha. Market return can be referred to as beta.

### ***Domestic Equities***

Investing in the domestic equity market is a way to participate in one of the largest and most diverse economies in the world through ownership of the companies that make up the economy of the United States. Investment theory and history suggest that the domestic equity markets provide long-term price appreciation in an amount that tends to mirror the overall growth in the economy. In addition, stocks have historically provided a return that served as an effective hedge relative to inflation (i.e., the historical return of stocks has been in excess of the rate of inflation).

It is expected that the ERS will have exposure to all segments of the domestic equity market including but not limited to growth and value stocks of large to small capitalization companies. The domestic equity market is considered by many to be one of the most efficient capital markets in the world. The availability of public information regarding the future prospects of individual companies combined with the numerous market participants rendering assessments of the information contribute to this market’s efficiency. With this in mind, a large portion of the domestic equity portfolio will be managed through passive index funds. A portion of the portfolio will be utilized

to add alpha relative to the benchmarks. While the market is very efficient, neither it nor any other market is perfectly efficient. When appropriate skill is available, it may be possible to successfully use active management techniques to improve upon benchmark returns, with acceptable levels of risk.

***International Equities***

The international equity markets are an increasingly larger share of the investment opportunity set. In addition, because international company stocks tend to react to local as well as global influences, the fluctuations in the returns of international equity markets are only partially related to the movements in the domestic equity market. Further, capital market theory suggests that we should be fully diversified in a global, not just in a local sense.

***Fixed Income***

Bonds provide a source of diversification relative to an equity-oriented portfolio. The rate of return volatility (investment risk) of fixed income securities is substantially lower than the volatility of equities. In addition, there are significant differences in the pattern of returns between stock and bond investments. When combined with equity securities, a fixed income allocation can serve to reduce the overall risk of the portfolio without materially sacrificing return potential.

The fixed income asset class is perhaps the most diverse capital market. Securities include government, mortgage-backed and corporate bonds of U.S. and non-U.S. issuers. It also includes bonds issued by high quality as well as low quality companies and countries. The fixed income market may be more efficient than once believed. However, fixed income can experience less efficiency at times and in certain segments such as lower quality bonds. It is expected that the fixed income portfolio will make use of both active and passive investment mandates and will include allocations to all major segments of the fixed income market.

***Short-term Investments***

Short-term investments are an integral part of a public pension portfolio, primarily as a tool of principal preservation and as a provider of liquidity. Eligible securities within this asset class include but are not limited to, U.S. treasury bills, notes and bonds with maturities of one year or less, corporate debt obligations (primarily commercial paper), short-dated agency and mortgage backed debt with government backed principal and interest payments, various types of bank paper including time deposits, repurchase agreements as well as money market funds. Also included is any money held in the STIF (short-term investment fund) account at the custody bank of the RSA, State Street Corporation.

***Alternative Investments***

The alternative investment asset class can encompass many different and distinct asset categories. These types of investments exhibit high levels of risk, with an expectation for high rates of investment returns. Many of these investments also exhibit a high level of correlation with the publicly-traded equity markets.

The alternative investment asset class is considered highly inefficient, as the lack of publicly available company and pricing information suggest active management is critical in this asset class. The primary benefit afforded investors in this asset class is the expectation of generating high levels of investment returns, as well as hedging instruments for risk controls.

Examples of such investments are venture capital partnerships, private equity, hedge funds, leveraged buy-out funds, private debt, and direct ownership of individual assets such as oil and gas partnerships. These investments shall only be entered into after due diligence and with approval by both the Investment Committee and the Investment Management Committee or by the Board. No final commitment shall be made until all the forgoing is met. Subsequent investments in a previously approved investment do not require additional specific approvals by the Investment Committee and the Investment Management Committee or the Board, unless there has been a material adverse change in the investment.

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ERS may not engage an investment manager or invest in a fund, partnership, or other entity if the terms of the engagement or investment do not preclude an investment result that is contrary to the Investment Policy Statement.

ERS may not engage an investment manager or invest in a fund unless the investment-management or subscription agreement includes a representation, warranty, and covenant confirming the absence of any compensation (before, during, or after the agreement) to a solicitor, placement agent, lobbyist, or other intermediary except as fully disclosed in a writing attached to and made a part of the agreement.

### *Real Estate*

Real estate investments can serve as a diversifier of a stock and bond portfolio. While the factors that influence real estate returns may also influence the returns of stock and bond portfolios, these factors impact real estate in a different manner than the other asset classes. This suggests that the return patterns of real estate have a lower correlation to other asset classes, providing a diversification benefit when combined with stocks and bonds.

### **Risk Controls and Procedures**

- The fund is to be broadly diversified across and within asset classes to limit the volatility of the total fund investment returns and to limit the impact of large losses on individual investments of the fund.
- Individual portfolios will be managed according to written investment guidelines that are approved by the Staff. These guidelines are intended to ensure that the portfolio meets its objective and operates within acceptable risk parameters.
- A process will be established by which compliance with all elements of the IPS and portfolio guidelines are measured and monitored, with compliance exceptions being reported to the Investment Management Committee and the Board.
- The Investment Advisor will work with the Staff to develop a quarterly strategy for investments, which will be disseminated to the Board, as it is prepared each quarter.
- The Investment Committee shall approve all investments made within the IPS. The Investment Committee, in its approval, is considered to be signing for the Board of Control. If any purchase or sale is questioned by two members of the Investment Committee as to whether it is within policy, the Board shall decide and no purchase or sale shall take place until all parties are in clear agreement that said action is or is not covered by policy.
- Each week, the Secretary-Treasurer will send to the Investment Advisor the list of actual activities for written confirmation, which will then be distributed to the Board of Control members upon receipt.
- All investment security purchases will be documented with an individual worksheet setting out the reason for the purchase, rating, market history and other general data relevant to the decision making process.
- An annual survey will be made of all fixed income investments held with emphasis on credit quality. A holding that has been downgraded in rating will be examined as to the reason for the downgrade and a determination should be made as to whether the security should remain in the portfolio.
- The rules of the Securities and Exchange Commission, the general policies of the Board of Control, and the Alabama Ethics Commission shall govern the ethical conduct of employees. The Investment Management Staff will provide the Alabama Ethics Commission with a quarterly report of all purchases and sales of any and all securities for personal accounts occurring within each reported quarter.
- All Alternative Investments will be documented with a comprehensive financial analysis setting out the reasons for the investment and showing the projected return on investment.

*Investment Section*

Employees' Retirement System Investment Policy Statement (Continued)

For the Fiscal Year Ended September 30, 2020

**Performance Measurement**

The investment objective of the ERS total fund is to earn the rate of return of the Total Plan Policy Portfolio. A Policy Portfolio is a passive representation of the specific asset allocation strategy pursued and is the most objective performance evaluation metric. The Total Plan Policy Portfolio weights each individual portfolio and its return versus the actual relative index returns. This process accounts for asset allocation shifts within and between any asset classes.

**Total Plan Benchmark**

The Total Plan Benchmark is calculated monthly. It is a weighted average of the asset classes and their corresponding benchmarks. The weights are calculated using the beginning market values. The asset class benchmarks are listed in the table below.

<b>Domestic Equity</b>	<b>Custom Benchmark</b>	<b>(see description below)</b>
<b>International Equity</b>	MSCI EAFE Net & Emerging Markets Net	
<b>Domestic Fixed Income</b>	Custom Benchmark	(see description below)
<b>International Fixed Income</b>	WGBI Non-US	Currently, there are no International Fixed Income portfolios in the
<b>Cash</b>	ML 90-Day T-Bill	
<b>Alternative Investments</b>	-If an equity investment, the Russell 3000 +3%  -If a debt investment, the Barclay Capital Agency plus 3%.	
<b>Real Estate</b>	NCREIF NPI	-Privately held US-based commercial Real Estate properties.  -Most commonly used.  -Often use NPI + 1-3% to compensate for higher risk and expected returns of funds that use leverage.



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***Domestic Equity Benchmark***

The Domestic Equity Benchmark is calculated monthly. It is a weighted average of the domestic equity portfolios and their corresponding benchmarks. The weights are calculated using the beginning markets' values. The portfolio benchmarks are listed in the table below:

<b>Core Fund</b>	<b>S&amp;P 500</b>
<b>S&amp;P 500 Fund</b>	S&P 500
<b>MidCap Active Fund (SSF)</b>	S&P 400 MidCap
<b>S&amp;P MidCap Index</b>	S&P 400 MidCap
<b>S&amp;P SmallCap Index</b>	S&P 600 SmallCap
<b>SmallCap Active Fund</b>	S&P 600 SmallCap
<b>LargeCap Policy Fund</b>	S&P 500
<b>LargeCap Value Fund</b>	S&P 500

***Fixed Income Benchmark***

The Fixed Income Benchmark is calculated monthly. It is a weighted average of the Fixed Income sectors and their corresponding benchmarks. The weights are calculated using the beginning markets' values. The sector benchmarks are listed in the table below:

<b>Agency</b>	<b>Barclay Capital Agency</b>
<b>Asset Backed</b>	Barclay Capital ABS Index
<b>CMO</b>	Barclay Capital MTGE
<b>Corporate</b>	Barclay Capital Corp
<b>Municipal</b>	N/A
<b>Mortgage Pass-Through</b>	Barclay Capital MTGE
<b>Private Placement</b>	N/A
<b>US Treasury</b>	Barclay Capital Treasury
<b>Yankee - Agency</b>	Barclay Capital Agency
<b>Yankee – Other Yankee</b>	Barclay Capital Corp

RETIREMENT SYSTEMS OF ALABAMA

Investment Section

Teachers' Retirement System

Schedule of Investment Performance

U.S. Equity	TIME WEIGHTED RATES OF RETURN - GROSS OF FEE			
	1 Year	3 Years	5 Years	10 Years
TRS Core Fund	11.34%	11.09%	13.23%	12.67%
TRS S&P 500 Fund	14.05%	11.80%	13.56%	13.46%
TRS Mid Cap Index	-2.07%	2.96%	8.16%	10.54%
TRS S&P Small Cap Index	-7.71%	0.19%	7.75%	11.14%
TRS Midcap Active Fund (Ssf)	-0.64%	5.15%	8.41%	10.20%
TRS Large Cap Policy Fund	12.18%	9.63%	13.69%	n/a
<b>TRS Total Domestic Equity</b>	<b>8.65%</b>	<b>9.16%</b>	<b>12.03%</b>	<b>12.49%</b>
<b>TRS Custom Domestic Equity Index</b>	<b>10.02%</b>	<b>9.54%</b>	<b>12.51%</b>	<b>12.93%</b>
<i>S&amp;P 500</i>	<i>15.15%</i>	<i>12.28%</i>	<i>14.15%</i>	<i>13.74%</i>
<i>S&amp;P Mid Cap 400</i>	<i>-2.16%</i>	<i>2.90%</i>	<i>8.11%</i>	<i>10.49%</i>
<i>S&amp;P Smallcap 600</i>	<i>-8.29%</i>	<i>-0.33%</i>	<i>7.20%</i>	<i>10.57%</i>
<b>International Equity</b>				
TRS Emerging Markets Fund	5.71%	0.48%	8.06%	n/a
TRS International Equities	0.77%	1.34%	5.94%	5.21%
<b>TRS Total International Equity</b>	<b>2.00%</b>	<b>1.28%</b>	<b>6.26%</b>	<b>4.94%</b>
<b>TRS Custom International Equity Index</b>	<b>2.76%</b>	<b>1.07%</b>	<b>5.90%</b>	<b>n/a</b>
<i>MSCI Eafe (Net)</i>	<i>0.49%</i>	<i>0.62%</i>	<i>5.26%</i>	<i>4.62%</i>
<i>MSCI Emerging Markets</i>	<i>10.54%</i>	<i>2.42%</i>	<i>8.97%</i>	<i>2.50%</i>
<b>TRS Total Global Equity</b>	<b>7.22%</b>	<b>7.44%</b>	<b>10.81%</b>	<b>10.80%</b>
<b>TRS Custom Global Equity Index</b>	<b>8.47%</b>	<b>7.70%</b>	<b>11.11%</b>	<b>11.05%</b>
<b>Fixed Income</b>				
TRS Domestic Fixed Income	7.95%	5.49%	4.71%	4.21%
<b>TRS Custom Domestic Fixed Index</b>	<b>7.63%</b>	<b>5.63%</b>	<b>4.70%</b>	<b>4.04%</b>
<i>Barclays Aggregate Bond</i>	<i>6.98%</i>	<i>5.24%</i>	<i>4.18%</i>	<i>3.64%</i>
<b>TRS Total Fixed Income</b>	<b>7.95%</b>	<b>5.49%</b>	<b>4.71%</b>	<b>4.21%</b>
<b>Alternative Investments</b>				
TRS Private Placements	7.81%	5.66%	-4.11%	5.86%
TRS Preferred And Private Equity	-3.85%	-1.35%	18.05%	17.91%
TRS Real Estate	-3.47%	0.03%	2.26%	3.07%
<b>TRS Total Alternatives</b>	<b>-2.69%</b>	<b>0.69%</b>	<b>1.65%</b>	<b>6.24%</b>
<b>TRS Total Fixed Income Plus Alternatives</b>	<b>1.99%</b>	<b>2.85%</b>	<b>3.01%</b>	<b>5.37%</b>
<b>Cash</b>				
TRS Cash Account	1.05%	1.74%	1.30%	0.72%
TRS Short Term Investments	1.65%	2.12%	1.64%	1.01%
<b>TRS Total Cash</b>	<b>1.35%</b>	<b>1.94%</b>	<b>1.50%</b>	<b>n/a</b>
<b>Total Plan</b>				
<b>TRS Total Plan</b>	<b>5.62%</b>	<b>5.86%</b>	<b>7.92%</b>	<b>8.67%</b>
<b>TRS Total Plan Policy</b>	<b>8.20%</b>	<b>7.25%</b>	<b>9.04%</b>	<b>8.62%</b>

Note: Calculations are prepared using the time-weighted rate-of-return methodology based upon market values.

RETIREMENT SYSTEMS OF ALABAMA

Investment Section

Employees' Retirement System

Schedule of Investment Performance

U.S. Equity	TIME-WEIGHTED RATES OF RETURN - GROSS OF FEE			
	1 Year	3 Years	5 Years	10 Years
ERS Core Fund	11.32%	11.08%	13.22%	12.68%
ERS S&P 500 Fund	14.04%	11.80%	13.55%	13.45%
ERS Mid Cap Index	-2.07%	2.96%	8.16%	10.55%
ERS S&P Small Cap Index	-7.71%	0.19%	7.75%	11.14%
ERS Midcap Active Fund (Ssf)	-0.63%	5.15%	8.42%	10.20%
ERS Large Cap Policy Fund	12.18%	9.63%	13.69%	n/a
<b>ERS Total Domestic Equity</b>	<b>9.03%</b>	<b>9.38%</b>	<b>12.13%</b>	<b>12.52%</b>
<b>ERS Custom Domestic Equity Index</b>	<b>10.50%</b>	<b>9.80%</b>	<b>12.65%</b>	<b>13.00%</b>
<i>S&amp;P 500</i>	<i>15.15%</i>	<i>12.28%</i>	<i>14.15%</i>	<i>13.74%</i>
<i>S&amp;P Mid Cap 400</i>	<i>-2.16%</i>	<i>2.90%</i>	<i>8.11%</i>	<i>10.49%</i>
<i>S&amp;P Smallcap 600</i>	<i>-8.29%</i>	<i>-0.33%</i>	<i>7.20%</i>	<i>10.57%</i>
<b>International Equity</b>				
ERS Emerging Markets Fund	6.79%	0.88%	8.32%	n/a
ERS International Equities	0.35%	1.20%	5.85%	5.17%
<b>ERS Total International Equity</b>	<b>2.22%</b>	<b>1.19%</b>	<b>6.23%</b>	<b>4.90%</b>
<b>ERS Custom International Equity Index</b>	<b>3.12%</b>	<b>1.10%</b>	<b>5.94%</b>	<b>n/a</b>
<i>MSCI Eafe (Net)</i>	<i>0.49%</i>	<i>0.62%</i>	<i>5.26%</i>	<i>4.62%</i>
<i>MSCI Emerging Markets</i>	<i>10.54%</i>	<i>2.42%</i>	<i>8.97%</i>	<i>2.50%</i>
<b>ERS Total Global Equity</b>	<b>7.54%</b>	<b>7.64%</b>	<b>10.92%</b>	<b>10.88%</b>
<b>ERS Custom Global Equity Index</b>	<b>8.90%</b>	<b>7.96%</b>	<b>11.28%</b>	<b>11.18%</b>
<b>Fixed Income</b>				
ERS Domestic Fixed Income	7.91%	5.45%	4.69%	4.20%
<b>ERS Custom Domestic Fixed Index</b>	<b>7.61%</b>	<b>5.62%</b>	<b>4.69%</b>	<b>4.04%</b>
<i>Barclays Aggregate Bond</i>	<i>6.98%</i>	<i>5.24%</i>	<i>4.18%</i>	<i>3.64%</i>
<b>ERS Total Fixed Income</b>	<b>7.91%</b>	<b>5.45%</b>	<b>4.69%</b>	<b>4.20%</b>
<b>Alternative Investments</b>				
ERS Private Placements	7.84%	5.64%	-4.18%	5.77%
ERS Preferred And Private Equity	-2.35%	-0.82%	20.40%	18.99%
ERS Real Estate	-3.42%	0.05%	2.23%	3.03%
<b>ERS Total Alternatives</b>	<b>-2.25%</b>	<b>0.73%</b>	<b>2.66%</b>	<b>6.86%</b>
<b>ERS Total Fixed Income Plus Alternatives</b>	<b>2.18%</b>	<b>2.82%</b>	<b>3.67%</b>	<b>5.73%</b>
<b>Cash</b>				
ERS Cash Account	1.05%	1.75%	1.31%	0.72%
ERS Short Term Investments	1.68%	2.14%	1.67%	1.03%
<b>ERS Total Cash</b>	<b>1.35%</b>	<b>1.94%</b>	<b>1.52%</b>	<b>n/a</b>
<b>Total Plan</b>				
<b>ERS Total Plan</b>	<b>5.83%</b>	<b>5.93%</b>	<b>8.14%</b>	<b>8.75%</b>
<b>ERS Total Plan Policy</b>	<b>8.53%</b>	<b>7.61%</b>	<b>9.37%</b>	<b>8.91%</b>

Note: Calculations are prepared using the time-weighted rate-of-return methodology based upon market values.

RETIREMENT SYSTEMS OF ALABAMA

Investment Section

Judicial Retirement Fund

Schedule of Investment Performance

	TIME WEIGHTED RATES OF RETURN - GROSS OF FEE			
	1 Year	3 Years	5 Years	10 Years
<b>U.S. Equity</b>				
JRF S&P 500 Fund	14.10%	11.84%	13.66%	13.53%
JRF Mid Cap Index	-2.07%	2.95%	8.14%	10.54%
JRF S&P Small Cap Index	-7.71%	0.19%	7.75%	11.14%
JRF Large Cap Policy Fund	12.15%	9.58%	13.66%	n/a
<b>JRF Total Domestic Equity</b>	<b>10.61%</b>	<b>9.95%</b>	<b>12.60%</b>	<b>12.99%</b>
<i>JRF Custom Domestic Equity Index</i>	<i>11.43%</i>	<i>10.31%</i>	<i>12.97%</i>	<i>13.14%</i>
<i>S&amp;P 500</i>	<i>15.15%</i>	<i>12.28%</i>	<i>14.15%</i>	<i>13.74%</i>
<i>S&amp;P Mid Cap 400</i>	<i>-2.16%</i>	<i>2.90%</i>	<i>8.11%</i>	<i>10.49%</i>
<i>S&amp;P Smallcap 600</i>	<i>-8.29%</i>	<i>-0.33%</i>	<i>7.20%</i>	<i>10.57%</i>
<b>International Equity</b>				
JRF Emerging Markets Fund	3.82%	-0.30%	7.50%	n/a
JRF International Equities	0.76%	1.33%	5.92%	5.21%
<b>JRF Total International Equity</b>	<b>1.51%</b>	<b>1.13%</b>	<b>6.23%</b>	<b>4.86%</b>
<i>JRF Custom International Equity Index</i>	<i>2.46%</i>	<i>1.04%</i>	<i>5.95%</i>	<i>n/a</i>
<i>MSCI Eafe (Net)</i>	<i>0.49%</i>	<i>0.62%</i>	<i>5.26%</i>	<i>4.62%</i>
<i>MSCI Emerging Markets</i>	<i>10.54%</i>	<i>2.42%</i>	<i>8.97%</i>	<i>2.50%</i>
<b>JRF Total Global Equity</b>	<b>8.57%</b>	<b>7.99%</b>	<b>11.21%</b>	<b>11.20%</b>
<i>JRF Custom Global Equity Index</i>	<i>9.45%</i>	<i>8.26%</i>	<i>11.44%</i>	<i>11.25%</i>
<b>Fixed Income</b>				
JRF Domestic Fixed Income	7.28%	5.19%	4.37%	4.01%
<i>JRF Custom Domestic Fixed Index</i>	<i>7.58%</i>	<i>5.59%</i>	<i>4.58%</i>	<i>3.95%</i>
<i>Barclays Aggregate Bond</i>	<i>6.98%</i>	<i>5.24%</i>	<i>4.18%</i>	<i>3.64%</i>
<b>JRF Total Fixed Income</b>	<b>7.28%</b>	<b>5.19%</b>	<b>4.37%</b>	<b>4.01%</b>
<b>Alternative Investments</b>				
JRF Private Placements	8.13%	8.75%	-30.42%	-13.69%
JRF Preferred And Private Equity	11.23%	1.62%	n/a	n/a
JRF Real Estate	-2.71%	1.18%	4.24%	6.45%
<b>JRF Total Alternatives</b>	<b>-0.33%</b>	<b>2.66%</b>	<b>0.41%</b>	<b>2.89%</b>
<b>JRF Total Fixed Income Plus Alternatives</b>	<b>6.77%</b>	<b>5.02%</b>	<b>4.12%</b>	<b>3.95%</b>
<b>Cash</b>				
JRF Cash Account	1.05%	1.73%	1.30%	0.72%
JRF Short Term Investments	1.76%	2.10%	1.64%	1.03%
<b>JRF Total Cash</b>	<b>1.38%</b>	<b>1.91%</b>	<b>1.47%</b>	<b>n/a</b>
<b>Total Plan</b>				
<b>JRF Total Plan</b>	<b>7.87%</b>	<b>6.98%</b>	<b>8.73%</b>	<b>8.77%</b>
<i>JRF Total Plan Policy</i>	<i>8.53%</i>	<i>7.30%</i>	<i>9.06%</i>	<i>8.94%</i>

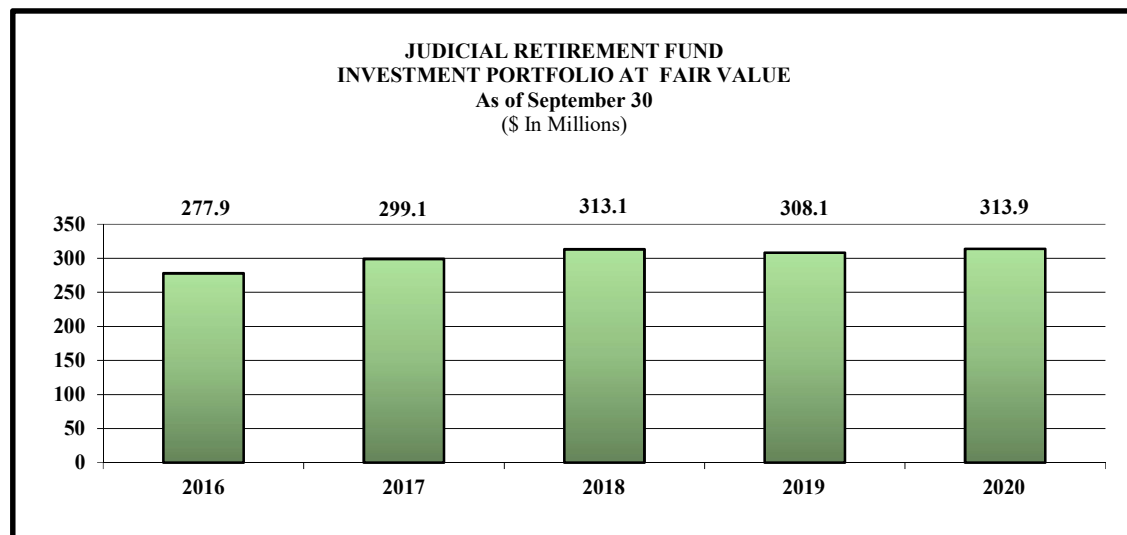
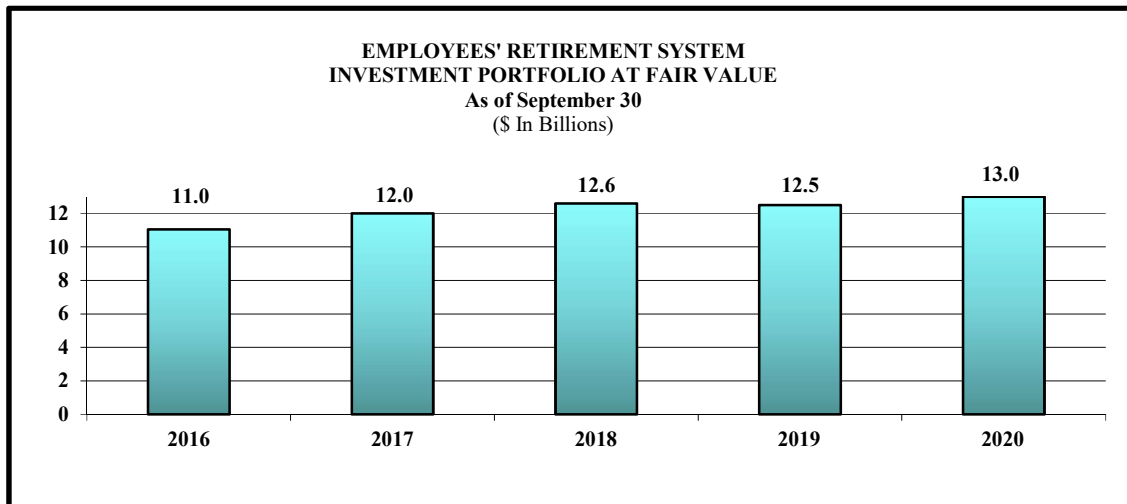
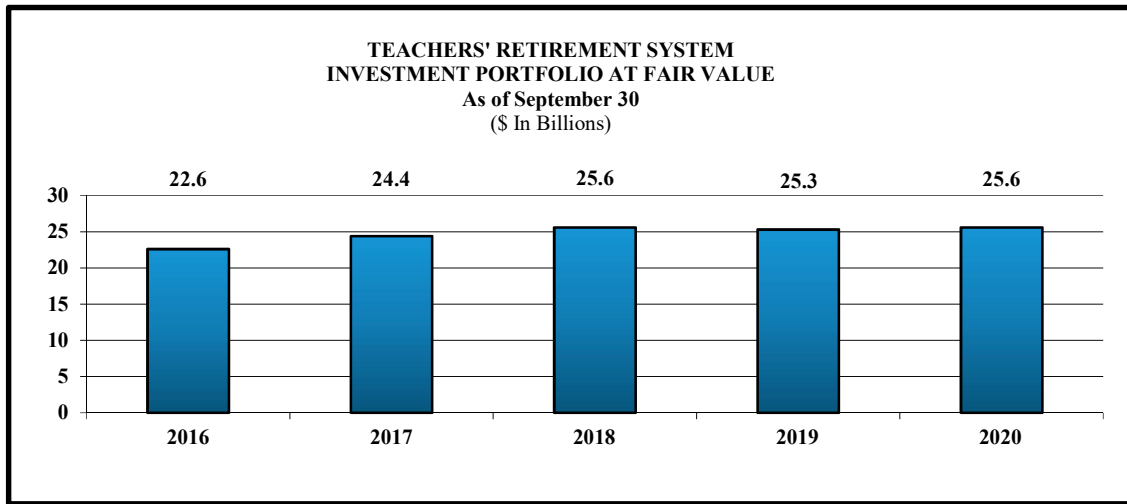
Note: Calculations are prepared using the time-weighted rate-of-return methodology based upon market values.

# RETIREMENT SYSTEMS OF ALABAMA

## Investment Section

### Investment Portfolio at Fair Value

#### Five-Year Comparison

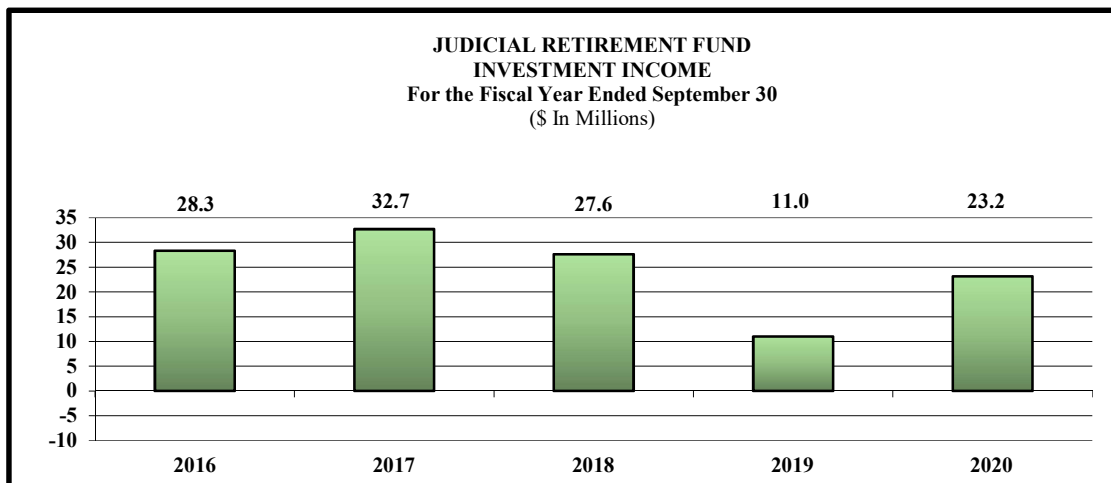
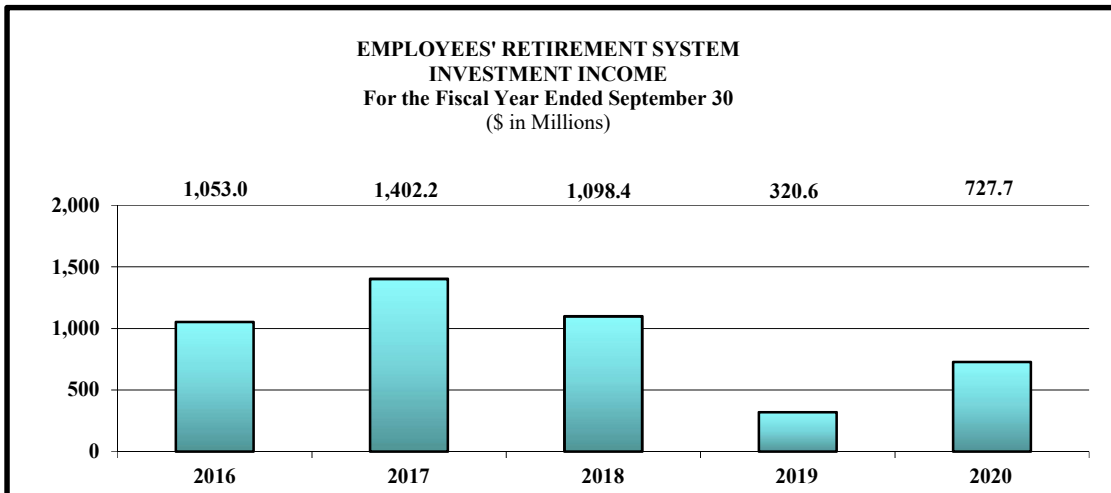
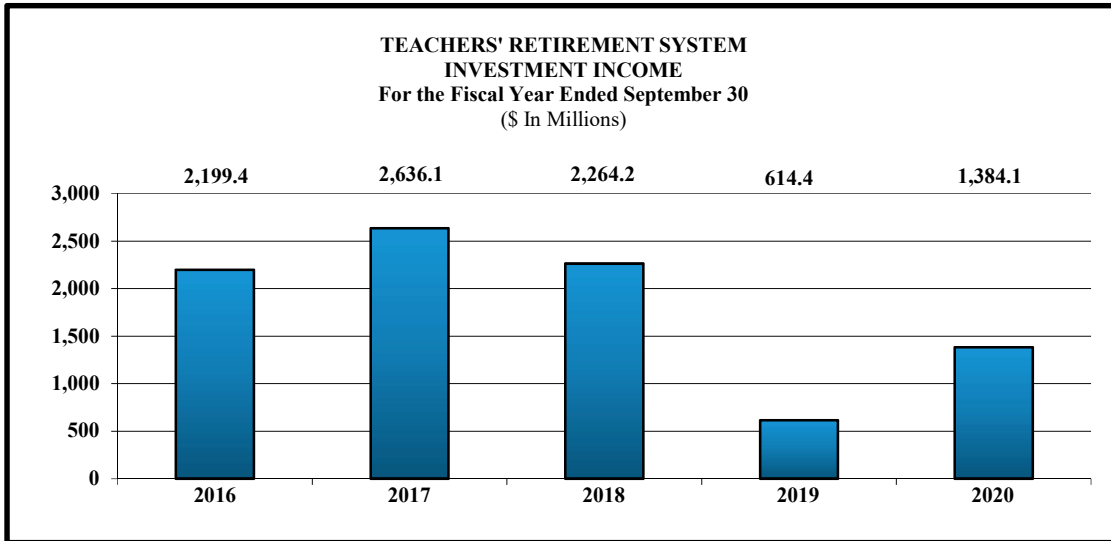


RETIREMENT SYSTEMS OF ALABAMA

Investment Section

Investment Income

Five-Year Comparison

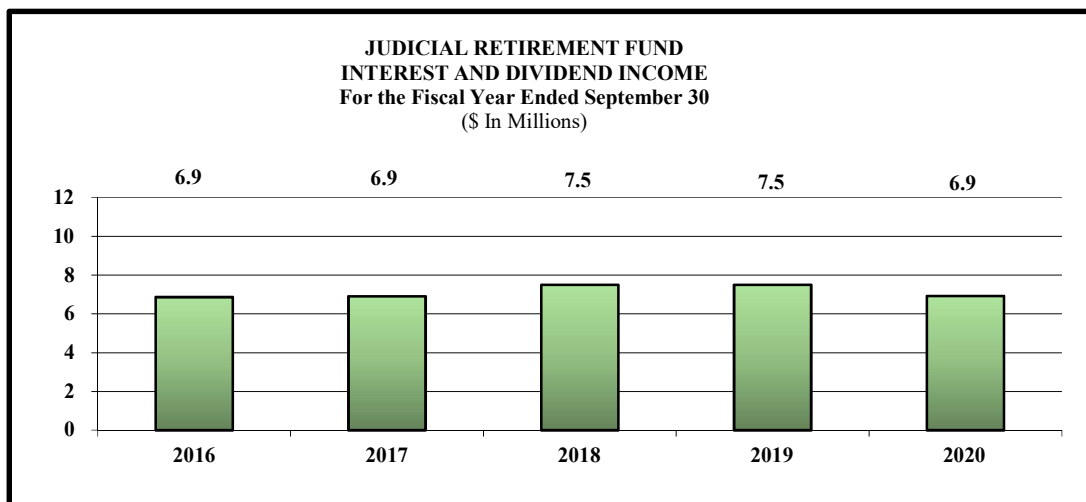
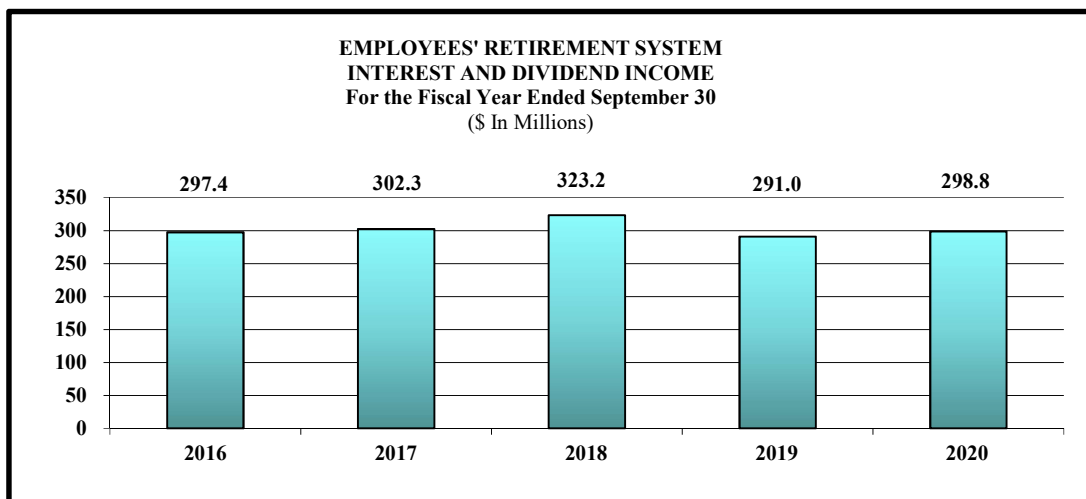
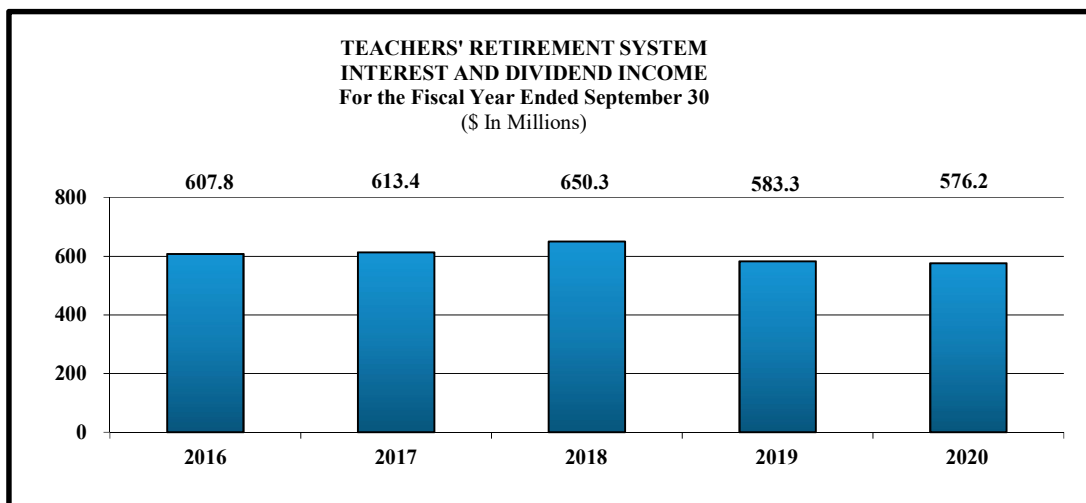


# RETIREMENT SYSTEMS OF ALABAMA

## Investment Section

### Interest and Dividend Income

#### Five-Year Comparison

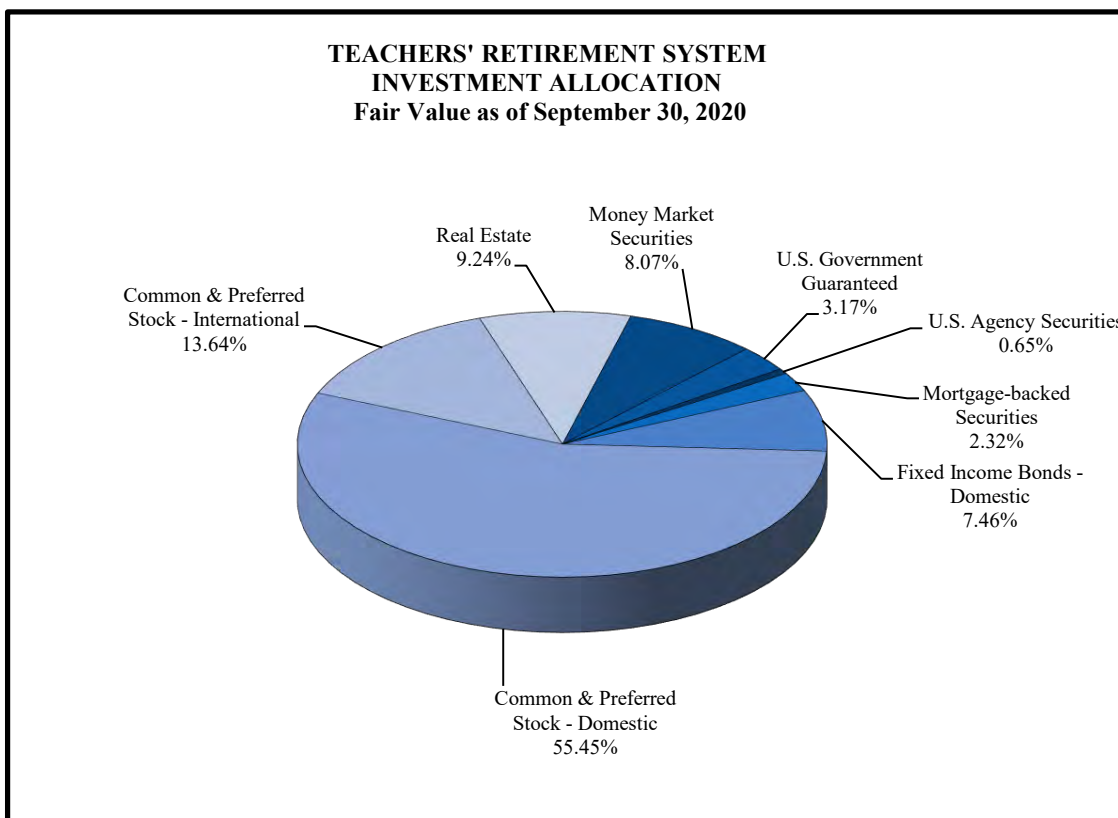


RETIREMENT SYSTEMS OF ALABAMA

Investment Section

Teachers' Retirement System

Investment Allocation and Summary



**TEACHERS' RETIREMENT SYSTEM  
INVESTMENT SUMMARY AT FAIR VALUE**

As of September 30, 2020

(\$ In Thousands)

	<b>Fair Value</b>	<b>% of Fair Value</b>
Money Market Securities and Mutual Funds	\$ 2,066,603	8.07
U.S. Government Guaranteed	812,734	3.17
U.S. Agency Securities	165,566	0.65
Mortgage-backed Securities	594,250	2.32
Fixed Income Bonds		
Domestic	1,910,144	7.46
Common and Preferred Stocks		
Domestic	14,202,366	55.45
International	3,492,991	13.64
Real Estate	2,367,682	9.24
<b>Total Investments</b>	<b>\$ 25,612,336</b>	<b>100.00</b>



**RETIREMENT SYSTEMS OF ALABAMA***Investment Section*

## Teachers' Retirement System

## Largest Stock and Bond Holdings

**TEACHERS' RETIREMENT SYSTEM  
LARGEST STOCK HOLDINGS****September 30, 2020**

(Amounts In Thousands)

	<b>Shares</b>	<b>Stock</b>	<b>Fair Value</b>
1)	13	New Water Street Corporation	\$ 1,259,595
2)	932	Morgan Stanley Small Cap Equity Linked Note	1,073,287
3)	5,369	Apple, Inc.	621,737
4)	2,535	Microsoft Corporation	533,164
5)	11,193	ISHARES MSCI Emerging Markets	493,484
6)	150	Amazon.Com, Inc.	472,952
7)	379	Gray Media Preferred	418,932
8)	809	Facebook, Inc.	212,007
9)	3,527	ISHARES CORE MSCI Emerging Markets	186,250
10)	359	Goldman Sachs MSCI Emerging Markets Equity Linked Note	185,949

**TEACHERS' RETIREMENT SYSTEM  
LARGEST BOND HOLDINGS****September 30, 2020**

(Amounts In Thousands)

	<b>Par</b>	<b>Bonds</b>	<b>Fair Value</b>
1)	74,115	U.S. Treasury, 2.25%, Due 11/15/2024	\$ 80,282
2)	75,311	U.S. Treasury, 2%, Due 12/31/2021	77,061
3)	66,081	Charter Communications, Inc, 5.55%, Due 7/15/2035	75,854
4)	68,666	U.S. Treasury, 2.75%, Due 2/15/2024	74,621
5)	59,993	U.S. Treasury, 2.25%, Due 8/15/2046	70,989
6)	75,351	SIO2 Medical Products, Inc, 8%, Due 12/31/2021	68,675
7)	51,331	U.S. Treasury, 3%, Due 5/15/2042	68,350
8)	50,781	U.S. Treasury, 2.5%, Due 2/15/2045	62,619
9)	61,232	U.S. Treasury, 2.125%, Due 8/15/2021	62,294
10)	52,831	U.S. Treasury, 2.5%, Due 5/15/2024	57,239

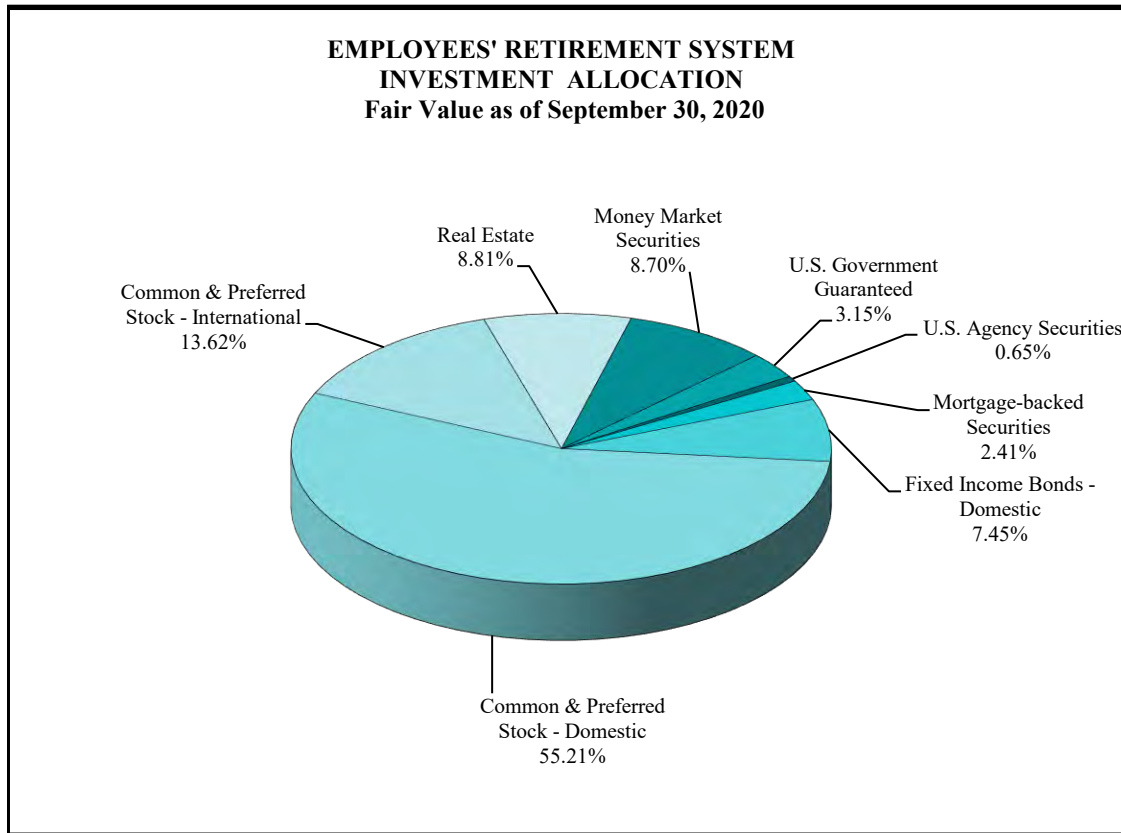
A complete list of portfolio holdings is available upon request.

RETIREMENT SYSTEMS OF ALABAMA

Investment Section

Employees' Retirement System

Investment Allocation and Summary



**EMPLOYEES' RETIREMENT SYSTEM  
INVESTMENT SUMMARY AT FAIR VALUE**

As of September 30, 2020

(\$ In Thousands)

	Fair Value	% of Fair Value
Money Market Securities and Mutual Funds	\$ 1,134,949	8.70
U.S. Government Guaranteed	411,122	3.15
U.S. Agency Securities	84,553	0.65
Mortgage-backed Securities	313,882	2.41
Fixed Income Bonds		
Domestic	971,565	7.45
Common and Preferred Stocks		
Domestic	7,197,425	55.21
International	1,775,891	13.62
Real Estate	1,148,110	8.81
<b>Total Investments</b>	<b>\$ 13,037,497</b>	<b>100.00</b>

## RETIREMENT SYSTEMS OF ALABAMA

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### *Investment Section*

#### Employees' Retirement System

#### Largest Stock and Bond Holdings

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### EMPLOYEES' RETIREMENT SYSTEM

#### LARGEST STOCK HOLDINGS

September 30, 2020

(Amounts in Thousands)

	<u>Shares</u>	<u>Stock</u>	<u>Fair Value</u>
1)	6	New Water Street Corporation	\$ 578,747
2)	383	Morgan Stanley Small Cap Equity Linked Note	441,396
3)	2,733	Apple, Inc.	316,458
4)	271	Gray Media Preferred	298,990
5)	1,289	Microsoft Corporation	271,051
6)	77	Amazon.Com, Inc.	241,574
7)	5,264	ISHARES MSCI Emerging Markets	232,081
8)	3,052	ISHARES CORE MSCI Emerging Markets	161,124
9)	412	Facebook, Inc.	107,873
10)	205	Goldman Sachs MSCI Emerging Markets Equity Linked Note	106,090

### EMPLOYEES' RETIREMENT SYSTEM

#### LARGEST BOND HOLDINGS

September 30, 2020

(Amounts In Thousands)

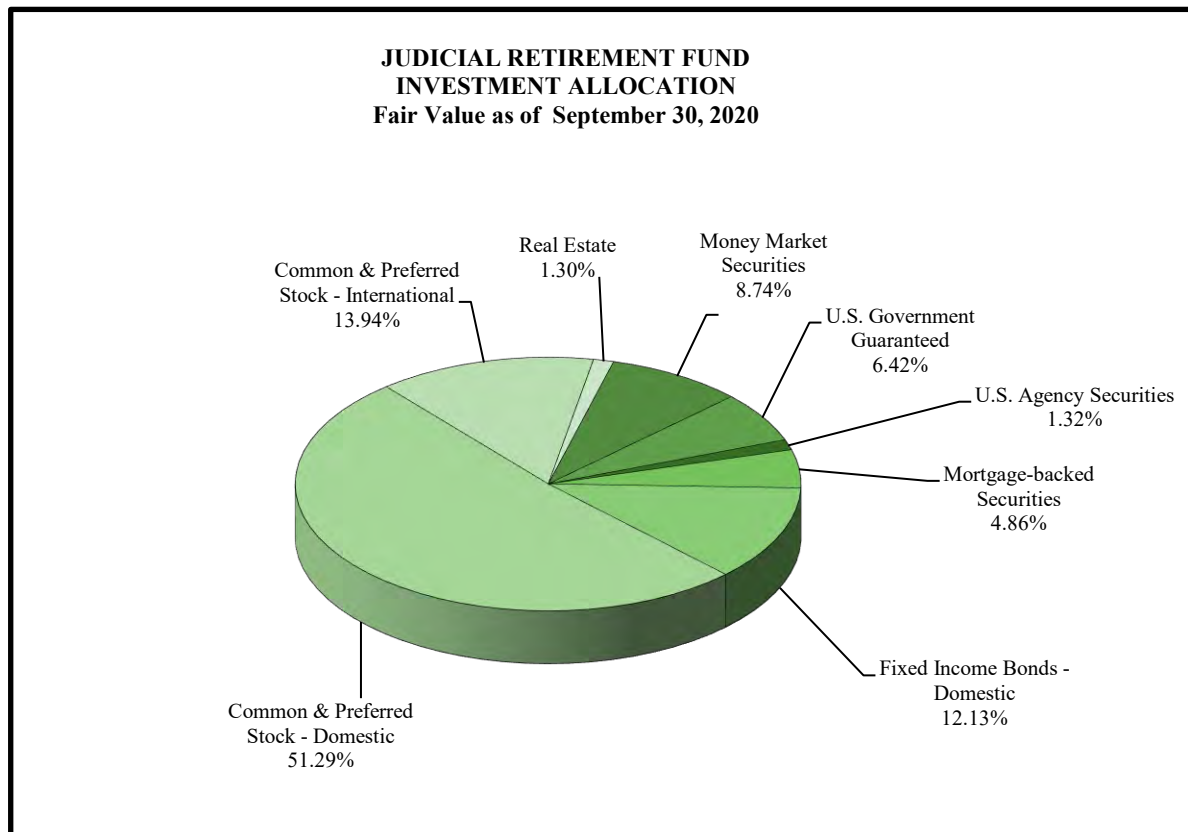
	<u>Par</u>	<u>Bonds</u>	<u>Fair Value</u>
1)	41,928	U.S. Treasury, 2%, Due 12/31/2021	\$ 42,902
2)	37,516	U.S. Treasury, 2.25%, Due 11/15/2024	40,637
3)	32,547	Charter Communications, Inc, 5.55%, Due 7/15/2035	37,361
4)	29,289	U.S. Treasury, 2.25%, Due 8/15/2046	34,657
5)	31,457	U.S. Treasury, 2.75%, Due 2/15/2024	34,185
6)	25,604	U.S. Treasury, 3%, Due 5/15/2042	34,093
7)	33,301	U.S. Treasury, 2.125%, Due 8/15/2021	33,879
8)	37,113	SIO2 Medical Products, Inc, 8%, Due 12/31/2021	33,825
9)	29,362	U.S. Treasury, 2.5%, Due 5/15/2024	31,812
10)	23,578	U.S. Treasury, 2.5%, Due 2/15/2045	29,075

A complete list of portfolio holdings is available upon request.

Investment Section

Judicial Retirement Fund

Investment Allocation and Summary



**JUDICIAL RETIREMENT FUND  
INVESTMENT SUMMARY AT FAIR VALUE  
As of September 30, 2020**

(\$ In Thousands)

	<b>Fair Value</b>	<b>% of Fair Value</b>
Money Market Securities and Mutual Funds	\$ 27,435	8.74
U.S. Government Guaranteed	20,140	6.42
U.S. Agency Securities	4,151	1.32
Mortgage-backed Securities	15,260	4.86
Fixed Income Bonds		
Domestic	38,086	12.13
Common and Preferred Stocks		
Domestic	160,978	51.29
International	43,757	13.94
Real Estate	4,080	1.30
<b>Total Investments</b>	<b>\$ 313,887</b>	<b>100.00</b>

**RETIREMENT SYSTEMS OF ALABAMA***Investment Section*

## Judicial Retirement Fund

## Largest Stock and Bond Holdings

**JUDICIAL RETIREMENT FUND  
LARGEST STOCK HOLDINGS****September 30, 2020**

(Amounts in Thousands)

	<b>Shares</b>	<b>Stock</b>	<b>Fair Value</b>
1)	8	Morgan Stanley Small Cap Equity Linked Note	\$ 9,669
2)	75	Apple, Inc.	8,663
3)	35	Microsoft Corporation	7,406
4)	143	ISHARES MSCI Emerging Markets	6,290
5)	2	Amazon.Com, Inc.	6,238
6)	*	New Water Street Corporation	4,080
7)	11	Facebook, Inc.	2,930
8)	4	Goldman Sachs MSCI Emerging Markets Equity Linked Note	2,148
9)	1	Alphabet, Inc. CL A	2,049
10)	1	Alphabet, Inc. CL C	2,007

\* Less than 1,000 shares

**JUDICIAL RETIREMENT FUND  
LARGEST BOND HOLDINGS****September 30, 2020**

(Amounts In Thousands)

	<b>Par</b>	<b>Bonds</b>	<b>Fair Value</b>
1)	3,986	U.S. Treasury, 2.5%, Due 5/15/2024	\$ 4,319
2)	2,042	U.S. Treasury, 2.25%, Due 11/15/2024	2,212
3)	1,871	U.S. Treasury, 2.75%, Due 2/15/2024	2,033
4)	1,619	U.S. Treasury, 2.5%, Due 2/15/2045	1,996
5)	1,794	U.S. Treasury, 2.125%, Due 8/15/2021	1,825
6)	1,340	U.S. Treasury, 3%, Due 5/15/2042	1,784
7)	1,319	GE Capital Intl Funding Co, 2.342%, Due 11/15/2020	1,322
8)	1,169	U.S. Treasury, 2.375%, Due 8/15/2024	1,267
9)	996	Charter Communications, Inc, 5.55%, Due 7/15/2035	1,144
10)	1,036	U.S. Treasury, 2%, Due 1/15/2021	1,042

A complete list of portfolio holdings is available upon request.

RETIREMENT SYSTEMS OF ALABAMA

*Investment Section*

Broker Commissions Paid

For the Fiscal Year Ended September 30, 2020

	Stock		Commissions (000's)	Fixed Securities Commissions (000's)	Total Commissions (000's)
	Commissions Per Share	# of Shares (000's)			
Bank of America Merrill Lynch	0.017	17,259	295	266	561
Barclays	0.050	457	23	70	93
Bernstein	0.045	11,845	536	-	536
Citigroup	0.050	8,029	399	295	694
Convergex	0.038	9,185	345	-	345
Cornerstone	0.050	1,871	93	-	93
Cowen	0.043	4,839	207	-	207
Credit Suisse	0.050	2,003	100	54	154
Goldman Sachs	0.009	14,785	137	236	373
Harbor Financial	0.050	500	25	-	25
International Strategy and Investment - ISI	0.048	11,383	546	-	546
Issuer Designated	-	-	-	864	864
Jefferies	0.050	2,006	100	-	100
JP Morgan Chase	0.049	3,893	192	341	533
Keybanc Capital Markets	0.050	1,985	99	31	130
Leerink Swann	0.050	1,245	62	-	62
Morgan Stanley	0.030	42,722	1,287	197	1,484
National Bank of Commerce - NBC Securities	0.050	1,600	80	-	80
Oppenheimer & Co.	-	-	-	14	14
Raymond James & Associates	0.050	1,300	65	-	65
Renaissance Macro Securities - Renmac	0.050	4,904	245	-	245
Royal Bank of Canada - RBC	0.049	9,656	478	103	581
Securities Capital	0.050	500	25	-	25
Southwest Securities	0.050	300	15	-	15
Stifel Nicolaus	0.048	10,417	500	49	549
Strategas	0.023	15,584	364	-	364
Suntrust	-	-	-	52	52
Union Bank of Switzerland - UBS	0.050	1,399	70	-	70
Wells Fargo	0.023	21,255	496	98	594
Wolfe Research Securities	0.050	2,923	146	-	146
<b>Totals</b>		<b>203,845</b>	<b>\$ 6,930</b>	<b>\$ 2,670</b>	<b>\$ 9,600</b>

**Average Commission Per Share of Stock = \$ 0.0340**

Note: Certain Broker agreements include provisions for commission sharing.

# Actuarial Section

## Component Units of the State of Alabama Comprehensive Annual Financial Report





# Cavanaugh Macdonald

CONSULTING, LLC

*The experience and dedication you deserve*

June 17, 2020

Board of Control  
Teachers' Retirement System  
of Alabama

Dear Board Members:

The basic funding objectives of the Teachers' Retirement System of Alabama (TRS) is to accumulate sufficient assets during a member's employment to fully finance the benefits the member is expected to receive throughout retirement.

TRS maintains a funding policy that was effective September 30, 2012 and last amended as of September 30, 2019. In order to meet the objectives listed above, the System will strive to meet the following funding objectives:

- To maintain an increasing funded ratio (ratio of system actuarial value of assets to actuarial accrued liabilities) that reflects a trend of improved actuarial condition. The long-term objective is to attain a funded ratio which is consistent with the fiscal health and long-term stability of the System.
- To maintain adequate asset levels to finance the benefits promised to members and monitor the future demands for liquidity.
- To develop a pattern of contribution rates expressed as a percentage of member payroll as measured by valuations prepared in accordance with applicable State laws and the principles of practice prescribed by the Actuarial Standards Board. In no event will the employer contribution rate be negative.
- To provide intergenerational equity for taxpayers with respect to System costs.

To track progress in achieving the funding objectives, the following benchmarks are measured annually as of the valuation date:

- **Funded ratio** – The funded ratio, defined as the actuarial value of assets divided by the actuarial accrued liability, should increase over time, before adjustments for changes in benefits, actuarial methods, and/or actuarial assumptions. An open amortization period is one for which the amortization period is recalculated on a yearly basis and the ending date of the amortization period is a variable with each recalculation. A closed amortization period is one which is calculated over a fixed period and at the end of that period, the amount is fully amortized.
- **Unfunded Actuarial Accrued Liability (UAAL)**
  - **Transitional UAAL** - The UAAL established as of the initial valuation date for which this funding policy is adopted shall be known as the Transitional UAAL (applicable only to employers participating in the System as of the adoption date of the funding policy).
  - **New Incremental UAAL** - Each subsequent valuation will produce a New Incremental UAAL consisting of all benefit changes, assumption and method changes and experience gains and/or losses that have occurred since the previous valuation.
- **UAAL Amortization Period and Contribution Rates)**
  - In each valuation 1/15th of the Transitional UAAL will be amortized over a closed period. The closed period shall be the amortization period for the valuation preceding the adoption of the funding policy not to exceed 30 years. The remaining Transitional UAAL each year will be amortized over an open period. The open period shall be the amortization period for the valuation preceding the adoption of the funding policy not to exceed 30 years. After 15 years the entire Transitional UAAL will be closed.





Board of Control  
June 17, 2020  
Page 2

- Each New Incremental UAAL shall be amortized over a closed 30 year period.
- Incremental UAAL resulting from plan changes that grant benefit improvements shall be amortized over a period not to exceed 15 years.
- Employer Normal Contribution Rate – the contribution rate determined as of the valuation date each year based on the provisions of Alabama Code Section 16-25-21.
- In each valuation subsequent to the adoption of this funding policy the required employer contribution rate will be determined by the summation of the employer Normal Contribution Rate, a contribution rate for administrative expenses, a contribution rate for the pre-retirement death benefit fund, a contribution rate for the term life insurance fund, the individual amortization rate for each of the New Incremental UAAL bases, the individual amortization rate for each of the 15 closed periods for the Transitional UAAL and the amortization of any remaining open portion of the Transitional UAAL.

In order to measure progress toward this fundamental objective and funding policy, TRS has an annual actuarial valuation performed. The valuation (i) measures present financial position, and (ii) establishes contribution rates that provide for the normal cost and level percent of payroll amortization of unfunded actuarial accrued liability in accordance with the funding policy. The latest completed actuarial valuation was based upon data and assumptions as of September 30, 2019. This valuation indicates that the current employer contribution rates of 12.43% of payroll for Tier I members and 11.32% of payroll for Tier II members, for benefits then in effect, meet the basic financial objective and the goals of the funding policy as listed above. There are 136,325 active members as of September 30, 2019.

The actuarial valuation is based upon financial and participant data which is prepared by the retirement system staff, assumptions regarding future rates of investment return and inflation, and rates of retirement, turnover, death and disability among TRS members and their beneficiaries. The data are reviewed by us for internal and year to year consistency as well as general reasonableness prior to its use in the actuarial valuation. It is also summarized and tabulated for the purpose of analyzing trends. The assumptions were adopted by the Board of Control and were based upon actual experience of TRS during the years October 1, 2010 to September 30, 2015. Assets are valued according to a market related method that recognizes 20% of the difference between market value and expected value each year. The assumptions and methods utilized in this valuation, in our opinion, meet the parameters established by the Actuarial Standards of Practice.

The current benefit structure is outlined in the Actuarial Section. There have been no changes since the previous valuation.



Board of Control  
June 17, 2020  
Page 3

We provided the following information and supporting schedules in the Actuarial and Statistical Sections:

- Summary of Actuarial Assumptions and Methods
- Actuarial Cost Method
- Summary of Plan Provisions as Interpreted for Valuation Purposes
- Schedule of Funding Progress
- Solvency Test
- Analysis of Actuarial Gains and Losses
- Schedule of Active Member Valuation Data
- Schedule of Retirants and Beneficiaries Added and Removed from Rolls
- Retired Members by Type of Benefit as of September 30, 2019
- Ten-Year History of Average Monthly Benefit Payments as of September 30

**Based upon the valuation results and the presumption that future contributions will be made at the necessary level to ensure adequate funding and to meet accounting standards, it is our opinion that the Teachers' Retirement System of Alabama continues in sound condition in accordance with the actuarial principles of level percent of payroll financing.**

Sincerely yours,

A handwritten signature in blue ink, appearing to read 'LL', enclosed in a rectangular box.

Larry Langer, ASA, EA, FCA, MAAA  
Principal and Consulting Actuary

A handwritten signature in blue ink that reads 'Cathy Turcot'.

Cathy Turcot  
Principal and Managing Director

A handwritten signature in blue ink that reads 'Edward J. Koebel'.

Edward Koebel, EA, FCA, MAAA  
Chief Executive Officer

**Summary of Actuarial Assumptions and Methods**

The assumptions and methods used in the valuation were selected based on the actuarial experience study prepared as of September 30, 2015, submitted to and adopted by the Board on September 13, 2016. The discount rate of 7.70% was subsequently adopted by the Board on December 4, 2018.

**Ultimate Investment Rate of Return:** 7.70% per annum, compounded annually, including price inflation at 2.75%.

**Salary Increases:** Representative values of the assumed annual rates of future salary increases are as follows and include wage inflation at 3.00% per annum:

Years of Service	Annual % Rate
0	5.00
1 - 5	4.00
6 - 10	3.75
11 - 15	3.50
16 & Over	3.25

**Separations before Service Retirement:** Representative values of the assumed annual rates of death, disability, and withdrawal are as follows:

Male							
Annual % Rate of							
		Disability**		Withdrawal***			
		Years of Service		Years of Service			
Age	Death*	0-24	25+	0-4	5-9	10-20	20+
20	0.02	0.00		25.00			
25	0.03	0.03		14.80	11.00		
30	0.04	0.04		13.80	5.40	3.50	
35	0.07	0.13		13.50	5.40	2.50	0.50
40	0.09	0.17		13.00	5.40	2.25	0.50
45	0.13	0.27	0.20	13.00	5.40	2.25	0.75
50	0.18	0.60	0.20	12.00	5.00	2.50	0.80
55	0.25	0.90	0.20	11.50	5.00	2.50	0.90
60	0.38	0.50	0.50	12.00	4.50	2.50	0.90
65	0.54	0.50	0.50	12.00	6.00		
69	0.63	0.50	0.50	12.00	6.25		

\*Rates of pre-retirement mortality are according to the sex distinct RP-2000 Employee Mortality Table Projected with Scale BB to 2020 with an adjustment factor of 90% for males and 60% for females.

\*\*No rates of disability are assumed for members with less than 10 years of service.

\*\*\*No rates of withdrawal are assumed after eligibility for service retirement.

RETIREMENT SYSTEMS OF ALABAMA

Actuarial Section

Teachers' Retirement System

Summary of Actuarial Assumptions and Methods (Continued)

		Female					
		Annual % Rate of					
		Disability**		Withdrawal***			
		Years of Service		Years of Service			
Age	Death*	0-24	25+	0-4	5-9	10-20	20+
20	0.01	0.10		25.00			
25	0.01	0.03		12.75	9.00		
30	0.01	0.04		13.50	5.80	4.30	
35	0.02	0.10		13.50	5.00	2.60	1.50
40	0.04	0.20		11.50	4.75	2.00	1.50
45	0.06	0.35	0.20	10.75	4.10	2.00	0.50
50	0.09	0.65	0.20	10.75	3.90	2.20	0.75
55	0.14	1.05	0.20	11.00	4.20	2.40	0.80
60	0.19	0.50	0.50	12.00	4.50	2.70	1.00
65	0.27	0.50	0.50	15.00	6.75		
69	0.34	0.50	0.50	15.00	7.25		

\*Rates of pre-retirement mortality are according to the sex distinct RP-2000 Employee Mortality Table Projected with Scale BB to 2020 with an adjustment factor of 90% for males and 60% for females.

\*\*No rates of disability are assumed for members with less than 10 years of service.

\*\*\*No rates of withdrawal are assumed after eligibility for service retirement.

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**Service Retirement:**

The assumed annual rates of service retirement for Tier 1 members upon attaining 25 years of service:

<b>Age Group</b>	<b>Annual % Rate</b>	
	<b>Male*</b>	<b>Female **</b>
47 & Under	25.00	28.00
48	25.00	20.00
49	20.00	17.00
50	16.50	13.00
51 - 53	16.00	15.00
54	16.00	17.00
55	16.00	18.00
56 - 57	16.00	19.00
58	16.00	21.00
59	20.00	22.00
60	20.00	30.00
61	20.00	27.50
62	35.00	45.00
63	30.00	35.00
64	23.00	32.00
65	28.00	38.00
66	27.00	40.00
67	22.00	35.00
68	22.00	37.00
69 - 70	22.00	30.00
71 - 74	20.00	30.00
75	100.00	100.00

\*For males, retirement rates are increased by 5% in the first year attaining 25 years of service from age 51 through age 60.

\*\*For females, retirement rates are increased by 9% in the first year attaining 25 years of service from age 50 to 59.

The assumed annual rates of service retirement for Tier 1 members who are first eligible for unreduced benefits before attaining 25 years of service:

<b>Age</b>	<b>Annual % Rate</b>	
	<b>Male</b>	<b>Female</b>
60	12.50	17.00
61	11.00	13.50
62	25.00	23.50
63	18.50	18.00
64	15.00	17.00
65	28.00	28.00
66	27.00	28.00
67	22.00	23.00
68	22.00	27.00
69	22.00	22.00
70	22.00	26.00
71 to 74	20.00	24.00
75 & Above	100.00	100.00

RETIREMENT SYSTEMS OF ALABAMA

*Actuarial Section*

Teachers' Retirement System

Summary of Actuarial Assumptions and Methods (Continued)

The assumed annual rates of service retirement for Tier 2 members are as follows:

Age	Annual % Rate			
	Male*		Female**	
	Less than 25 years of service	25 or more years of service	Less than 25 years of service	25 or more years of service
62	50.00	60.00	50.00	70.00
63	18.50	30.00	18.00	35.00
64	15.00	23.00	17.00	32.00
65	28.00	28.00	28.00	38.00
66	27.00	27.00	28.00	40.00
67	22.00	22.00	23.00	35.00
68	22.00	22.00	27.00	37.00
69	22.00	22.00	22.00	30.00
70	22.00	22.00	26.00	30.00
71 to 74	20.00	20.00	24.00	30.00
75 & Above	100.00	100.00	100.00	100.00

\*For FLC Tier II members, rates on or after age 60 are the same as those for Tier I, while rates from ages 56 to 59 are equal to 0.20 for service less than 25 years and 0.30 for service greater than or equal to 25 years.

\*\*For FLC Tier II members, rates on or after age 60 are the same as those for Tier I, while rates from ages 56 to 59 are equal to 0.20 for service less than 25 years and 0.40 for service greater than or equal to 25 years.

**Deaths after Retirement:** Rates of mortality for the period after service retirement are according to the RP-2000 White Collar Mortality Table Projected to 2020 using scale BB and adjusted 115% for all ages for males and 112% for ages 78 and over for females. The rates of disabled mortality were based on the RP-2000 Disabled Mortality Table projected to 2020 using scale BB and adjusted 105% for males and 120% for females. Representative values of assumed mortality are as follows:

Age	Annual % Rate of Death After			
	Service Retirement		Disability Retirement	
	Male	Female	Male	Female
55	0.36	0.23	3.50	1.79
60	0.56	0.38	3.84	2.14
65	0.99	0.68	4.14	2.64
70	1.64	1.19	4.86	6.55
75	2.86	2.02	6.37	4.92
80	5.05	3.79	8.45	6.82
85	8.89	6.52	10.99	9.45
90	16.43	11.32	15.44	13.47

**Spousal Benefits:** For those eligible for spousal benefits, it is assumed that 75% will elect the lump sum death benefit payable from the death benefit fund and 25% will elect the spousal benefit payable from the pension accumulation fund and included in the liabilities of the System.

**Benefits Payable upon Separation from Service:** For active members who separate from service prior to eligibility for a service retirement allowance, the liability is assumed to be the greater of the value of the refund of contributions or the value of the deferred annuity.

**Unused Sick Leave:** 3% load on service retirement liabilities for Tier 1 active members. No load for Tier 2 active members.

**Percentage Married:** 100% of active members are assumed to be married with the husband 3 years older than the wife.

**Valuation Method:** Individual entry age normal method. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability.

**Assets Method:** Actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected value. In order to reduce short-term volatility in valuation results and because the market value and actuarial value of assets were close in value, the actuarial value of assets was set equal to the market value on September 30, 2013. 5-year smoothing commenced again beginning September 30, 2013.

**Liability for Current Inactive Members:** Member Contribution Balance is multiplied by a factor of 2.0 for vested members with incomplete data and 1.0 for other inactive members.

**Liability for Post-DROP Active Members:** Members are assumed to retire immediately and receive their accrued benefit.

**COLA:** No future ad hoc cost of living adjustments (COLAs) are assumed.

**Future Service Credit:** One year of creditable service per year of employment.

### **Actuarial Cost Method**

1. The valuation is prepared on the projected benefit basis, which is used to determine the present value of each member's expected benefit payable at retirement or death. The calculations are based on the member's age, years of service, sex, compensation, expected future salary increases, and an assumed future interest earnings rate (currently 7.70%). The calculations consider the probability of a member's death or termination of employment prior to becoming eligible for a benefit and the probability of the member terminating with a service, disability, or survivor's benefit. The present value of the expected benefits payable to active members is added to the present value of the expected future payments to retired members and beneficiaries to obtain the present value of all expected benefits payable to the present group of members and beneficiaries.
2. The employer contributions required to support the benefits of the System are determined following a level funding approach and consist of a normal contribution and an accrued liability contribution.
3. The normal contribution is determined using the "individual entry age normal" method. Under this method, a calculation is made to determine the uniform and constant percentage rate of employer contributions which, if applied to the compensation of each new member during the entire period of the member's anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on the member's behalf.
4. The unfunded accrued liability contributions are determined by subtracting the current assets held by the System and the present value of prospective employer normal contributions and member contributions from the present value of expected benefits to be paid from the System.

### **Summary of Plan Provisions as Interpreted for Valuation Purposes**

The Teachers' Retirement System of Alabama (TRS) was established on September 15, 1939, and became effective September 30, 1941. The valuation took into account amendments to the System effective through the valuation date. The following summary describes the main benefit and contribution provisions of the System as interpreted for the valuation.

#### **Definitions**

**Average Final Compensation** – The average compensation of a Tier 1 member is calculated using compensation for the 3 highest years in the last 10 years of creditable service. The average compensation of a Tier 2 member is calculated using compensation for the 5 highest years in the last 10 years of creditable service.

**Membership Service** – all service rendered while a member of the System and for which contributions are made.

**Creditable Service** – the sum of membership service, prior service, and any other service established as creditable in accordance with the provisions of the retirement law.

**Annuity** – payments for life derived from the accumulated contributions of a member.

**Pension** – payments for life derived from the accumulated contributions of an employer.

**Retirement Allowance** – the sum of the annuity and pension payments.



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## Benefits

### Service Retirement Allowance

#### Condition for Allowance

Tier 1 - The service retirement allowance is payable upon the request of a member who has completed 25 years of creditable service or who has attained age 60 and completed at least 10 years of creditable service.

Tier 2 - The service retirement allowance is payable upon the request of a member who has completed at least 10 years of creditable service and who has attained age 62 (age 56 with 10 years of creditable service for certified law enforcement, correctional officers, and firefighters).

#### Amount of Allowance

Tier 1 - Upon service retirement, a member receives a retirement allowance equal to 2.0125% of the member's average final compensation multiplied by the number of years of creditable service. At retirement, a member receives one additional year of creditable service in determining the retirement allowance for each five years of service as certified law enforcement, correctional officer, or firefighter.

Tier 2 - Upon service retirement, a member receives a retirement allowance equal to 1.65% of their average final compensation multiplied by the number of years of creditable service. The benefit is capped at 80% of the member's average final compensation.

Tier 1 & 2 - Members may elect to receive a reduced retirement allowance in order to provide an allowance to a designated beneficiary after the member's death (see "Special Privileges at Retirement").

### Disability Retirement Allowance

#### Condition for Allowance

A disability retirement allowance may be granted to a member who has completed at least 10 years of creditable service and becomes permanently incapacitated for duty before reaching eligibility for a service retirement.

#### Amount of Allowance

Tier 1 - Upon disability retirement, a member receives a retirement allowance equal to 2.0125% of the member's average final compensation multiplied by the number of years of creditable service. At retirement, a member receives one additional year of creditable service in determining the retirement allowance for each five years of service as certified law enforcement, correctional officer, or firefighter.

Tier 2 - Upon disability retirement, a member receives a retirement allowance equal to 1.65% of the member's average final compensation multiplied by the number of years of creditable service. The benefit is capped at 80% of the member's average final compensation.

Tier 1 & 2 - Members may elect to receive a reduced retirement allowance in order to provide an allowance to a designated beneficiary after the member's death (see "Special Privileges at Retirement").

### Benefits Payable upon Separation of Service

A member who withdraws from service is entitled to receive his or her contributions with allowable interest. A member who has completed 10 years of creditable service may, after separation from service, continue membership in the System and file for service retirement after reaching age 60 for Tier 1 members and age 62 for Tier 2 members.

## RETIREMENT SYSTEMS OF ALABAMA

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### *Actuarial Section*

#### Teachers' Retirement System

#### Summary of Plan Provisions (Continued)

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##### Benefits Payable upon Death in Active Service

In the event of the death of a member eligible for service retirement, the designated beneficiary may elect (1) to exercise Option 3 as defined under "Special Privileges at Retirement" or (2) to receive a return of member contributions and total earned interest plus a death benefit payable from the Pre-retirement Death Benefit Fund equal to the salary on which retirement contributions were made for the previous scholastic year (July 1-June 30).\*

In the event of the death of a member with more than one year of service who is not eligible to retire, the designated beneficiary shall receive the return of member contributions and total earned interest. Also, the designated beneficiary shall receive an additional death benefit payable from the Pre-retirement Death Benefit Fund equal to the salary on which retirement contributions were made for the previous scholastic year (July 1-June 30).\*

In the event of a job-related death of a member with less than one year of service, the designated beneficiary shall receive the return of member contributions and total earned interest plus a death benefit payable from the Pre-retirement Death Benefit Fund equal to the annual earnable compensation of the member at the time of death.\*

In the event of the death of a member which is not job-related and who has less than one year of service, the designated beneficiary shall receive the return of member contributions and total earned interest plus a matching death benefit, which is limited to a maximum of \$5,000.

\*However, if the death occurred more than 180 calendar days after the member's last day in pay status, or if the deceased member had applied for a refund of member contributions or terminated employment, the lump sum will be the same as if the member had less than one year of service and the death was not job-related.

##### Special Privileges at Retirement

In lieu of the full retirement allowance, a member may, at retirement, elect to receive a reduced retirement allowance equal in value to the full allowance, with the provision that:

Option 1 - If the member dies before the annuity payments equal the present value of the annuity at the date of retirement, the balance is paid to a designated beneficiary or to the member's estate, or

Option 2 - After the member's death, the member's allowance is continued throughout the life of the designated beneficiary, or

Option 3 - After the member's death, one-half of the member's allowance is continued throughout the life of the designated beneficiary, or

Option 4 - Some other benefit is paid either to the member or to such other person as the member shall designate provided such benefit, together with the reduced retirement allowance, is of equivalent actuarial value to the member's retirement allowance and is approved by the Board of Control.

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Deferred Retirement Option Plan (DROP)

Prior to March 25, 2011, a member could elect to participate in the Deferred Retirement Option Plan (DROP) upon completion of at least 25 years of creditable service (excluding sick leave) and attainment of at least 55 years of age. Under the DROP, the member deferred receipt of a retirement allowance and continued employment for a period of three to five years. At the end of the period, the member withdrew from active service and received the retirement benefit calculated at the time of enrollment in the DROP, and also received a payment for the deferred retirement benefits and employee contributions while participating in the DROP and interest earned on DROP deposits. The effect of Act 2011-27 was that no new participants were allowed to enter the DROP with an effective participation date after June 1, 2011.

Term Life Insurance

Upon the death of a contributing member, a term life insurance benefit of \$15,000 is paid (pro-rated for part-time members).

Member Contributions

Tier 1 - Prior to October 1, 2011, covered members contributed 5% of earnable compensation. From October 1, 2011, to September 30, 2012, covered members contributed 7.25% of earnable compensation. Beginning October 1, 2012, covered members contribute 7.50% of earnable compensation. Prior to October 1, 2011, certified law enforcement, correctional officers, and firefighters contributed 6% of earnable compensation. From October 1, 2011, to September 30, 2012, certified law enforcement, correctional officers, and firefighters contributed 8.25% of earnable compensation. Beginning October 1, 2012, certified law enforcement, correctional officers, and firefighters contribute 8.50% of earnable compensation. DROP participants continue to contribute during the DROP period but receive a refund of these contributions and regular interest upon retirement.

Tier 2 – Covered members contribute 6% of earnable compensation. Certified law enforcement, correctional officers, and firefighters contribute 7% of earnable compensation.

Tier 1 & 2 - If positive investment performance results in a decrease in the total contribution rate paid by employers and employees participating in the System, the Retirement Systems of Alabama shall first reduce the employee contribution rate. “Regular Interest” is 4% which is the rate adopted by the Board and applied to the balance in each member’s account every year; however, if a member receives a refund of contributions, the interest rate applied to the refund is lower than the 4% regular rate (Based on the *Code of Alabama 1975, Section 16-25-20(b)*).

**RETIREMENT SYSTEMS OF ALABAMA***Actuarial Section*

## Teachers' Retirement System

## Supporting Schedules

**Supporting Schedules**

The following table reflects a ten-year history of active member valuation data:

**SCHEDULE OF ACTIVE MEMBER VALUATION DATA**

(Dollar Amounts Not in Thousands)

<b>Valuation Date</b>		<b>Number</b>	<b>Annual Payroll</b>	<b>Annual Average Pay</b>	<b>% Increase/ (Decrease) in Average Pay</b>
9/30/2019	A	136,325	\$ 7,193,832,116	\$ 52,770	7.13
9/30/2018	A	137,161	6,756,474,151	49,259	0.70
9/30/2017	A	136,941	6,698,834,819	48,918	4.00
9/30/2016	A	136,731	6,430,999,445	47,034	1.56
9/30/2015	B	135,986	6,297,938,621	46,313	0.77
9/30/2014	C	135,230	6,214,949,700	45,958	1.48
9/30/2013	D	133,919	6,065,042,345	45,289	2.06
9/30/2012	E	133,791	5,936,831,043	44,374	3.74
9/30/2011	F	135,768	5,807,655,862	42,776	(0.12)
9/30/2010	G	136,290	5,836,902,762	42,827	(0.01)

A - There are no employees currently participating in the DROP program.

B - In addition, there are 699 employees with annual compensation of \$52,847,343 who are currently in the DROP program. Employers of the Retirement System contribute on this payroll.

C - In addition, there are 1,748 employees with annual compensation of \$120,210,805 who are currently in the DROP program. Employers of the Retirement System contribute on this payroll.

D - In addition, there are 3,029 employees with annual compensation of \$198,322,151 who are currently in the DROP program. Employers of the Retirement System contribute on this payroll.

E - In addition, there are 4,436 employees with annual compensation of \$285,484,977 who are currently in the DROP program. Employers of the Retirement System contribute on this payroll.

F - In addition, there are 5,625 employees with annual compensation of \$351,906,404 who are currently in the DROP program. Employers of the Retirement System contribute on this payroll.

G - In addition, there are 5,737 employees with annual compensation of \$346,301,313 who are currently in the DROP program. Employers of the Retirement System contribute on this payroll.

The following table presents a ten-year history of funding progress:

### SCHEDULE OF FUNDING PROGRESS

(Dollar Amounts in Thousands)

Valuation Date	Actuarial Value of Assets (A)	Actuarial	Unfunded	% Funded (A/B)	Covered Payroll (C)	UAAL
		Accrued Liability (AAL) (B)	AAL (UAAL) (B-A)			as a % of Covered Payroll ((B-A)/C)
9/30/2019	\$25,821,326	\$37,215,470	\$11,394,144	69.4	\$7,193,832	158.4
9/30/2018 ***	25,006,419	35,628,398	10,621,979	70.2	6,756,474	157.2
9/30/2017 ***	23,887,077	34,688,078	10,801,001	68.9	6,698,835	161.2
9/30/2016 *	22,645,512	33,143,834	10,498,322	68.3	6,430,999	163.2
9/30/2015	21,740,280	31,844,843	10,104,563	68.3	6,350,786	159.1
9/30/2014	20,809,871	30,837,829	10,027,958	67.5	6,335,161	158.3
9/30/2013	19,629,816	29,665,843	10,036,027	66.2	6,263,364	160.2
9/30/2012 **	18,786,008	28,251,367	9,465,359	66.5	6,222,316	152.1
9/30/2011 ***	19,430,135	28,776,316	9,346,181	67.5	6,159,562	151.7
9/30/2010	20,132,779	28,299,523	8,166,744	71.1	6,183,204	132.1

\*Reflects changes in actuarial assumptions and methods.

\*\*Reflects changes in methods.

\*\*\*Reflects changes in actuarial assumptions.

The following table presents a ten-year history of a solvency test:

### SOLVENCY TEST

(Dollar Amounts in Thousands)

Valuation Date	Aggregate Accrued Liabilities For			Reported Assets	% of Accrued Liabilities Covered by Reported Assets		
	(1)	(2)	(3)		(1)	(2)	(3)
	Active Member Contributions	Retirants and Beneficiaries	Active Members (Employer Financed Portion)				
9/30/2019	\$ 6,100,489	\$ 21,093,665	\$10,021,316	\$25,821,326	100.00	93.00	0.00
9/30/2018 *	5,788,187	20,511,811	9,328,400	25,006,419	100.00	93.00	0.00
9/30/2017 *	5,504,125	19,886,016	9,297,937	23,887,077	100.00	92.00	0.00
9/30/2016 **	5,197,469	19,257,160	8,689,205	22,645,512	100.00	91.00	0.00
9/30/2015	4,894,145	18,621,250	8,329,448	21,740,280	100.00	90.00	0.00
9/30/2014	4,589,021	18,104,369	8,144,439	20,809,871	100.00	90.00	0.00
9/30/2013	4,261,269	17,666,932	7,737,642	19,629,816	100.00	87.00	0.00
9/30/2012 ***	3,921,179	17,085,972	7,244,216	18,786,008	100.00	87.00	0.00
9/30/2011 *	3,620,301	17,245,088	7,910,927	19,430,135	100.00	92.00	0.00
9/30/2010	3,498,959	16,083,293	8,717,271	20,132,779	100.00	100.00	6.30

\*Reflects changes in actuarial assumptions.

\*\* Reflects changes in actuarial assumptions and methods.

\*\*\*Reflects changes in methods.

RETIREMENT SYSTEMS OF ALABAMA

Actuarial Section

Teachers' Retirement System

Supporting Schedules (Continued)

The following table presents a ten-year history of retirants and beneficiaries:

**SCHEDULE OF RETIRANTS AND BENEFICIARIES ADDED AND REMOVED FROM ROLLS**

Fiscal Year Ended	Retirees Added §*		Retirees Removed		Retirees - Year-end*		% Increase/ (Decrease) in Annual Allowances	Average Annual Allowance
	Number	Annual Allowances (000s)	Number	Annual Allowances (000s)	Number	Annual Allowances (000s)		
2019	4,428	\$ 113,405	2,057	\$ 46,818	97,927	\$ 1,954,313	3.53	\$ 19,957
2018	4,457	109,294	1,868	42,615	95,556	1,887,726	3.66	19,755
2017	4,352	101,946	1,741	38,835	92,967	1,821,047	3.59	19,588
2016	4,583	102,365	1,590	35,115	90,356	1,757,936	3.98	19,456
2015	4,951	117,295	1,565	34,127	87,363	1,690,686	5.17	19,352
2014	4,820	113,117	1,396	30,044	83,977	1,607,518	5.45	19,142
2013	4,627	104,280	1,369	29,107	80,553	1,524,445	5.19	18,925
2012	5,043	111,252	1,132	18,234	77,295	1,449,272	6.86	18,750
2011	4,088	87,692	1,212	25,189	73,384	1,356,254	4.83	18,482
2010	3,447	71,293	1,104	22,736	70,508	1,293,751	3.90	18,349

§ Includes retirees completing DROP participation and entering regular retirement.

\*Does not include active DROP participants.

The following table provides an analysis of actuarial gains and losses:

**ANALYSIS OF ACTUARIAL GAINS AND LOSSES**

(Dollar Amounts in Thousands)

	Amount
Unfunded Actuarial Liability as of September 30, 2018	\$ 10,621,979
Normal Cost for 2018 Plan Year	87,110
Contributions Received During the Year	(843,551)
Interest to Year End	792,123
Expected Unfunded Actuarial Liability as of September 30, 2019	<u>10,657,661</u>
Actuarial (Gains)/Losses During the Year	
From Investments	149,503
From Actuarial Liabilities	586,979
Total Actuarial (Gains)/Losses During the Year	<u>736,482</u>
Actual Unfunded Actuarial Liability as of September 30, 2019	<u><u>\$ 11,394,143</u></u>





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June 23, 2020

Board of Control  
Employees' Retirement System  
of Alabama

Dear Board Members:

The basic funding objectives of the Employees' Retirement System of Alabama (ERS) is to accumulate sufficient assets during a member's employment to fully finance the benefits the member is expected to receive throughout retirement.

ERS maintains a funding policy that was effective September 30, 2012 and last amended as of September 30, 2019. In order to meet the objectives listed above, the System will strive to meet the following funding objectives:

- To maintain an increasing funded ratio (ratio of system actuarial value of assets to actuarial accrued liabilities) that reflects a trend of improved actuarial condition. The long-term objective is to attain a funded ratio which is consistent with the fiscal health and long-term stability of the System.
- To maintain adequate asset levels to finance the benefits promised to members and monitor the future demands for liquidity.
- To develop a pattern of contribution rates expressed as a percentage of member payroll as measured by valuations prepared in accordance with applicable State laws and the principles of practice prescribed by the Actuarial Standards Board. In no event will the employer contribution rate be negative.
- To provide intergenerational equity for taxpayers with respect to System costs.

To track progress in achieving the funding objectives, the following benchmarks are measured annually as of the valuation date:

- **Funded ratio** – The funded ratio, defined as the actuarial value of assets divided by the actuarial accrued liability, should increase over time, before adjustments for changes in benefits, actuarial, methods, and/or actuarial assumptions.
- **Unfunded Actuarial Accrued Liability (UAAL)**
  - **Transitional UAAL** – The UAAL established as of the initial valuation date for which this funding policy is adopted.
  - **New Incremental UAAL** – Each subsequent valuation will produce a New Incremental UAAL consisting of all benefit changes, assumption and method changes and experience gains and/or losses that have occurred since the previous valuation.
- **UAAL Amortization Period and Contribution Rates**
  - For those employers with a funded percentage less than 100% in the valuation prior to the adoption of the funding policy: In each valuation 1/15<sup>th</sup> of the Transitional UAAL will be amortized over a closed period. The closed period shall be the amortization period for the valuation preceding the adoption of the funding policy not to exceed 30 years. The remaining Transitional UAAL each year will be amortized over an open period. The open period shall be the amortization period for the valuation preceding the adoption of the funding policy not to exceed 30 years. After 15 years the entire Transitional UAAL will be closed.





- For those employers with a funded percentage 100% or greater in the valuation prior to the adoption of the funding policy: In each valuation 1/15<sup>th</sup> of the Transitional UAAL will be amortized over a 30 year closed period. The remaining Transitional UAAL each year will be amortized over a 30 year open period. After 15 years the entire Transitional UAAL will be closed.
- Each New Incremental UAAL shall be amortized over a closed 30 year period.
- Incremental UAAL resulting from plan changes that grant benefit improvements shall be amortized over a period not to exceed 15 years.
- Employer Normal Contribution Rate – the contribution rate determined as of the valuation date each year based on the provisions of Alabama Code Section 36-27-24.
- In each valuation subsequent to the adoption of this funding policy the required employer contribution rate will be determined by the summation of the employer Normal Contribution Rate, a contribution rate for administrative expenses, a contribution rate for the pre-retirement death benefit fund, the individual amortization rate for each of the New Incremental UAAL bases, the individual amortization rate for each of the 15 closed periods for the Transitional UAAL and the amortization of any remaining open portion of the Transitional UAAL. If the resulting contribution rate will not support the cash flow and projected benefit payment needs of a particular unit or employer then the RSA staff may approve a more aggressive funding policy for these units or employers.

In order to measure progress toward this fundamental objective and funding policy, ERS has an annual actuarial valuation performed. The valuation (i) measures present financial position, and (ii) establishes contribution rates that provide for the normal cost and level percent of payroll amortization of unfunded actuarial accrued liability in accordance with the funding policy. The latest completed actuarial valuation was based upon data and assumptions as of September 30, 2019.

This valuation indicates that the current employer contribution rates for State employees (other than State policemen) of 14.83% of payroll for Tier I members and 14.44% of payroll for Tier II members and employer contribution rates for State policemen of 52.22% of payroll for Tier I members and 42.86% of payroll for Tier II members, for benefits then in effect, meet the basic financial objective and the goals of the funding policy as listed above. In addition, there are varying employer contribution rates for each participating Local employer actuarially determined in accordance with the funding policy. There are 84,534 total active members as of September 30, 2019.

The actuarial valuation is based upon financial and participant data which is prepared by the retirement system staff, assumptions regarding future rates of investment return and inflation, and rates of retirement, turnover, death and disability among ERS members and their beneficiaries. The data are reviewed by us for internal and year to year consistency as well as general reasonableness prior to its use in the actuarial valuation. It is also summarized and tabulated for the purpose of analyzing trends. The assumptions were adopted by the Board of Control and were based upon actual experience of ERS during the years October 1, 2010 to September 30, 2015. Assets are valued according to a market related method that recognizes 20% of the difference between market value and expected value each year. The assumptions and methods utilized in this valuation, in our opinion, meet the parameters established by the Actuarial Standards of Practice.

The current benefit structure is outlined in the Actuarial Section. Since the previous valuation, the System has been amended to allow local employers that participate in the System to elect to provide Tier I retirement benefits to their Tier II employees, upon approval by the Board of Control, under Act 2019-132 until May 8, 2021. However, this valuation does not reflect the provisions of Act 2019-132. The contribution rates for local employers for the fiscal year beginning October 1, 2021 will be submitted in a separate report and will include the impact of any employer elections of Act 2019-132 approved by the Board through the September 2020 Board meeting.

We provided most of the information used in the supporting schedules in the Actuarial and Statistical Sections, as well as the Schedules of Funding Progress and the employer contributions shown in the Schedules of Employer Contributions in the Financial Section.



We provided the following information and supporting schedules in the Actuarial and Statistical Sections:

- Summary of Actuarial Assumptions and Methods
- Actuarial Cost Method
- Summary of Plan Provisions as Interpreted for Valuation Purposes
- Schedule of Funding Progress
- Solvency Test
- Analysis of Actuarial Gains and Losses
- Schedule of Active Member Valuation Data
- Schedule of Retirants and Beneficiaries Added and Removed from Rolls
- Retired Members by Type of Benefit as of September 30, 2019
- Ten-Year History of Average Monthly Benefit Payments as of September 30

**Based upon the valuation results and the presumption that future contributions will be made at the necessary level to ensure adequate funding and to meet accounting standards, it is our opinion that the Employees' Retirement System of Alabama continues in sound condition in accordance with the actuarial principles of level percent of payroll financing.**

Respectfully submitted,

Larry Langer, ASA, EA, FCA, MAAA  
Principal and Consulting Actuary

Cathy Turcot  
Principal and Managing Director

Edward J. Koebel, EA, FCA, MAAA  
Chief Executive Officer

# RETIREMENT SYSTEMS OF ALABAMA

## Actuarial Section

### Employees' Retirement System

#### Summary of Actuarial Assumptions and Methods

### Summary of Actuarial Assumptions and Methods

The assumptions and methods used in the valuation were selected based on the actuarial experience study prepared as of September 30, 2015, submitted to and adopted by the Board on September 29, 2016. The discount rate was subsequently adopted by the Board on December 19, 2018.

**Ultimate Investment Rate of Return:** 7.70% per annum, compounded annually, including price inflation at 2.75%.

**Salary Increases:** Representative values of the assumed annual rates of future salary increases for State and Local Employees are as follows:

Years of Service	Annual % Rate*
0	5.00
1 - 5	4.00
6 - 10	3.75
11 - 15	3.50
16 & Over	3.25

\*Includes wage inflation at 3.00% per annum.

The assumed annual rate of future salary increases for State Police is 4.50% per year for all years of service.

**Separations before Service Retirement:** Representative values of the assumed annual rates of death, disability, and withdrawal are shown in the following tables.

State Employees - Male							
Annual % Rate of							
Age	Death*	Disability		Withdrawal			
		Years of Service		Years of Service			
		0-24	25+	0-4	5-9	10-20	20+
20	0.02	0.06		24.00	9.00	5.00	1.50
25	0.03	0.09		19.50	8.50	5.00	1.50
30	0.03	0.12		17.50	7.00	4.00	1.50
35	0.05	0.15		16.00	6.50	3.25	1.50
40	0.07	0.41		15.50	5.50	3.00	1.50
45	0.10	0.63	0.25	13.50	5.00	2.75	1.50
50	0.14	1.15	0.25	13.00	5.00	2.50	1.50
55	0.20	1.53	0.25	11.50	5.00	2.50	1.50
60	0.30	0.50	0.25	11.50	5.50	2.50	1.50
65	0.42	0.50	0.25	15.50	7.50	2.75	1.50
69	0.49			15.50	7.50	2.75	1.50

\*Rates of pre-retirement mortality are according to the sex distinct RP-2000 Combined Mortality Table Projected with Scale BB to 2020 set forward three years for males and one year for females with an adjustment factor of 0.70 for males and 0.50 for females.

RETIREMENT SYSTEMS OF ALABAMA

Actuarial Section

Employees' Retirement System

Summary of Actuarial Assumptions and Methods (Continued)

State Employees - Female							
Annual % Rate of							
Age	Death*	Disability		Withdrawal			
		Years of Service		Years of Service			
		0-24	25+	0-4	5-9	10-20	20+
20	0.01	0.05		33.00	12.00	6.50	1.50
25	0.01	0.07		23.00	11.00	6.50	1.50
30	0.01	0.10		20.00	8.25	5.25	1.50
35	0.02	0.19		18.00	7.50	5.25	1.50
40	0.03	0.37		17.00	7.25	3.50	1.50
45	0.05	0.56	0.25	15.50	6.50	3.50	1.50
50	0.08	0.90	0.25	14.50	6.25	3.50	1.50
55	0.11	1.40	0.25	14.00	5.50	3.50	1.50
60	0.16	1.00	0.25	15.00	6.00	3.50	1.50
65	0.23	1.00	0.25	16.00	8.50	3.50	1.50
69	0.29			16.00	8.50	3.50	1.50

\*Rates of pre-retirement mortality are according to the sex distinct RP-2000 Combined Mortality Table Projected with Scale BB to 2020 set forward three years for males and one year for females with an adjustment factor of 0.70 for males and 0.50 for females.

State Police					
Annual % Rate of					
Age	Death*		Disability	Withdrawal	
	Male	Female		Years of Service	
				0 - 4	5+
20	0.02	0.01	0.08	2.00	2.00
25	0.03	0.01	0.10	2.00	2.00
30	0.03	0.01	0.14	2.00	2.00
35	0.05	0.02	0.22	2.00	1.00
40	0.07	0.03	0.34	2.00	1.00
45	0.10	0.05	0.46	5.00	1.00
50	0.14	0.08	0.60		
55	0.20	0.11			
60	0.30	0.16			
62	0.35	0.18			
65	0.42	0.23			

\*Rates of pre-retirement mortality are according to the sex distinct RP-2000 Combined Mortality Table Projected with Scale BB to 2020 set forward three years for males and one year for females with an adjustment factor of 0.70 for males and 0.50 for females.

**Service Retirement:** The assumed annual rates of service retirement for Tier 1 and Tier 2 members are as follows:

**Tier 1 State and Local Employees**

Age	Annual % Rate of Service Retirement*	
	1st Eligible	Subsequent
50 & Under	18.00	11.50
51 to 55	20.00	11.50
56	25.00	11.50
57 to 59	25.00	15.00
60	13.00	17.00
61	13.00	13.00
62	25.00	25.00
63	25.00	20.00
64	25.00	20.00
65	35.00	25.00
66	35.00	30.00
67 to 74	35.00	21.00
75 & Above	100.00	100.00

\*40% are assumed to retire at age 60 with 25 years of service and 20% are assumed to retire at age 60 with 26 or more years of service.

**Tier 2 State and Local Employees**

Age	Annual % Rate of Service Retirement	
	1st Eligible	Subsequent
62	50.00	
63	25.00	20.00
64	25.00	20.00
65	35.00	25.00
66	35.00	30.00
67	35.00	25.00
68	35.00	21.00
69 to 74	35.00	20.00
75 & Above	100.00	100.00

**State Police**

Age	Annual % Rate of Service Retirement		
	Years of Service		
	10 - 19	20 - 24	25+
40			40.00
45			40.00
50			40.00
55	5.00	35.00	35.00
60	25.00	25.00	25.00
62	25.00	25.00	25.00
65	100.00	100.00	100.00

## RETIREMENT SYSTEMS OF ALABAMA

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### *Actuarial Section*

#### Employees' Retirement System

#### Summary of Actuarial Assumption and Methods (Continued)

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**Death after Retirement:** The rates of mortality for the period after service retirement are according to the sex distinct RP-2000 Blue Collar Mortality Table Projected with Scale BB to 2020 with an adjustment of 125% at all ages for males and 120% for females at ages on and after age 78. The rates of mortality for the period after disability retirement are according to the sex distinct RP-2000 Disabled Mortality Table Projected with Scale BB to 2020 with an adjustment of 130% at all ages for females.

**Death in Active Service Benefit:** For those members eligible for service retirement who die in active service, it is assumed that 75% of beneficiaries will elect the lump sum death benefit and 25% will elect the Option 3 allowance.

**Benefits Payable upon Separation from Service:** For active members who separate from service prior to eligibility for a service retirement allowance, the liability is assumed to be the greater of the value of the refund of contributions or the value of the deferred annuity.

**Unused Sick Leave:** 2.25% load on service retirement liabilities for Tier 1 active members. No load for Tier 2 active members.

**Percent Married:** 100% of active members are assumed to be married with the husband 3 years older than the wife.

**Actuarial Method:** Individual entry age normal method. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability.

**Asset Method:** Actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected value of assets, based on the assumed valuation rate of return. Each year, 20% of the difference between market value and expected actuarial value is recognized. In order to reduce short-term volatility in valuation results and because the market value and actuarial value of assets were close in value, the actuarial value of assets was set equal to the market value on September 30, 2012. 5-year smoothing commenced again beginning September 30, 2013.

**Liability for Current Inactive Members:** Member Contribution Balance is multiplied by a factor of 3.0 for vested local employees with incomplete data and by a factor of 1.0 for all non-vested inactive members.

**Liability for Post-DROP Active Members:** Members are assumed to retire immediately and receive their accrued benefit.

**COLA:** No future ad hoc cost of living adjustments (COLAs) are assumed.

**Future Service Credit:** One year of creditable service per year of employment.

### **Actuarial Cost Method**

1. The valuation is prepared on the projected benefit basis, which is used to determine the present value of each member's expected benefit payable at retirement or death. The calculations are based on the member's age, years of service, sex, compensation, expected future salary increases, and an assumed future interest earnings rate (currently 7.70%). The calculations consider the probability of a member's death or termination of employment prior to becoming eligible for a benefit and the probability of the member terminating with a service, disability, or survivor's benefit. The present value of the expected benefits payable to active members is added to the present value of the expected future payments to retired members and beneficiaries to obtain the present value of all expected benefits payable to the present group of members and beneficiaries.
2. The employer contributions required to support the benefits of the System are determined following a level funding approach and consist of a normal contribution and an accrued liability contribution.
3. The normal contribution is determined using the "individual entry age normal" method. Under this method, a calculation is made to determine the uniform and constant percentage rate of employer contributions which, if applied to the compensation of each new member during the entire period of the member's anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on the member's behalf.
4. The unfunded accrued liability contributions are determined by subtracting the current assets held by the System and the present value of prospective employer normal contributions and member contributions from the present value of expected benefits to be paid from the System. The accrued liability contribution amortizes the balance of the unfunded accrued liability over a period of years from the valuation date.

### **Summary of Plan Provisions as Interpreted for Valuation Purposes**

The Employees' Retirement System of Alabama (ERS) was established on October 1, 1945. The valuation took into account amendments to the System effective through the valuation date. The following summary describes the main benefit and contribution provisions of the System as interpreted for the valuation.

#### **Definitions**

**Average Final Compensation** – The average compensation of a Tier 1 member is calculated using compensation for the 3 highest years in the last 10 years of creditable service. The average compensation of a Tier 2 member is calculated using compensation for the 5 highest years in the last 10 years of creditable service.

**Membership Service** – all service rendered while a member of the System and for which contributions were made.

**Creditable Service** – the sum of membership service, prior service, and any other previous service established as creditable in accordance with the provisions of the retirement law.

**Annuity** – payments for life derived from the accumulated contributions of a member.

**Pension** – payments for life derived from the accumulated contributions of an employer.

**Retirement Allowance** – the sum of the annuity and pension payments.

# RETIREMENT SYSTEMS OF ALABAMA

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## *Actuarial Section*

### Employees' Retirement System

#### Summary of Plan Provisions (Continued)

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#### **Benefits – Members Classified as Other Than State Police**

##### Service Retirement Allowance

###### Condition for Allowance

Tier 1 - The service retirement allowance is payable upon the request of a member who has completed 25 years of creditable service or who has attained age 60 and completed at least 10 years of creditable service.

Tier 2 - The service retirement allowance is payable upon the request of a member who has completed at least 10 years of creditable service and who has attained age 62 or age 56 for certified law enforcement, correctional officers, and firefighters.

###### Amount of Allowance

Tier 1 - Upon service retirement, a member receives a retirement allowance equal to 2.0125% of the member's average final compensation multiplied by the number of years of creditable service. At retirement, a member receives one additional year of creditable service in determining the retirement allowance for each five years of service as a certified law enforcement, correctional officer, or firefighter.

Tier 2 - Upon service retirement, a member receives a retirement allowance equal to 1.65% of their average final compensation multiplied by the number of years of creditable service. The benefit is capped at 80% of the member's average final compensation.

Tier 1 & 2 - Members may elect to receive a reduced retirement allowance in order to provide an allowance to a designated beneficiary after the member's death (see "Special Privileges at Retirement – All Members").

##### Disability Retirement Allowance

###### Condition for Allowance

A disability retirement allowance may be granted to a member who has completed at least 10 years of creditable service and becomes permanently incapacitated for duty before reaching eligibility for service retirement.

###### Amount of Allowance

Tier 1 - Upon disability retirement, a member receives a retirement allowance equal to 2.0125% of the member's average final compensation multiplied by the number of years of creditable service. At retirement, a member receives one additional year of creditable service in determining the retirement allowance for each five years of service as a certified law enforcement, correctional officer, or firefighter.

Tier 2 - Upon disability retirement, a member receives a retirement allowance equal to 1.65% of the member's average final compensation multiplied by the number of years of creditable service. The benefit is capped at 80% of the member's average final compensation.

Tier 1 & 2 - Members may elect to receive a reduced retirement allowance in order to provide an allowance to a designated beneficiary after the member's death (see "Special Privileges at Retirement – All Members").



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Benefits Payable upon  
Separation of Service

A member who withdraws from service is entitled to receive his or her contributions with allowable interest. A member who has completed at least 10 years of creditable service may, after separation from service, continue membership in the System and file for service retirement after reaching age 60 for Tier 1 members or age 62 for Tier 2 members.

Benefits Payable upon  
Death in Active Service

In the event of the death of a member eligible for service retirement, the designated beneficiary may elect: (1) to exercise Option 3 as defined under “Special Privileges at Retirement – All Members” or (2) to receive a return of member contributions and total earned interest plus a death benefit payable from the Pre-retirement Death Benefit Fund equal to the salary on which retirement contributions were made for the previous fiscal year (October 1 – September 30).\*

In the event of the death of a member with more than one year of service who is not eligible to retire, the designated beneficiary shall receive the return of member contributions and total earned interest. Also, the designated beneficiary shall receive an additional death benefit payable from the Pre-retirement Death Benefit Fund equal to the salary on which retirement contributions were made for the previous fiscal year (October 1 – September 30).\*

In the event of a job-related death of a member at any age with less than one year of service, the designated beneficiary shall receive the return of member contributions and total earned interest plus a death benefit payable from the Pre-retirement Death Benefit Fund equal to the annual earnable compensation of the member at the time of death.\*

In the event of the death of a member which is not job-related who has less than one year of service, the designated beneficiary shall receive the return of member contributions and total earned interest plus a matching death benefit, which is limited to a maximum of \$5,000.

\*However, if the death occurred more than 180 calendar days after the member’s last day in pay status or if the deceased member had applied for a refund of member contributions or terminated employment, the lump sum will be the same as if the member had less than one year of service and the death was not job-related.

## RETIREMENT SYSTEMS OF ALABAMA

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### *Actuarial Section*

### Employees' Retirement System

### Summary of Plan Provisions (Continued)

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#### Deferred Retirement Option Plan (DROP)

Prior to March 25, 2011, a member could elect to participate in the Deferred Retirement Option Plan (DROP) upon completion of at least 25 years of creditable service (excluding sick leave) and attainment of at least 55 years of age. Under the DROP, the member deferred receipt of a retirement allowance and continued employment for a period of three to five years. At the end of the period, the member withdrew from active service and received the retirement benefit calculated at the time of enrollment in the DROP, and also received a payment for the deferred retirement benefits and employee contributions while participating in the DROP and interest earned on DROP deposits. The effect of Act 2011-27 was that no new participants were allowed to enter the DROP with an effective participation date after June 1, 2011.

#### Member Contributions

Tier 1 - Prior to October 1, 2011, covered members contributed 5% of earnable compensation. From October 1, 2011, to September 30, 2012, covered members contributed 7.25% of earnable compensation. Beginning October 1, 2012, covered members contribute 7.50% of earnable compensation. Certified law enforcement, correctional officers, and firefighters contributed 6% of earnable compensation until September 30, 2011. From October 1, 2011, to September 30, 2012, certified law enforcement, correctional officers, and firefighters contributed 8.25% of earnable compensation. Beginning October 1, 2012, certified law enforcement, correctional officers, and firefighters contribute 8.50% of earnable compensation. DROP participants continue to contribute during the DROP period but receive a refund of these contributions and regular interest upon retirement.

Tier 2 – Covered members contribute 6% of earnable compensation. Certified law enforcement, correctional officers, and firefighters contribute 7% of earnable compensation.

Tier 1 & 2 - If positive investment performance results in a decrease in the total contribution rate paid by employers and employees participating in the System, the Retirement Systems of Alabama shall first reduce the employee contribution rate. "Regular Interest" is 4% which is the rate adopted by the Board and applied to the balance in each member's account every year; however, if a member receives a refund of contributions, the interest rate applied to the refund is lower than the 4% regular rate (Based on the *Code of Alabama 1975, Section 36-27-25(g)*).

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## Benefits – Members Classified as State Police

### Service Retirement Allowance

Condition of Allowance Tier 1 - A retirement allowance is payable upon the request of a member who has completed 25 years of creditable service or who has attained age 52 and completed at least 10 years of creditable service.

Tier 2 - A retirement allowance is payable upon the request of any member who has attained age 56 and completed at least 10 years of creditable service.

Amount of Allowance Tier 1 - Upon service retirement, a member receives a retirement allowance equal to 2.875% of the member's average final compensation multiplied by the number of years of creditable service.

A member who has attained 20 or more years of creditable service and retires prior to age 60 is eligible to receive a “bonus service credit” up to 4 years as follows:

- Age 56 or older – bonus service of 4 years reduced by 1 month for each month over the age of 56.
- Age 52 to 56 – bonus service of 4 years.
- Age 52 or less (disability retirement only) – bonus service of 4 years.
- Age 52 or less with 25 or more years of service – bonus service of 4 years.

Tier 2 - Upon service retirement, a member receives a retirement allowance equal to 2.375% of the member’s average final compensation multiplied by the number of years of creditable service. The benefit is capped at 80% of the member’s average final compensation.

### Disability Retirement Allowance

Condition for Allowance A disability retirement allowance may be granted to a member who has completed at least 10 years of creditable service and who becomes permanently incapacitated for the further performance of duty before reaching the minimum age for service retirement or who becomes disabled as a result of employment in the line of duty without regard to years of creditable service.

Amount of Allowance Tier 1 - Upon disability retirement, a member receives a retirement allowance equal to 2.875% of the member's average final compensation multiplied by the number of years of creditable service.

Tier 2 - Upon disability retirement, a member receives a retirement allowance equal to 2.375% of the member’s average final compensation multiplied by the number of years of creditable service.

## RETIREMENT SYSTEMS OF ALABAMA

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### *Actuarial Section*

#### Employees' Retirement System

#### Summary of Plan Provisions (Continued)

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##### Benefits Payable upon Separation from Service

A member who withdraws from service is entitled to receive a return of member contributions with allowable interest. A member who has completed at least 10 years of creditable service may, after separation from service, continue in the membership of the System and file for service retirement after reaching age 52 for Tier 1 members or age 56 for Tier 2 members.

##### Benefits Payable upon Death in Active Service

In the event of the death of a member who is eligible for service retirement, the designated beneficiary may elect: (1) to exercise Option 3 as defined below under "Special Privileges at Retirement – All Members" or (2) to receive a return of member contributions and total earned interest plus a death benefit payable from the Pre-retirement Death Benefit Fund equal to the salary on which the member made retirement contributions for the previous fiscal year (October 1 – September 30).\*

In the event of the death of a member with more than one year of service who is not eligible to retire, the designated beneficiary shall receive the return of member contributions and total earned interest. Also, the designated beneficiary shall receive an additional death benefit payable from the Pre-retirement Death Benefit Fund equal to the salary on which the member made retirement contributions for the previous fiscal year (October 1 – September 30).\*

In the event of a job-related death of a member at any age with less than one year of service, the designated beneficiary shall receive the return of member contributions and total earned interest plus a death benefit payable from the Pre-retirement Death Benefit Fund equal to the annual earnable compensation of the member at the time of death.\*

In the event of the death of a member which is not job-related and who has less than one year of service, the designated beneficiary shall receive the return of member contributions and total earned interest plus a matching death benefit which is limited to a maximum of \$5,000.

\*However, if the death occurred more than 180 calendar days after the member's last day in pay status, or if the deceased member had applied for a refund of member contributions or terminated employment, the lump sum will be the same as if the member had less than one year of service and the death was not job-related.

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Deferred Retirement Option Plan  
(DROP)

Prior to March 25, 2011, a member could elect to participate in the Deferred Retirement Option Plan (DROP) upon completion of at least 25 years of creditable service (excluding sick leave) and attainment of at least 52 years of age. Under the DROP, the member deferred receipt of a retirement allowance and continued employment for a period of three to five years. At the end of the period, the member withdrew from active service and received the retirement benefit calculated at the time of enrollment in the DROP, and also received a payment for the deferred retirement benefits and employee contributions while participating in the DROP and interest earned on DROP deposits. The effect of Act 2011-27 was that no new participants were allowed to enter the DROP with an effective participation date after June 1, 2011.

Member Contributions

Each member contributes 10% of earnable compensation. DROP participants continue to contribute during the DROP period but receive a refund of these contributions and regular interest upon retirement.

**Special Privileges at Retirement – All Members**

In lieu of the full retirement allowance, a member may, at retirement, elect to receive a reduced retirement allowance equal in value to the full retirement allowance, with the provision that:

- Option 1: If the member dies before the annuity payments equal or exceed the present value of the member's annuity at the date of retirement, the balance is paid to the designated beneficiary or to the member's estate, or
- Option 2: After the member's death, the member's retirement allowance is continued throughout the life of the designated beneficiary, or
- Option 3: After the member's death, one-half of the member's retirement allowance is continued throughout the life of the designated beneficiary, or
- Option 4: Some other benefit is paid either to the member or the designated beneficiary, provided such benefit, together with the reduced retirement allowance, is of equivalent actuarial value to the member's retirement allowance and is approved by the Board of Control.

# RETIREMENT SYSTEMS OF ALABAMA

## Actuarial Section

### Employees' Retirement System

#### Supporting Schedules

### Supporting Schedules

The following schedule provides a ten-year history on active member valuation data:

#### SCHEDULE OF ACTIVE MEMBER VALUATION DATA

(Dollar Amounts Not in Thousands)

<u>Valuation Date</u>		<u>Number</u>	<u>Annual Payroll</u>	<u>Annual Average Pay</u>	<u>% Increase/ (Decrease) in Average Pay</u>
9/30/2019	A	84,694	\$ 3,387,186,858	\$ 39,993	(5.92)
9/30/2018	A	86,565	3,679,181,111	42,505	1.56
9/30/2017	A	85,657	3,584,700,002	41,849	(0.66)
9/30/2016	A	84,814	3,572,891,196	42,129	2.93
9/30/2015	B	84,563	3,461,155,131	40,930	2.34
9/30/2014	C	84,694	3,387,186,858	39,993	1.61
9/30/2013	D	84,035	3,307,511,468	39,359	6.02
9/30/2012	E	84,169	3,124,791,422	37,125	(5.88)
9/30/2011	F	85,633	3,377,717,419	39,444	(1.00)
9/30/2010	G	86,967	3,464,913,031	39,842	0.38

A - There are no employees currently participating in the DROP program.

B - In addition, there are 396 members with compensation of \$26,861,749 who are currently participating in the DROP. Employers of the Retirement System contribute on this payroll.

C - In addition, there are 891 members with compensation of \$57,153,873 who are currently participating in the DROP. Employers of the Retirement System contribute on this payroll.

D - In addition, there are 1,514 members with compensation of \$93,084,090 who are currently participating in the DROP. Employers of the Retirement System contribute on this payroll.

E - In addition, there are 2,121 members with compensation of \$127,211,439 who are currently participating in the DROP. Employers of the Retirement System contribute on this payroll.

F - In addition, there are 2,708 members with compensation of \$162,963,178 who are currently participating in the DROP. Employers of the Retirement System contribute on this payroll.

G - In addition, there are 2,593 members with compensation of \$154,756,911 who are currently participating in the DROP. Employers of the Retirement System contribute on this payroll.

The following table presents a ten-year history of funding progress:

**SCHEDULE OF FUNDING PROGRESS**

(Dollar Amounts in Thousands)

Valuation Date	Actuarial Value of Assets (A)	Actuarial		Percentage Funded (A/B)	Covered Payroll (C)	UAAL as a % of Covered Payroll ((B-A)/C)
		Accrued Liability (AAL) (B)	Unfunded AAL (UAAL) (B-A)			
9/30/2019	\$12,645,789	\$18,543,542	\$5,897,753	68.2	\$3,793,957	155.5
9/30/2018	12,240,597	17,829,735	5,589,138	68.7	3,679,181	151.9
9/30/2017	11,690,952	17,250,835	5,559,883	67.8	3,584,700	155.1
9/30/2016	11,082,280	16,728,009	5,645,729	66.2	3,572,891	158.0
9/30/2015	10,589,258	15,723,720	5,134,462	67.3	3,488,017	147.2
9/30/2014	10,134,581	15,138,294	5,003,713	66.9	3,444,341	145.3
9/30/2013	9,546,459	14,536,600	4,990,141	65.7	3,400,596	146.7
9/30/2012	9,116,551	13,884,995	4,768,444	65.7	3,252,003	146.6
9/30/2011	9,456,158	14,366,796	4,910,638	65.8	3,540,681	138.7
9/30/2010	9,739,331	14,284,119	4,544,788	68.2	3,619,670	125.6

The following table provides a ten-year history of solvency tests:

**SOLVENCY TEST**

(Dollar Amounts in Thousands)

Valuation Date	Aggregate Accrued Liabilities For			Reported Assets	% of Accrued Liabilities Covered by Reported Assets		
	(1)	(2)	(3)		(1)	(2)	(3)
	Active Member Contributions	Retirants and Beneficiaries	Active Members (Employer Financed Portion)				
9/30/2019	\$ 3,038,594	\$ 10,300,063	\$5,204,885	\$12,645,789	100	93	0.0
9/30/2018 A	2,922,432	9,944,503	4,962,800	12,240,597	100	93	0.0
9/30/2017 A	2,817,368	9,567,278	4,866,189	11,690,952	100	93	0.0
9/30/2016 A	2,707,129	9,209,857	4,811,023	11,082,280	100	91	0.0
9/30/2015	2,591,066	8,666,490	4,466,164	10,589,258	100	92	0.0
9/30/2014	2,484,050	8,366,277	4,287,967	10,134,581	100	91	0.0
9/30/2013	2,363,600	8,085,291	4,087,709	9,546,459	100	89	0.0
9/30/2012 B	2,218,478	7,781,431	3,885,086	9,116,551	100	89	0.0
9/30/2011 C	2,112,356	7,722,942	4,531,498	9,456,158	100	95	0.0
9/30/2010	2,050,051	7,130,938	4,535,113	9,739,331	100	100	12.3

RETIREMENT SYSTEMS OF ALABAMA

Actuarial Section

Employees' Retirement System  
Supporting Schedules (Continued)

The following table presents a ten-year history of data concerning retirants and beneficiaries:

**SCHEDULE OF RETIRANTS AND BENEFICIARIES ADDED AND REMOVED FROM ROLLS**

Fiscal Year Ended	Retirees Added §*		Retirees Removed		Retirees - Year-end*		% Increase/ (Decrease) in Annual Allowances	Average Annual Allowance
	Number	Annual Allowances (000s)	Number	Annual Allowances (000s)	Number	Annual Allowances (000s)		
9/30/2019	2,468	\$ 63,336	1,251	\$ 27,257	50,930	\$ 962,024	3.90	\$ 18,889
9/30/2018	2,571	64,020	1,147	24,894	49,713	925,945	4.41	18,626
9/30/2017	2,449	58,678	1,114	22,433	48,289	886,819	4.26	18,365
9/30/2016	2,655	61,579	1,083	22,434	46,954	850,574	4.82	18,115
9/30/2015	2,698	63,043	1,028	21,337	45,382	811,429	5.42	17,880
9/30/2014	2,617	59,959	1,012	20,185	43,712	769,723	5.45	17,609
9/30/2013	2,628	59,930	972	19,036	42,107	729,949	5.93	17,336
9/30/2012	2,846	64,800	977	18,759	40,451	689,055	7.16	17,034
9/30/2011	2,444	53,577	921	17,228	38,582	643,014	5.99	16,666
9/30/2010	2,030	42,920	958	17,571	37,059	606,665	4.36	16,370

§ Includes retirees completing DROP participation and entering regular retirement.

\*Does not include active DROP participants.

The following table provides an analysis of actuarial gains and losses:

**ANALYSIS OF ACTUARIAL GAINS AND LOSSES**

(Dollar Amounts in Thousands)

	<u>Amount</u>
Unfunded Actuarial Liability as of September 30, 2018	\$ 5,589,138
Normal Cost for 2018 Plan Year	44,354
Contributions Received During the Year	(453,339)
Interest to Year End	416,325
Expected Unfunded Actuarial Liability as of September 30, 2019	<u>5,596,478</u>
Actuarial (Gains)/Losses During the Year	
From Investments	49,461
From Actuarial Liabilities	251,814
Total Actuarial (Gains)/Losses During the Year	<u>301,275</u>
<b>Actual Unfunded Actuarial Liability as of September 30, 2019</b>	<b><u><u>\$ 5,897,753</u></u></b>







# Cavanaugh Macdonald

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June 17, 2020

Board of Control  
Employees' Retirement System of  
Alabama for the Administration of  
the Judicial Retirement Fund

Dear Board Members:

The basic funding objectives of the Judicial Retirement Fund of Alabama (JRF) is to accumulate sufficient assets during a member's employment to fully finance the benefits the member is expected to receive throughout retirement.

JRF maintains a funding policy that was effective September 30, 2012 and last amended as of September 30, 2019. In order to meet the objectives listed above, the Fund will strive to meet the following funding objectives:

- To maintain an increasing funded ratio (ratio of fund actuarial value of assets to actuarial accrued liabilities) that reflects a trend of improved actuarial condition. The long-term objective is to attain a funded ratio which is consistent with the fiscal health and long-term stability of the Fund.
- To maintain adequate asset levels to finance the benefits promised to members and monitor the future demands for liquidity.
- To develop a pattern of contribution rates expressed as a percentage of member payroll as measured by valuations prepared in accordance with applicable State laws and the principles of practice prescribed by the Actuarial Standards Board. In no event will the employer contribution rate be negative.
- To provide intergenerational equity for taxpayers with respect to Fund costs.

To track progress in achieving the funding objectives, the following benchmarks are measured annually as of the valuation date:

- **Funded ratio** – The funded ratio, defined as the actuarial value of assets divided by the actuarial accrued liability, should increase over time, before adjustments for changes in benefits, actuarial, methods, and/or actuarial assumptions.
- **Unfunded Actuarial Accrued Liability (UAAL)**
  - **Transitional UAAL** – The UAAL established as of the initial valuation date for which this funding policy is adopted.
  - **New Incremental UAAL** – Each subsequent valuation will produce a New Incremental UAAL consisting of all benefit changes, assumption and method changes and experience gains and/or losses that have occurred since the previous valuation.
- **UAAL Amortization Period and Contribution Rates**
  - The Transitional UAAL will be amortized over a closed period. The closed period shall be the amortization period for the valuation preceding the adoption of the funding policy not to exceed 30 years.
  - Each New Incremental UAAL shall be amortized over a closed 30 year period.
  - Incremental UAAL resulting from plan changes that grant benefit improvements shall be amortized over a period not to exceed 15 years.
  - Employer Normal Contribution Rate – the contribution rate determined as of the valuation date each year based on the provisions of Alabama Code Sections 36-27-24 and 12-18-2.



Board of Control  
June 17, 2020  
Page 2

- In each valuation subsequent to the adoption of this funding policy the required employer contribution rate will be determined by the summation of the employer Normal Contribution Rate, a contribution rate for administrative expenses, the individual amortization rate for each of the New Incremental UAAL bases and the amortization rate for the Transitional UAAL.

In order to measure progress toward this fundamental objective and funding policy, JRF has an annual actuarial valuation performed. The valuation (i) measures present financial position, and (ii) establishes contribution rates that provide for the normal cost and level percent of payroll amortization of unfunded actuarial accrued liability in accordance with the funding policy. The latest completed actuarial valuation was based upon data and assumptions as of September 30, 2019. This valuation indicates for benefits then in effect that the current employer contribution rates for the Judicial Retirement Fund (other than District Attorneys' Plan) of 42.10% of payroll for Tier I members and 37.47% of payroll for Tier II members, and employer contribution rates for District Attorneys' of 19.77% of payroll, meet the basic financial objective and the goals of the funding policy as listed above. There are 366 active members as of September 30, 2019.

The actuarial valuation is based upon financial and participant data which is prepared by the retirement Fund staff, assumptions regarding future rates of investment return and inflation, and rates of retirement, turnover, death and disability among JRF members and their beneficiaries. The data is reviewed by us for internal and year to year consistency as well as general reasonableness prior to its use in the actuarial valuation. It is also summarized and tabulated for the purpose of analyzing trends. The assumptions were adopted by the Board of Control and were based upon actual experience of JRF during the years October 1, 2010 to September 30, 2015. Assets are valued according to a market related method that recognizes 20% of the difference between market value and expected value each year. The assumptions and methods utilized in this valuation, in our opinion, meet the parameters established by the Actuarial Standards of Practice.

The current benefit structure is outlined in the Actuarial Section. The Judges' and Clerks' plan covers justices, judges and circuit clerks who are not members of the Judicial Retirement Fund or The Clerks' and Registers' Supernumerary Fund. The District Attorneys' Plan covers any District Attorney first elected or appointed on or after November 8, 2016.

We provided the following information and supporting schedules in the Actuarial and Statistical Sections:

- Summary of Actuarial Assumptions and Methods
- Actuarial Cost Method
- Summary of Plan Provisions as Interpreted for Valuation Purposes
- Schedule of Funding Progress
- Solvency Test
- Analysis of Actuarial Gains and Losses
- Schedule of Active Member Valuation Data
- Schedule of Retirants and Beneficiaries Added and Removed from Rolls
- Retired Members by Type of Benefit as of September 30, 2019
- Ten-Year History of Average Monthly Benefit Payments as of September 30



Board of Control  
June 17, 2020  
Page 3

**Based upon the valuation results and the presumption that future contributions will be made at the necessary level to ensure adequate funding and to meet accounting standards, it is our opinion that the Judicial Retirement Fund of Alabama continues in sound condition in accordance with the actuarial principles of level percent of payroll financing.**

Respectfully submitted,

A handwritten signature in blue ink, appearing to read 'LL', enclosed in a rectangular box.

Larry Langer, ASA, EA, FCA, MAAA  
Principal and Consulting Actuary

A handwritten signature in blue ink that reads 'Cathy Turcot'.

Cathy Turcot  
Principal and Managing Director

# RETIREMENT SYSTEMS OF ALABAMA

## Actuarial Section

### Judicial Retirement Fund

#### Summary of Actuarial Assumptions and Methods

### Summary of Actuarial Assumptions and Methods

The assumptions and methods used in the valuation are based on the actuarial experience study prepared as of September 30, 2015, submitted to and adopted by the Board on September 29, 2016. The discount rate of 7.65% was subsequently adopted by the Board on December 19, 2018.

**Ultimate Investment Rate of Return:** 7.65% per annum, compounded annually, including inflation at 2.75%.

**Salary Increases:** 3.50% per annum for all ages with service less than 14 years, and 3.25% per annum for all ages with service of 14 years or more, compounded annually, including wage inflation at 3.00%.

**Separations before Retirement:** Representative values of the assumed annual rates of withdrawal, death, and disability are as follows:

Age	Withdrawal	Annual % Rate of Death*		Disability**
		Male	Female	
30	2.50	0.04	0.01	0.02
35	2.50	0.07	0.03	0.04
40	2.50	0.09	0.04	0.07
45	2.50	0.13	0.06	0.11
50	2.50	0.18	0.09	0.16
55	2.50	0.26	0.14	0.25
60	2.50	0.38	0.19	0.40
64	2.50	0.51	0.26	0.57

\*Rates of pre-retirement mortality are according to the sex distinct RP-2000 Employee Mortality Table Projected with Scale BB to 2020 with an adjustment factor of 90% for males and 60% for females.

\*\*Disability rates turn off at retirement eligibility.

### Rates of Retirement:

Tier I (Groups 1 and 2): Between the ages of 55 and 59, 25% of members are assumed to retire in the first year of eligibility and 10% in each year thereafter. Between the ages of 60 and 69, 30% of members are assumed to retire in the year when first eligible and 15% in each year thereafter. 30% of the remaining members are assumed to retire each year between age 70 and 74, and all remaining members are assumed to retire at age 75.

Tier II (Group 3) and District Attorney's Plan:

Age	Judges with up to 18 Years of Service	Judges with at least 18 years of service	Clerks & District Attorneys
62 - 69	10%	15%*	10%**
70 - 74	30%	30%	30%
75	100%	100%	100%

\*An additional 15% are assumed to retire at 18 years of service.

\*\*An additional 20% are assumed to retire when first eligible for retirement and at 27 years of service.

## RETIREMENT SYSTEMS OF ALABAMA

### Actuarial Section

#### Judicial Retirement Fund

#### Summary of Actuarial Assumptions and Methods (Continued)

**Deaths after Retirement:** Rates of mortality for the period after service retirement are according to the RP-2000 White Collar Mortality Table with projection scale BB to 2020 and adjusted 115% for males and 112% for females older than age 78. The sex distinct RP-2000 Disabled Mortality Table adjusted 105% for males and 120% for females. Representative values of assumed mortality rates are as follows:

Age	Annual % Rate of Death After			
	Service Retirement		Disability Retirement	
	Male	Female	Male	Female
55	0.36	0.23	3.50	1.79
60	0.56	0.38	3.84	2.14
65	0.99	0.68	4.14	2.64
70	1.64	1.19	4.86	3.55
75	2.86	2.02	6.37	4.92
80	5.05	3.79	8.49	6.82
85	8.89	6.53	10.99	9.45
90	16.43	11.32	15.44	13.47

**Percent Married:** 85% of active members are assumed to be married with the husband 4 years older than the wife.

**Actuarial Method:** Individual entry age normal method. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability.

**Assets:** Actuarial value. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected value of assets, based on the assumed valuation rate of return. Each year, 20% of the difference between market value and expected actuarial value is recognized. In order to reduce short-term volatility in valuation results and because market value and actuarial value of assets were close in value, the actuarial value of assets was set equal to the market value on September 30, 2012. 5-year smoothing commenced again beginning September 30, 2013.

**Liability for Current Inactive Non-Vested members:** Members Contribution Balance is multiplied by a factor of 1.0.

**Post Retirement Increases:** Allowances of retired members and spouses who receive benefits based on the salaries prescribed by law for the position are assumed to increase by 3.00% per year. The members' actual salaries at retirement are assumed to be equal to the salary prescribed by law for their position.

**Benefits Payable upon Separation from Service:** Active members who terminated from service prior to becoming eligible for a benefit are assumed to receive a refund of contributions with interest assumed to be 4% per year.

### **Actuarial Cost Method**

1. The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future, of each member's expected benefit payable at retirement or death is determined, based on age, service, sex and compensation. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the probability of his terminating with a service, disability or survivor's benefit. Future salary increases are also anticipated. The present value of the expected benefits payable on account the active members is added to the present value of expected future payments to retired members and beneficiaries to obtain the present value of all expected benefits payable from the Fund on account of the present group of members and beneficiaries.
2. The employer contributions required to support the benefits of the Fund are determined following a level funding approach, and consist of a normal contribution and an accrued liability contribution.
3. The normal contribution is determined using the "individual entry age normal" method. Under this method, a calculation is made to determine the uniform and constant percentage rate of employer contribution which, if applied to the compensation of each new member during the entire period of his anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his behalf.
4. The unfunded accrued liability contributions are determined by subtracting the present value of prospective employer normal contributions and member contributions together with the current assets held from the present value of expected benefits to be paid from the Fund.

### **Summary of Plan Provisions as Interpreted for Valuation Purposes**

The Judicial Retirement Fund (JRF) was established as of September 18, 1973. The valuation took into account amendments to the JRF effective through the valuation date. The following summary describes the main benefit and contribution provisions of the JRF as interpreted for the valuation.

#### **Membership**

Any justice of the Supreme Court of Alabama, judge of the Alabama Court of Civil Appeals, judge of the Alabama Court of Criminal Appeals, judge of a Circuit Court, or officeholder of any newly created judicial office receiving compensation from the State Treasury became a member of the JRF if the member was holding office on the date that it was established and elected to come under its provisions. Any such justice or judge elected or appointed to office after September 18, 1973, or any district or probate judge elected or appointed to office after October 10, 1975, or October 1, 1976, respectively, automatically becomes a member by virtue of their position. Certain other district and probate judges as well as certain former county court judges, district attorneys, or assistant district attorneys serving as circuit judges and certain supernumerary judges and justices may also elect to become a member. Any circuit clerk or district attorney elected or appointed on or after November 8, 2016 automatically becomes a member. Certain other district and probate judges as well as certain former county court judges, district attorneys or assistant district attorneys service as circuit judges and certain supernumerary judges and justices could also elect to become members.

#### **Average Final Compensation**

The average compensation of of a member for the highest years in the last 10 years of creditable service.

#### **Creditable Service**

Creditable service is service as a member plus certain periods of previous service creditable in accordance with the provisions of the Act.

**Benefits**

**Service Retirement Benefit**

Condition of Benefit

Tier 1 (Groups 1 and 2):

A service retirement benefit is payable upon request of a member who has:

- Completed 12 years of creditable service and attained age 65, or
- Completed 15 years of creditable service and whose age plus service equals or exceeds 77, or
- Completed at least 18 years of creditable service or three full terms as a judge or justice, or
- Completed 10 years of creditable service and attained age 70.

However, a judge who became a member on or after July 30, 1979, or who is a district or probate judge must meet the following age and service requirement combinations in order to be eligible to retire:

- Completed 12 years of creditable service and attained age 65, or
- Completed at least 15 years of creditable service and attained age 60, and whose age plus service equals or exceeds 77, or
- Completed 10 years of creditable service and attained age 70, or
- Completed 25 years of creditable service or 24 years of creditable service provided the member purchases one year of service prior to retirement, regardless of age.

Tier 2 (Group 3) and District Attorneys:

A service retirement benefit is payable upon request of a member who has completed 10 years of service and attained age 62.

Amount of Benefit

Tier 1 (Groups 1 and 2):

The service retirement benefit for a member is equal to:

- (a) For circuit or appellate judges who were members prior to July 30, 1979, 75% of the salary prescribed by law for the position from which the member retires.
- (b) For circuit and appellate judges who assumed office on or after July 30, 1979, 75% of the member's salary at the time of separation from service.
- (c) For district judges, 75% of the position's salary immediately prior to retirement.
- (d) For probate judges, 75% of the member's salary at the time of separation from service.



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Tier 2 (Group 3) and District Attorneys:

The service retirement benefit for a member is equal to:

- (a) For a member who is judge with years of service less than 18 years, 4% of average final compensation multiplied by years of creditable service; for a member who is a judge with 18 or more years of service, 75% of average final compensation, not to exceed 75% of average final compensation.
- (b) For a member who is clerk or district attorney, 3% of average final compensation multiplied by years of creditable service, not to exceed 80% of average final compensation.

**Disability Retirement Benefit**

**Condition of Benefit**      A disability retirement benefit is payable to a member who becomes permanently, physically or mentally, unable to carry out his duties on a full-time basis, provided the member has completed five or more years of creditable service.

**Amount of Benefit**

Tier 1 (Groups 1 and 2):

The disability retirement benefit for a member other than a district or probate judge who was a member prior to July 30, 1979, is equal to 25% of the salary prescribed by law for the position from which the member retires on disability plus 10% of such salary for each year of creditable service in excess of five years. The disability retirement benefit is subject to a minimum of 30% and a maximum of 75% of such salary.

The disability retirement benefit for a judge who became a member on or after July 30, 1979, or who is a district or probate judge is equal to 25% of his salary immediately prior to retirement plus 10% of such salary for each year of creditable service in excess of five years. The disability retirement benefit is subject to a minimum of 30% and a maximum of 75% of such salary.

Tier 2 (Group 3) and District Attorneys:

For a member who is judge with years of service less than 18 years, 4% of average final compensation multiplied by years of creditable service; for a member who is a judge with 18 or more years, 75% of average final compensation, not to exceed 75% of average final compensation.

For a member who is a clerk or district attorney, 3% of average final compensation multiplied by years of creditable service, not to exceed 80% of average final compensation.

**Spousal Benefit**

Tier 1 (Groups 1 and 2):

**Condition of Benefit**      Upon the death of an active, inactive or retired member with at least 5 years of creditable service, a death benefit is payable to the member's spouse.

**Amount of Benefit**      The death benefit payable to the spouse of a judge other than a district or probate judge consists of a yearly benefit equivalent to 3% of the salary prescribed by law for the position of the former member for each year of creditable service, not to exceed 30% of such salary.

The death benefit payable to the spouse of a district judge consists of a yearly benefit equal to 3% of the position's salary prescribed by law at the time of death for each year of creditable service, not to exceed 30% of such salary.

The death benefit for the spouse of a probate judge is a yearly benefit equal to the greater of \$480 for each year of creditable service to a maximum of 10 years, or 3% of the member's salary at the time of separation from service for each year of creditable service, not to exceed 30% of such salary.

The benefit is payable for the spouse's life or until his or her remarriage.

### Death in Active Service Benefit

Tier 2 (Group 3) and District Attorneys:

Amount of Benefit	In the event of the death of a member who is eligible for service retirement, the designated beneficiary may elect: (1) to exercise option 3 as defined below "Special Privileges at Retirement – All Employees" or (2) to receive a return of member contributions and total interest earned plus a death benefit payable from the per-retirement death benefit fund equal to the salary on which the member made retirement contributions for the previous fiscal year (October 1 – September 30).
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In the event of the death of a member who is not eligible for retirement, the designated beneficiary shall receive the accumulated contributions not to exceed \$5,000 or the accumulated contributions of the member plus an additional death benefit payable from the per-retirement death benefit payable from the per-retirement death benefit fund equal to the salary on which their retirement contributions were made for the previous fiscal year. (October 1 – September 30).

### Benefit Payable upon Separation from Service

If a member terminates service and elects not to withdraw his or her contributions and accrued interest from the JRF, the member is eligible to receive any of the benefits for which the member has sufficient creditable service upon reaching an eligible retirement age.

A member terminating service prior to reaching eligibility for retirement benefits may elect to receive a return of contributions and accrued interest. "Regular Interest" is 4% which is the rate adopted by the Board and applied to the balance in each member's account every year; however, if a member receives a refund of contributions, the interest rate applied to the refund is lower than the 4% regular rate (Based on the *Code of Alabama 1975, Section 36-27-25(g)*).

### Member Contributions

Tier 1 (Groups 1 and 2):

- Prior to October 1, 2011, each member contributed 6.0% of salary.
- Beginning October 1, 2011, each member contributed 8.25% of salary.
- Beginning October 1, 2012, each member contributed 8.5% of salary.

Tier 2 (Group 3) and District Attorneys:

Each Tier 2 member and District Attorney member contributes 8.5% of salary.

If a positive investment performance results in a decrease in the total contribution rate paid by employers and employees participating in the System, the Retirement Systems of Alabama shall first reduce the employee contribution rate.

**By State** The State makes contributions, which in addition to the members' contributions, are sufficient to provide the retirement allowances described.

RETIREMENT SYSTEMS OF ALABAMA

Actuarial Section

Judicial Retirement Fund

Supporting Schedules

**Supporting Schedules**

The following schedule presents a ten-year history of active member valuation data:

**SCHEDULE OF ACTIVE MEMBER VALUATION DATA**

(Dollar Amounts Not in Thousands)

Valuation Date	Number	Annual Payroll*	Annual Average Pay**	% Increase/ (Decrease) in Average Pay
9/30/2019	366	\$45,325,830	\$123,841	(2.50)
9/30/2018	345	43,819,340	127,013	0.65
9/30/2017	351	44,291,914	126,188	(1.45)
9/30/2016	336	43,022,891	128,044	1.08
9/30/2015	338	42,814,343	126,670	0.27
9/30/2014	338	42,698,909	126,328	1.94
9/30/2013	338	41,887,006	123,926	(1.61)
9/30/2012	337	42,446,426	125,954	0.58
9/30/2011	334	41,826,338	125,229	(1.70)
9/30/2010	338	43,060,614	127,398	0.78

\*0.9% increase for total pay since 2013.

\*\*0.5% increase for average pay since 2013.

The following table presents a ten-year history of funding progress:

**SCHEDULE OF FUNDING PROGRESS**

(Dollar Amounts in Thousands)

Valuation Date	Actuarial Value of Assets (A)	Actuarial Liability (AAL) (B)	Unfunded AAL (UAAL) (B-A)	Percentage Funded (A/B)	Covered Payroll (C)	UAAL as a % of Covered Payroll ((B-A)/C)
9/30/2019	\$310,689	\$475,829	\$165,140	65.3	\$45,326	364.3
9/30/2018 *	305,397	457,834	152,437	66.7	43,819	347.9
9/30/2017 **	293,090	448,446	155,356	65.4	44,292	350.8
9/30/2016 *	279,807	446,920	167,113	62.6	43,023	388.4
9/30/2015	267,414	427,591	160,177	62.5	42,814	374.1
9/30/2014	257,452	422,863	165,411	60.9	42,699	387.4
9/30/2013	243,316	414,200	170,884	58.7	41,887	408.0
9/30/2012 ***	234,300	380,470	146,170	61.6	42,446	344.4
9/30/2011 ****	235,870	393,635	157,765	59.9	41,826	377.2
9/30/2010	246,197	358,459	112,262	68.7	43,061	260.7

\*Reflects changes in actuarial assumptions and methods.

\*\*Reflects changes in benefit structure beginning November 8, 2016.

\*\*\*Reflects changes in actuarial methods.

\*\*\*\*Reflects changes in actuarial assumptions.

RETIREMENT SYSTEMS OF ALABAMA

Actuarial Section

Judicial Retirement Fund

Supporting Schedules (Continued)

The following schedule presents a ten- year history of solvency tests:

**SOLVENCY TEST**  
(Dollar Amounts in Thousands)

Valuation Date	Aggregate Accrued Liabilities For			Reported Assets	% of Accrued Liabilities Covered by Reported Assets		
	(1)	(2)	(3)		(1)	(2)	(3)
	Active Member Contributions	Retirants and Beneficiaries	Active Members (Employer Financed Portion)				
9/30/2019	\$ 40,993	\$ 338,734	\$ 96,102	\$310,689	100	80	0.0
9/30/2018 *	48,609	296,550	112,675	305,397	100	87	0.0
9/30/2017	44,792	296,231	107,422	293,090	100	84	0.0
9/30/2016 *	45,900	280,836	120,185	279,807	100	83	0.0
9/30/2015	42,745	272,624	112,222	267,414	100	82	0.0
9/30/2014	40,981	268,439	113,443	257,452	100	81	0.0
9/30/2013	37,366	270,430	106,404	243,315	100	76	0.0
9/30/2012 **	38,341	237,197	104,932	234,300	100	83	0.0
9/30/2011 ***	32,898	250,731	110,006	235,870	100	81	0.0
9/30/2010	33,950	218,969	105,540	246,197	100	97	0.0

\*Reflects a change in actuarial assumptions and methods.

\*\*Reflects changes in actuarial methods.

\*\*\*Reflects changes in actuarial assumptions.

The following schedule presents ten years of retirant and beneficiary data:

**SCHEDULE OF RETIRANTS AND BENEFICIARIES ADDED AND REMOVED FROM ROLLS**

Fiscal Year Ended	Retirees Added		Retirees Removed		Retirees - Year-end		% Increase/ (Decrease) in Annual Allowances	Average Annual Allowance
	Number	Annual Allowances (000s)	Number	Annual Allowances (000s)	Number	Annual Allowances (000s)		
2019	52	\$ 3,027	3	\$ 252	452	\$ 33,628	8.99	\$ 74,398
2018	11	733	13	1,071	403	30,853	(1.08)	76,558
2017	27	1,895	6	490	405	31,191	4.72	77,015
2016	11	970	11	889	384	29,786	0.27	77,568
2015	16	1,500	6	479	384	29,705	3.56	77,357
2014	9	918	10	798	374	28,684	0.42	76,695
2013	33	3,144	4	315	375	28,564	10.99	76,171
2012	6	569	3	236	346	25,735	1.31	74,379
2011	28	2,939	10	786	343	25,402	9.26	74,058
2010	15	1,446	11	838	325	23,249	2.69	71,535

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The following table provides an analysis of actuarial gains and losses:

**ANALYSIS OF ACTUARIAL GAINS AND LOSSES**

(Dollar Amounts in Thousands)

	<u>Amount</u>
Unfunded Actuarial Liability as of September 30, 2018	\$ 152,437
Normal Cost for 2018 Plan Year	4,925
Contributions Received During the Year	(17,449)
Interest to Year End	<u>11,371</u>
Expected Unfunded Actuarial Liability as of September 30, 2019	<u>151,284</u>
Actuarial (Gains)Losses During the Year	
From Investments	1,424
From Actuarial Liabilities	<u>12,433</u>
Total Actuarial (Gains)/Losses During the Year	<u>13,857</u>
<b>Actual Unfunded Actuarial Liability as of September 30, 2019</b>	<b><u><u>\$ 165,141</u></u></b>



# Statistical Section

## Component Units of the State of Alabama Comprehensive Annual Financial Report



The Statistical Section of the comprehensive annual financial report presents detailed information as a context for understanding what the information in the financial statements, note disclosures, and required supplementary information says about the Retirement Systems' overall financial health.

#### **Financial Trends**

These schedules contain trend information to help the reader understand how the Retirement Systems' financial performance has changed over time.

Additions by Source – Ten-Year History – page 163

Deductions by Type – Ten-Year History – page 164

Benefits by Type – Ten-Year History – page 165

Ten-Year History of Additions, Reductions, and Changes in Net Position – page 166

#### **Retirees and Beneficiaries**

These schedules provide information concerning the retirees and beneficiaries receiving benefits.

Retired Members by Type of Benefit – page 172

Ten-Year History of Average Monthly Benefit Payments – page 175

#### **Participating Units**

These schedules provide information concerning units participating in the Employees' Retirement System.

Local Participating Employers – page 178

Largest Employers – Ten-Year History – page 187



RETIREMENT SYSTEMS OF ALABAMA

Statistical Section

Additions by Source

Ten-Year History

(Amounts in Thousands)

TEACHERS' RETIREMENT SYSTEM  
ADDITIONS BY SOURCE

Fiscal Year	Member Contributions					Transfers from an Internal Service Fund	Investment Income	Total
	Contributions \$	Amount	Tier 1	Tier 2 @	In From PEEHP			
2020	\$ 515,003	\$ 862,475	12.43	11.34	\$ -	602	\$ 1,374,356	\$ 2,752,436
2019	522,909	869,336	12.41	11.35	-	-	614,427	2,006,672
2018	493,466	802,598	12.24	11.01	24,700	-	2,264,234	3,584,998
2017	489,638	782,695	12.01	10.82	-	-	2,636,105	3,908,438
2016	475,980	751,902	11.94	10.84	-	-	2,199,404	3,427,286
2015	477,918	737,671	11.71	11.05	-	-	2,614,688	1,477,057
2014	480,849	739,547	11.71	11.08	-	-	2,473,152	3,693,548
2013	477,586	627,892	10.08	9.44	-	-	2,732,706	3,838,184
2012	458,534	618,306	10.00	-	-	-	2,989,162	4,066,002
2011	323,196	779,644	12.51	-	-	-	351,965	1,454,805

EMPLOYEES' RETIREMENT SYSTEM  
ADDITIONS BY SOURCE

Employer Contributions		Employer Rate (%)	
State		Tier 2 @	
Tier 1		Regular	Law
		14.87	45.56

Fiscal Year	Member Contributions \$	Amount	Employer Contributions			Law	Regular	Law	Local	New Units	Investment Income	Transfers from an Internal Service Fund	Total
			Regular	Law	Judges & Clerks**								
2020	\$ 270,947	\$ 519,806	15.24	52.29	14.87	45.56	41.40	34.32	19.77	\$ 344,352	\$ 723,630	\$ 395	\$ 1,859,130
2019	254,440	467,553	14.51	50.08	14.14	43.43	41.40	34.32	19.77	-	320,585	-	1,042,578
2018	241,741	426,340	13.94	44.44	13.29	39.29	40.09	34.32	19.77	-	1,098,412	-	1,766,493
2017	233,901	426,215	13.89	57.25	13.25	53.55	40.09	34.32	19.77	-	1,402,163	-	2,062,279
2016	238,017	435,098	14.57	42.61	14.09	38.98	40.98	34.32	19.77	-	1,053,031	-	1,726,146
2015	229,254	410,932	13.45	38.37	13.31	32.45	35.24	34.32	19.77	-	1,264,900	-	1,766,676
2014	226,016	391,181	12.02	35.81	11.96	29.52	32.06	34.32	19.77	-	1,186,529	-	1,803,726
2013	223,646	338,819	10.12	31.61	10.04	25.32	32.06	34.32	19.77	-	1,296,460	-	1,858,925
2012	216,870	317,520	9.42	29.92	-	-	32.06	34.32	19.77	-	1,427,858	-	1,962,248
2011	195,709	394,998	11.94	30.57	-	-	24.20	34.32	19.77	-	196,939	-	787,646

JUDICIAL RETIREMENT FUND  
ADDITIONS BY SOURCE

Fiscal Year	Member Contributions \$	Amount	Employer Contributions			Law	Regular	Law	Local	New Units	Investment Income	Transfers from an Internal Service Fund	Total
			Groups 1 & 2	Judges & Clerks**	District Attorneys***								
2020	\$ 4,184	\$ 18,099	41.40	34.32	19.77	34.32	41.40	34.32	19.77	\$ 23,159	\$ 45,442	\$ 45,442	
2019	4,101	18,022	41.40	34.32	19.77	34.32	40.09	34.32	19.77	11,016	33,139	33,139	
2018	3,867	17,180	40.09	40.98	19.77	34.32	40.09	34.32	19.77	27,622	48,669	48,669	
2017	3,972	17,373	40.98	40.98	-	-	40.98	34.32	19.77	32,685	54,030	54,030	
2016	3,723	17,529	40.98	40.98	-	-	40.98	34.32	19.77	28,321	49,573	49,573	
2015	3,683	15,077	35.24	35.24	-	-	35.24	34.32	19.77	(856)	17,904	17,904	
2014	3,764	15,790	35.24	35.24	-	-	35.24	34.32	19.77	31,344	50,898	50,898	
2013	3,919	13,903	32.06	32.06	-	-	32.06	34.32	19.77	32,245	50,067	50,067	
2012	3,681	10,747	24.35	24.35	-	-	24.35	34.32	19.77	39,011	53,439	53,439	
2011	2,654	10,906	24.20	24.20	-	-	24.20	34.32	19.77	2,022	15,582	15,582	

§ Includes transfers from other systems.

\* Local agency rates differ for each participating agency.

© A new tier of benefits was established for members hired on or after January 1, 2013, which included different contribution rates for the members and their employers.

\*\*A new plan was created within the JRF for Judges and Clerks who were first elected or appointed on or after November 8, 2016, and were not a member of the JRF or the Clerks & Registers' Superannuation Fund.

\*\*\*A new plan was created within the JRF for District Attorneys who were serving in the capacity of District Attorney on or after November 8, 2016.

RETIREMENT SYSTEMS OF ALABAMA

Statistical Section

Deductions by Type

Ten-Year History

(Amounts in Thousands)

**TEACHERS' RETIREMENT SYSTEM  
DEDUCTIONS BY TYPE**

<b>Fiscal Year</b>	<b>Benefit Payments</b>	<b>Contribution Refunds &amp; Death Benefits</b>	<b>Service Transfers</b>	<b>Administrative Expenses</b>	<b>Depreciation</b>	<b>Total</b>
2020	\$ 2,328,892	\$ 60,601	\$ 4,891	\$ 21,957	\$ 9,154	\$ 2,425,495
2019	2,233,514	56,861	4,187	20,583	7,512	2,322,657
2018	2,204,031	58,538	4,908	15,952	6,338	2,289,767
2017	2,111,830	55,634	3,413	16,390	6,012	2,193,279
2016	2,155,784	57,130	6,223	14,873	4,709	2,238,719
2015	2,075,302	58,060	3,432	15,074	4,258	2,156,126
2014	1,997,595	54,699	2,880	13,103	4,336	2,072,613
2013	1,893,321	55,891	1,823	12,591	4,312	1,967,938
2012	1,800,805	49,453	1,937	11,555	4,344	1,868,094
2011	1,673,881	49,304	2,012	10,820	4,243	1,740,260

**EMPLOYEES' RETIREMENT SYSTEM  
DEDUCTIONS BY TYPE**

<b>Fiscal Year</b>	<b>Benefit Payments</b>	<b>Contribution Refunds &amp; Death Benefits</b>	<b>Unit Withdrawals &amp; Service Transfers</b>	<b>Administrative Expenses</b>	<b>Depreciation</b>	<b>Total</b>
2020	\$ 1,209,437	\$ 46,745	\$ 4,344	\$ 13,128	\$ 3,411	\$ 1,277,065
2019	1,123,150	48,675	6,803	12,934	2,895	1,194,457
2018	1,096,883	45,070	5,415	11,219	2,544	1,161,131
2017	1,050,340	48,683	3,357	11,982	2,520	1,116,882
2016	1,038,517	45,768	3,668	11,002	2,021	1,100,976
2015	1,018,515	51,024	4,059	11,136	2,046	1,086,780
2014	948,478	47,937	3,632	9,612	2,055	1,011,714
2013	895,475	44,837	3,587	9,767	2,015	955,681
2012	848,464	40,746	2,180	10,616	1,981	903,987
2011	782,957	36,798	2,157	10,002	2,029	833,943

**JUDICIAL RETIREMENT FUND  
DEDUCTIONS BY TYPE**

<b>Fiscal Year</b>	<b>Benefit Payments</b>	<b>Contribution Refunds &amp; Death Benefits</b>	<b>Service Transfers</b>	<b>Administrative Expenses</b>	<b>Depreciation</b>	<b>Total</b>
2020	\$ 38,812	\$ 256	\$ -	\$ 357	\$ -	\$ 39,425
2019	36,909	646	-	357	-	37,912
2018	33,419	130	-	328	-	33,877
2017	32,807	353	-	334	-	33,494
2016	30,893	115	-	397	-	31,405
2015	30,348	100	55	356	-	30,859
2014	29,826	54	1	281	-	30,162
2013	29,112	196	-	280	-	29,588
2012	27,183	253	-	257	-	27,693
2011	26,379	34	-	276	-	26,689

RETIREMENT SYSTEMS OF ALABAMA

Statistical Section

Benefits by Type

Ten-Year History

(Amounts in Thousands)

**TEACHERS' RETIREMENT SYSTEM**

**BENEFITS BY TYPE**

Fiscal Year	Age & Service Benefits		Disability Benefits	Death Benefits & Refunds	
	Retirants	Survivors		Death	Resignation
2020	\$ 2,168,552	\$ 90,192	\$ 70,148	\$ 16,944	\$ 43,657
2019	2,079,529	85,566	68,419	14,333	42,528
2018	2,053,906	82,406	67,719	12,827	45,711
2017	1,971,017	75,812	65,001	13,142	42,492
2016	2,021,973	70,959	62,852	14,578	42,552
2015	1,947,983	66,636	60,683	14,095	43,965
2014	1,876,615	62,674	58,306	11,225	43,474
2013	1,778,541	58,669	56,111	11,684	44,207
2012	1,692,169	55,109	53,527	11,269	38,184
2011	1,571,682	51,873	50,326	13,174	36,130

**EMPLOYEES' RETIREMENT SYSTEM**

**BENEFITS BY TYPE**

Fiscal Year	Age & Service Benefits		Disability Benefits	Death Benefits & Refunds	
	Retirants	Survivors		Death	Resignation
2020	\$ 1,092,775	\$ 55,119	\$ 61,543	\$ 12,478	\$ 34,267
2019	1,010,482	52,028	60,640	9,979	38,696
2018	987,527	49,220	60,136	10,843	34,577
2017	946,203	45,810	58,327	9,197	39,486
2016	937,752	43,376	57,389	8,842	36,926
2015	919,657	42,308	56,550	9,800	41,224
2014	855,857	39,488	53,133	9,687	38,250
2013	806,846	37,730	50,899	7,889	36,948
2012	763,881	36,161	48,422	8,969	31,777
2011	703,128	34,538	45,291	7,806	28,992

**JUDICIAL RETIREMENT FUND**

**BENEFITS BY TYPE**

Fiscal Year	Age & Service Benefits		Disability Benefits	Death Benefits & Refunds	
	Retirants	Survivors		Death	Resignation
2020	\$ 34,193	\$ 4,054	\$ 565	\$ 123	\$ 133
2019	32,288	4,055	566	-	646
2018	28,983	3,913	523	44	86
2017	28,370	3,956	481	19	334
2016	26,556	3,850	487	10	105
2015	26,082	3,839	427	8	92
2014	25,796	3,703	327	-	54
2013	25,022	3,715	375	-	196
2012	23,307	3,501	375	-	253
2011	22,773	3,231	375	-	34

RETIREMENT SYSTEMS OF ALABAMA

Statistical Section

Teachers' Retirement System

Ten-Year History of Additions, Reductions, and Changes in Net Position

(Amounts in Thousands)

	2020	2019	2018	2017	2016
<b>Additions</b>					
Contributions					
Employee	\$ 510,818	\$ 516,675	\$ 488,503	\$ 486,542	\$ 472,390
Employer	862,475	869,336	802,598	782,695	751,902
Transfers from Employees' Retirement System	4,185	6,234	4,963	3,096	3,590
Transfers from Judicial Retirement Fund	-	-	-	-	-
Transfers from PEEHIP	-	-	24,700	-	-
Transfers from an Internal Service Fund	602	-	-	-	-
Total Contributions	1,378,080	1,392,245	1,320,764	1,272,333	1,227,882
Investment Income					
<i>From Investing Activities</i>					
Net Increase/(Decrease) in Fair Value of Investments	801,465	33,671	1,615,440	2,021,774	1,589,279
Interest and Dividends	576,193	583,329	650,293	613,353	607,795
Total Investment Income from Investing Activities	1,377,658	617,000	2,265,733	2,635,127	2,197,074
Less: Investment Expenses, Net	9,719	9,205	9,171	8,685	7,731
Net Investment Income from Investing Activities	1,367,939	607,795	2,256,562	2,626,442	2,189,343
<i>From Securities Lending Activities</i>					
Securities Lending Income	13,960	28,905	23,246	20,125	15,930
Less Securities Lending Expenses:					
Borrower Rebates	4,423	19,431	12,385	7,350	2,825
Management Fees	3,120	2,842	3,189	3,112	3,044
Total Securities Lending Expenses	7,543	22,273	15,574	10,462	5,869
Net Income from Securities Lending Activities	6,417	6,632	7,672	9,663	10,061
Total Net Investment Income	1,374,356	614,427	2,264,234	2,636,105	2,199,404
Total Additions	2,752,436	2,006,672	3,584,998	3,908,438	3,427,286
<b>Deductions</b>					
Retirement Allowance Payments	2,328,892	2,233,514	2,204,031	2,111,830	2,155,784
Return of Contributions and Death Benefits	60,601	56,861	58,538	55,634	57,130
Transfers to Employees' Retirement System	4,891	4,187	4,899	3,413	6,223
Transfers to Judicial Retirement Fund	-	-	9	-	-
Administrative Expenses	21,957	20,583	15,952	16,390	14,873
Depreciation	9,154	7,512	6,338	6,012	4,709
Total Deductions	2,425,495	2,322,657	2,289,767	2,193,279	2,238,719
Net Increase/(Decrease)	326,941	(315,985)	1,295,231	1,715,159	1,188,567
<b>Net Position Restricted for Pension Benefits</b>					
Beginning of Year - as previously reported	25,619,448	25,935,433	24,651,457	22,936,298	21,747,731
Adjustment for Application of GASB 68	-	-	-	-	-
Adjustment for Application of GASB 75	-	-	(11,255)	-	-
Beginning of Year - as adjusted	25,619,448	25,935,433	24,640,202	22,936,298	21,747,731
End of Year	\$ 25,946,389	\$ 25,619,448	\$ 25,935,433	\$ 24,651,457	\$ 22,936,298

	2015	2014	2013	2012	2011
<b>Additions</b>					
Contributions					
Employee	\$ 473,903	\$ 477,300	\$ 474,241	\$ 456,518	\$ 321,137
Employer	737,671	739,547	627,892	618,306	779,644
Transfers from Employees' Retirement System	4,015	3,549	3,345	2,016	2,059
Transfers from Judicial Retirement Fund	-	-	-	-	-
Transfers from PEEHIP	-	-	-	-	-
Transfers from an Internal Service Fund	-	-	-	-	-
Total Contributions	<u>1,215,589</u>	<u>1,220,396</u>	<u>1,105,478</u>	<u>1,076,840</u>	<u>1,102,840</u>
Investment Income					
<i>From Investing Activities</i>					
Net Increase/(Decrease) in Fair Value of Investments	(381,400)	1,853,288	2,090,646	2,349,955	(278,407)
Interest and Dividends	640,910	618,861	638,766	634,695	624,546
Total Investment Income from Investing Activities	259,510	2,472,149	2,729,412	2,984,650	346,139
Less: Investment Expenses, Net	6,407	5,732	5,712	5,260	5,305
Net Investment Income from Investing Activities	<u>253,103</u>	<u>2,466,417</u>	<u>2,723,700</u>	<u>2,979,390</u>	<u>340,834</u>
<i>From Securities Lending Activities</i>					
Securities Lending Income	11,512	9,629	12,753	13,670	15,643
Less Securities Lending Expenses:					
Borrower Rebates	365	65	401	433	1,261
Management Fees	2,782	2,829	3,346	3,465	3,251
Total Securities Lending Expenses	<u>3,147</u>	<u>2,894</u>	<u>3,747</u>	<u>3,898</u>	<u>4,512</u>
Net Income from Securities Lending Activities	<u>8,365</u>	<u>6,735</u>	<u>9,006</u>	<u>9,772</u>	<u>11,131</u>
Total Net Investment Income	<u>261,468</u>	<u>2,473,152</u>	<u>2,732,706</u>	<u>2,989,162</u>	<u>351,965</u>
Total Additions	<u>1,477,057</u>	<u>3,693,548</u>	<u>3,838,184</u>	<u>4,066,002</u>	<u>1,454,805</u>
<b>Deductions</b>					
Retirement Allowance Payments	2,075,302	1,997,595	1,893,321	1,800,805	1,673,881
Return of Contributions and Death Benefits	58,060	54,699	55,891	49,453	49,304
Transfers to Employees' Retirement System	3,432	2,880	1,823	1,937	2,012
Transfers to Judicial Retirement Fund	-	-	-	-	-
Administrative Expenses	15,074	13,103	12,591	11,555	10,820
Depreciation	4,258	4,336	4,312	4,344	4,243
Total Deductions	<u>2,156,126</u>	<u>2,072,613</u>	<u>1,967,938</u>	<u>1,868,094</u>	<u>1,740,260</u>
<b>Net Increase/(Decrease)</b>	<u>(679,069)</u>	<u>1,620,935</u>	<u>1,870,246</u>	<u>2,197,908</u>	<u>(285,455)</u>
<b>Net Position Restricted for Pension Benefits</b>					
Beginning of Year - as previously reported	22,441,307	20,820,372	18,950,126	16,752,218	17,037,673
Adjustment for Application of GASB 68	(14,507)	-	-	-	-
Adjustment for Application of GASB 75	-	-	-	-	-
Beginning of Year - as adjusted	<u>22,426,800</u>	<u>20,820,372</u>	<u>18,950,126</u>	<u>16,752,218</u>	<u>17,037,673</u>
<b>End of Year</b>	<u><b>\$ 21,747,731</b></u>	<u><b>\$ 22,441,307</b></u>	<u><b>\$ 20,820,372</b></u>	<u><b>\$ 18,950,126</b></u>	<u><b>\$ 16,752,218</b></u>

RETIREMENT SYSTEMS OF ALABAMA

Statistical Section

Employees' Retirement System

Ten-Year History of Additions, Reductions, and Changes in Net Position

(Amounts in Thousands)

	2020	2019	2018	2017	2016
<b>Additions</b>					
Contributions					
Employee	\$ 266,056	\$ 250,253	\$ 236,842	\$ 230,488	\$ 231,794
Employer	519,806	467,553	426,340	426,215	435,098
New Units	344,352	-	-	-	-
Transfers from Teachers' Retirement System	4,891	4,187	4,899	3,413	6,223
Transfers from Judicial Retirement Fund	-	-	-	-	-
Transfers from an Internal Service Fund	395	-	-	-	-
Total Contributions	1,135,500	721,993	668,081	660,116	673,115
Investment Income					
<i>From Investing Activities</i>					
Net Increase/(Decrease) in Fair Value of Investments	425,632	30,092	775,132	1,098,859	753,836
Interest and Dividends	298,770	291,011	323,182	302,295	297,369
Total Investment Income from Investing Activities	724,402	321,103	1,098,314	1,401,154	1,051,205
Less: Investment Expenses, Net	3,828	3,661	3,395	3,305	2,883
Net Investment Income from Investing Activities	720,574	317,442	1,094,919	1,397,849	1,048,322
<i>From Securities Lending Activities</i>					
Securities Lending Income	6,534	13,884	10,589	9,127	7,481
Less Securities Lending Expenses:					
Borrower Rebates	1,996	9,394	5,647	3,424	1,356
Management Fees	1,482	1,347	1,449	1,389	1,416
Total Securities Lending Expenses	3,478	10,741	7,096	4,813	2,772
Net Income from Securities Lending Activities	3,056	3,143	3,493	4,314	4,709
Total Net Investment Income	723,630	320,585	1,098,412	1,402,163	1,053,031
Total Additions	1,859,130	1,042,578	1,766,493	2,062,279	1,726,146
<b>Deductions</b>					
Retirement Allowance Payments	1,209,437	1,123,150	1,096,883	1,050,340	1,038,517
Return of Contributions and Death Benefits	46,745	48,675	45,070	47,683	45,768
Unit Withdrawals	-	380	350	1,000	-
Transfers to Teachers' Retirement System	4,185	6,234	4,963	3,096	3,590
Transfers to Judicial Retirement Fund	159	189	102	261	78
Administrative Expenses	13,128	12,934	11,219	11,982	11,002
Depreciation	3,411	2,895	2,544	2,520	2,021
Total Deductions	1,277,065	1,194,457	1,161,131	1,116,882	1,100,976
<b>Net Increase/(Decrease)</b>	582,065	(151,879)	605,362	945,397	625,170
<b>Net Position Restricted for Pension Benefits</b>					
Beginning of Year - as previously reported	12,568,473	12,720,352	12,122,471	11,177,074	10,551,904
Adjustment for Application of GASB 68	-	-	-	-	-
Adjustment for Application of GASB 75	-	-	(7,481)	-	-
Beginning of Year - as adjusted	12,568,473	12,720,352	12,114,990	11,177,074	10,551,904
<b>End of Year</b>	<b>\$ 13,150,538</b>	<b>\$ 12,568,473</b>	<b>\$ 12,720,352</b>	<b>\$ 12,122,471</b>	<b>\$ 11,177,074</b>

	2015	2014	2013	2012	2011
<b>Additions</b>					
Contributions					
Employee	\$ 225,767	\$ 223,135	\$ 221,823	\$ 214,933	\$ 193,697
Employer	410,932	391,181	338,819	317,520	394,998
New Units	-	-	-	-	-
Transfers from Teachers' Retirement System	3,432	2,880	1,823	1,937	2,012
Transfers from Judicial Retirement Fund	55	1	-	-	-
Transfers from an Internal Service Fund	-	-	-	-	-
Total Contributions	<u>640,186</u>	<u>617,197</u>	<u>562,465</u>	<u>534,390</u>	<u>590,707</u>
Investment Income					
<i>From Investing Activities</i>					
Net Increase/(Decrease) in Fair Value of Investments	(186,154)	888,303	984,714	1,114,737	(112,758)
Interest and Dividends	311,516	298,049	310,220	310,748	307,152
Total Investment Income from Investing Activities	125,362	1,186,352	1,294,934	1,425,485	194,394
Less: Investment Expenses, Net	2,771	2,766	2,549	2,256	2,308
Net Investment Income from Investing Activities	<u>122,591</u>	<u>1,183,586</u>	<u>1,292,385</u>	<u>1,423,229</u>	<u>192,086</u>
<i>From Securities Lending Activities</i>					
Securities Lending Income	5,353	4,199	5,780	6,445	6,891
Less Securities Lending Expenses:					
Borrower Rebates	164	21	186	174	517
Management Fees	1,290	1,235	1,519	1,642	1,521
Total Securities Lending Expenses	1,454	1,256	1,705	1,816	2,038
Net Income from Securities Lending Activities	3,899	2,943	4,075	4,629	4,853
Total Net Investment Income	<u>126,490</u>	<u>1,186,529</u>	<u>1,296,460</u>	<u>1,427,858</u>	<u>196,939</u>
Total Additions	<u>766,676</u>	<u>1,803,726</u>	<u>1,858,925</u>	<u>1,962,248</u>	<u>787,646</u>
<b>Deductions</b>					
Retirement Allowance Payments	1,018,515	948,478	895,475	848,464	782,957
Return of Contributions and Death Benefits	51,024	47,937	44,837	40,746	36,798
Unit Withdrawals	-	-	-	-	-
Transfers to Teachers' Retirement System	4,015	3,549	3,345	2,016	2,059
Transfers to Judicial Retirement Fund	44	83	242	164	98
Administrative Expenses	11,136	9,612	9,767	10,616	10,002
Depreciation	2,046	2,055	2,015	1,981	2,029
Total Deductions	<u>1,086,780</u>	<u>1,011,714</u>	<u>955,681</u>	<u>903,987</u>	<u>833,943</u>
<b>Net Increase/(Decrease)</b>	<u>(320,104)</u>	<u>792,012</u>	<u>903,244</u>	<u>1,058,261</u>	<u>(46,297)</u>
<b>Net Position Restricted for Pension Benefits</b>					
Beginning of Year - as previously reported	10,883,952	10,091,940	9,188,696	8,130,435	8,176,732
Adjustment for Application of GASB 68	(11,944)	-	-	-	-
Adjustment for Application of GASB 75	-	-	-	-	-
Beginning of Year - as adjusted	<u>10,872,008</u>	<u>10,091,940</u>	<u>9,188,696</u>	<u>8,130,435</u>	<u>8,176,732</u>
<b>End of Year</b>	<u><b>\$ 10,551,904</b></u>	<u><b>\$ 10,883,952</b></u>	<u><b>\$ 10,091,940</b></u>	<u><b>\$ 9,188,696</b></u>	<u><b>\$ 8,130,435</b></u>

RETIREMENT SYSTEMS OF ALABAMA

*Statistical Section*

Judicial Retirement Fund

Ten-Year History of Additions, Reductions, and Changes in Net Position

(Amounts in Thousands)

	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>
<b>Additions</b>					
Contributions					
Employee	\$ 4,025	\$ 3,912	\$ 3,756	\$ 3,711	\$ 3,645
Employer	18,099	18,022	17,180	17,373	17,529
Transfers from Teachers' Retirement System	-	-	9	-	-
Transfers from Employees' Retirement System	159	189	102	261	78
Total Contributions	<u>22,283</u>	<u>22,123</u>	<u>21,047</u>	<u>21,345</u>	<u>21,252</u>
Investment Income					
<i>From Investing Activities</i>					
Net Increase/(Decrease) in Fair Value of Investments	16,173	3,476	20,071	25,639	21,302
Interest and Dividends	6,928	7,463	7,471	6,910	6,865
Total Investment Income from Investing Activities	<u>23,101</u>	<u>10,939</u>	<u>27,542</u>	<u>32,549</u>	<u>28,167</u>
Less: Investment Expenses, Net	-	-	-	-	-
Net Investment Income from Investing Activities	<u>23,101</u>	<u>10,939</u>	<u>27,542</u>	<u>32,549</u>	<u>28,167</u>
<i>From Securities Lending Activities</i>					
Securities Lending Income	128	327	248	270	258
Less Securities Lending Expenses:					
Borrower Rebates	41	218	134	90	58
Management Fees	29	32	34	44	46
Total Securities Lending Expenses	<u>70</u>	<u>250</u>	<u>168</u>	<u>134</u>	<u>104</u>
Net Income from Securities Lending Activities	<u>58</u>	<u>77</u>	<u>80</u>	<u>136</u>	<u>154</u>
Total Investment Income	<u>23,159</u>	<u>11,016</u>	<u>27,622</u>	<u>32,685</u>	<u>28,321</u>
Total Additions	<u>45,442</u>	<u>33,139</u>	<u>48,669</u>	<u>54,030</u>	<u>49,573</u>
<b>Deductions</b>					
Retirement Allowance Payments	38,812	36,909	33,419	32,807	30,893
Return of Contributions and Death Benefits	256	646	130	353	115
Transfers to Employees' Retirement System	-	-	-	-	-
Administrative Expenses	357	357	328	334	397
Total Deductions	<u>39,425</u>	<u>37,912</u>	<u>33,877</u>	<u>33,494</u>	<u>31,405</u>
<b>Net Increase/(Decrease)</b>	<u>6,017</u>	<u>(4,773)</u>	<u>14,792</u>	<u>20,536</u>	<u>18,168</u>
<b>Net Position Restricted for Pension Benefits</b>					
Beginning of Year - as previously reported	312,541	317,314	302,578	282,042	263,874
Adjustment for Application of GASB 68	-	-	-	-	-
Adjustment for Application of GASB 75	-	-	(56)	-	-
Beginning of Year - as adjusted	<u>312,541</u>	<u>317,314</u>	<u>302,522</u>	<u>282,042</u>	<u>263,874</u>
<b>End of Year</b>	<u><b>\$ 318,558</b></u>	<u><b>\$ 312,541</b></u>	<u><b>\$ 317,314</b></u>	<u><b>\$ 302,578</b></u>	<u><b>\$ 282,042</b></u>



	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>2012</u>	<u>2011</u>
<b>Additions</b>					
Contributions					
Employee	\$ 3,639	\$ 3,681	\$ 3,677	\$ 3,517	\$ 2,556
Employer	15,077	15,790	13,903	10,747	10,906
Transfers from Teachers' Retirement System	-	-	-	-	-
Transfers from Employees' Retirement System	44	83	242	164	98
Total Contributions	<u>18,760</u>	<u>19,554</u>	<u>17,822</u>	<u>14,428</u>	<u>13,560</u>
Investment Income					
<i>From Investing Activities</i>					
Net Increase/(Decrease) in Fair Value of Investments	(7,695)	24,197	25,207	32,112	(4,961)
Interest and Dividends	6,698	7,030	6,912	6,748	6,853
Total Investment Income from Investing Activities	(997)	31,227	32,119	38,860	1,892
Less: Investment Expenses, Net	-	-	-	-	-
Net Investment Income from Investing Activities	<u>(997)</u>	<u>31,227</u>	<u>32,119</u>	<u>38,860</u>	<u>1,892</u>
<i>From Securities Lending Activities</i>					
Securities Lending Income	195	167	184	215	201
Less Securities Lending Expenses:					
Borrower Rebates	7	1	10	12	22
Management Fees	47	49	48	52	49
Total Securities Lending Expenses	<u>54</u>	<u>50</u>	<u>58</u>	<u>64</u>	<u>71</u>
Net Income from Securities Lending Activities	<u>141</u>	<u>117</u>	<u>126</u>	<u>151</u>	<u>130</u>
Total Investment Income	<u>(856)</u>	<u>31,344</u>	<u>32,245</u>	<u>39,011</u>	<u>2,022</u>
Total Additions	<u>17,904</u>	<u>50,898</u>	<u>50,067</u>	<u>53,439</u>	<u>15,582</u>
<b>Deductions</b>					
Retirement Allowance Payments	30,348	29,826	29,112	27,183	26,379
Return of Contributions and Death Benefits	100	54	196	253	34
Transfers to Employees' Retirement System	55	1	-	-	-
Administrative Expenses	356	281	280	257	276
Total Deductions	<u>30,859</u>	<u>30,162</u>	<u>29,588</u>	<u>27,693</u>	<u>26,689</u>
<b>Net Increase/(Decrease)</b>	<u>(12,955)</u>	<u>20,736</u>	<u>20,479</u>	<u>25,746</u>	<u>(11,107)</u>
<b>Net Position Restricted for Pension Benefits</b>					
Beginning of Year - as previously reported	277,096	256,360	235,881	210,135	221,242
Adjustment for Application of GASB 68	(267)	-	-	-	-
Adjustment for Application of GASB 75	-	-	-	-	-
Beginning of Year - as adjusted	<u>276,829</u>	<u>256,360</u>	<u>235,881</u>	<u>210,135</u>	<u>221,242</u>
<b>End of Year</b>	<u><b>\$ 263,874</b></u>	<u><b>\$ 277,096</b></u>	<u><b>\$ 256,360</b></u>	<u><b>\$ 235,881</b></u>	<u><b>\$ 210,135</b></u>

RETIREMENT SYSTEMS OF ALABAMA

Statistical Section

Teachers' Retirement System

Retired Members by Type of Benefit as of September 30, 2019

Amount of Monthly Benefit	Number of Retirants	Type of Retirement <sup>1</sup>			Option Selected <sup>2</sup>				
		A	B	C	Maximum	Opt-1	Opt-2	Opt-3	Opt-4
\$ 1 - 250	1,453	865	444	144	262	311	466	414	-
251 - 500	8,894	6,515	921	1,458	2,532	3,370	1,867	1,122	3
501 - 750	9,165	7,284	726	1,155	2,367	3,671	1,954	1,169	4
751 - 1,000	7,988	6,500	654	834	1,896	3,178	1,737	1,171	6
1,001 - 1,250	6,853	5,646	538	669	1,359	2,606	1,801	1,084	3
1,251 - 1,500	6,109	5,098	469	542	1,185	2,216	1,761	945	2
1,501 - 1,750	7,201	6,400	349	452	1,265	2,922	2,028	982	4
1,751 - 2,000	9,035	8,457	279	299	1,556	3,990	2,174	1,312	3
2,001 - 2,250	9,339	8,935	227	177	1,403	4,189	2,486	1,258	3
2,251 - 2,500	7,724	7,441	192	91	1,175	3,571	1,969	1,006	3
2,501 - 2,750	5,711	5,524	131	56	833	2,586	1,538	754	-
2,751 - 3,000	4,248	4,112	101	35	628	1,798	1,192	628	2
3,001 - 3,250	3,190	3,079	89	22	425	1,338	951	472	4
3,251 - 3,500	2,389	2,288	91	10	325	954	761	348	1
3,501 - 3,750	1,862	1,799	56	7	241	743	608	267	3
3,751 - 4,000	1,418	1,375	36	7	200	573	419	223	3
4,001 - 4,250	1,216	1,178	37	1	166	503	350	195	2
4,251 - 4,500	894	862	30	2	108	345	297	141	3
4,501 - 4,750	671	653	18	-	91	239	223	117	1
4,751 - 5,000	575	560	15	-	75	209	202	88	1
Over	2,604	2,514	86	4	308	811	1,012	458	15
<b>Totals</b>	<b>98,539</b>	<b>87,085</b>	<b>5,489</b>	<b>5,965</b>	<b>18,400</b>	<b>40,123</b>	<b>25,796</b>	<b>14,154</b>	<b>66</b>

<sup>1</sup> Type of Retirement

- A - Service
- B - Survivor Benefit
- C - Disability

<sup>2</sup> Option

- Maximum - Life Annuity
- Opt-1 - Cash Refund
- Opt-2 - 100% Joint Survivorship
- Opt-3 - 50% Joint Survivorship
- Opt-4 - Other

RETIREMENT SYSTEMS OF ALABAMA

Statistical Section

Employees' Retirement System

Retired Members by Type of Benefit as of September 30, 2019

	Amount of Monthly Benefit	Number of Retirants	Type of Retirement <sup>1</sup>			Option Selected <sup>2</sup>				
			A	B	C	Maximum	Opt-1	Opt-2	Opt-3	Opt-4
\$	1 - 250	344	130	205	9	46	27	69	190	12
	251 - 500	3,589	2,314	915	360	919	896	896	831	47
	501 - 750	5,164	3,552	820	792	1,523	1,578	1,089	889	85
	751 - 1,000	4,916	3,470	587	859	1,463	1,624	906	848	75
	1,001 - 1,250	5,373	4,188	484	701	1,262	1,971	1,158	892	90
	1,251 - 1,500	4,845	3,967	384	494	1,074	1,841	1,099	762	69
	1,501 - 1,750	4,589	3,958	277	354	957	1,773	1,025	773	61
	1,751 - 2,000	4,179	3,784	165	230	803	1,706	882	742	46
	2,001 - 2,250	3,580	3,316	116	148	684	1,311	890	651	44
	2,251 - 2,500	3,040	2,827	96	117	573	1,164	747	520	36
	2,501 - 2,750	2,440	2,286	68	86	425	961	598	424	32
	2,751 - 3,000	1,903	1,809	51	43	319	750	462	352	20
	3,001 - 3,250	1,694	1,621	48	25	278	686	410	299	21
	3,251 - 3,500	1,185	1,135	35	15	191	474	288	215	17
	3,501 - 3,750	958	930	18	10	164	390	218	169	17
	3,751 - 4,000	715	693	14	8	125	298	154	128	10
	4,001 - 4,250	609	594	12	3	78	253	144	120	14
	4,251 - 4,500	445	427	11	7	72	172	111	85	5
	4,501 - 4,750	347	339	8	-	59	134	88	61	5
	4,751 - 5,000	317	306	8	3	53	108	83	69	4
	Over 5,000	1,219	1,191	22	6	189	460	297	258	15
	<b>Totals</b>	<b>51,451</b>	<b>42,837</b>	<b>4,344</b>	<b>4,270</b>	<b>11,257</b>	<b>18,577</b>	<b>11,614</b>	<b>9,278</b>	<b>725</b>

<sup>1</sup> Type of Retirement

- A - Service
- B - Survivor Benefit
- C - Disability

<sup>2</sup> Option

- Maximum - Life Annuity
- Opt-1 - Cash Refund
- Opt-2 - 100% Joint Survivorship
- Opt-3 - 50% Joint Survivorship
- Opt-4 - Other

RETIREMENT SYSTEMS OF ALABAMA

Statistical Section

Judicial Retirement Fund

Retired Members by Type of Benefit as of September 30, 2019

Amount of Monthly Benefit	Number of Retirants	Type of Retirement †			Option	
		A	B	C	Maximum	Joint Survivorship
\$ 1 - 250	-	-	-	-	-	-
251 - 500	2	-	2	-	2	-
501 - 750	1	-	1	-	1	-
751 - 1,000	3	-	3	-	3	-
1,001 - 1,250	4	-	3	1	3	1
1,251 - 1,500	12	-	12	-	12	-
1,501 - 1,750	7	1	6	-	6	1
1,751 - 2,000	4	-	4	-	4	-
2,001 - 2,250	3	-	3	-	3	-
2,251 - 2,500	1	-	1	-	1	-
2,501 - 2,750	1	-	1	-	1	-
2,751 - 3,000	4	-	4	-	4	-
3,001 - 3,250	6	2	1	3	2	4
3,251 - 3,500	15	5	10	-	10	5
3,501 - 3,750	23	1	22	-	22	1
3,751 - 4,000	28	2	26	-	28	-
4,001 - 4,250	4	4	-	-	-	4
4,251 - 4,500	6	5	1	-	3	3
4,501 - 4,750	9	7	1	1	2	7
4,751 - 5,000	12	8	4	-	4	8
Over 5,000	307	297	6	4	56	251
<b>Totals</b>	<b>452</b>	<b>332</b>	<b>111</b>	<b>9</b>	<b>167</b>	<b>285</b>

† Type of Retirement

A - Service

B - Survivor Benefit

C - Disability

RETIREMENT SYSTEMS OF ALABAMA

Statistical Section

Teachers' Retirement System

Ten-Year History of Average Monthly Benefit Payments as of September 30

	Years Credited Service				
	10-14	15-19	20-24	25-29	30 & over
<b>2019</b>					
Average monthly benefit	\$ 952	\$ 1,347	\$ 1,850	\$ 2,524	\$ 3,522
Average final average salary	\$ 47,460	\$ 48,489	\$ 51,915	\$ 59,072	\$ 66,278
Number of active retirants	825	634	709	1,426	813
<b>2018</b>					
Average monthly benefit	\$ 854	\$ 1,291	\$ 1,785	\$ 2,490	\$ 3,635
Average final average salary	\$ 44,361	\$ 46,765	\$ 50,942	\$ 58,748	\$ 68,533
Number of active retirants	917	714	623	1,460	726
<b>2017</b>					
Average monthly benefit	\$ 831	\$ 1,299	\$ 1,866	\$ 2,466	\$ 3,315
Average final average salary	\$ 42,451	\$ 46,698	\$ 51,545	\$ 57,495	\$ 63,269
Number of active retirants	952	631	744	1,396	605
<b>2016</b>					
Average monthly benefit	\$ 790	\$ 1,276	\$ 1,679	\$ 2,448	\$ 3,558
Average final average salary	\$ 41,166	\$ 46,315	\$ 47,377	\$ 57,439	\$ 66,923
Number of active retirants	950	646	626	1,456	502
<b>2015</b>					
Average monthly benefit	\$ 822	\$ 1,189	\$ 1,731	\$ 2,340	\$ 3,350
Average final average salary	\$ 42,410	\$ 42,982	\$ 49,065	\$ 54,854	\$ 63,017
Number of active retirants	934	667	650	1,476	529
<b>2014</b>					
Average monthly benefit	\$ 790	\$ 1,273	\$ 1,675	\$ 2,374	\$ 3,236
Average final average salary	\$ 40,969	\$ 46,200	\$ 47,036	\$ 56,099	\$ 60,273
Number of active retirants	855	656	633	1,397	364
<b>2013</b>					
Average monthly benefit	\$ 810	\$ 1,201	\$ 1,653	\$ 2,325	\$ 3,204
Average final average salary	\$ 41,846	\$ 43,291	\$ 46,143	\$ 55,080	\$ 59,738
Number of active retirants	879	676	600	1,216	278
<b>2012</b>					
Average monthly benefit	\$ 733	\$ 1,151	\$ 1,644	\$ 2,288	\$ 2,896
Average final average salary	\$ 37,417	\$ 41,518	\$ 46,432	\$ 53,707	\$ 54,443
Number of active retirants	951	643	638	1,411	493
<b>2011</b>					
Average monthly benefit	\$ 721	\$ 1,230	\$ 1,660	\$ 2,448	\$ 3,362
Average final average salary	\$ 36,580	\$ 43,817	\$ 47,340	\$ 58,430	\$ 64,558
Number of active retirants	797	595	632	1,674	732
<b>2010</b>					
Average monthly benefit	\$ 691	\$ 1,140	\$ 1,596	\$ 2,309	\$ 3,206
Average final average salary	\$ 36,194	\$ 41,368	\$ 45,033	\$ 55,481	\$ 61,883
Number of active retirants	721	499	520	1,701	847

RETIREMENT SYSTEMS OF ALABAMA

Statistical Section

Employees' Retirement System

Ten-Year History of Average Monthly Benefit Payments as of September 30

	Years Credited Service				
	10-14	15-19	20-24	25-29	30 & over
<b>2019</b>					
Average monthly benefit	\$ 785	\$ 1,284	\$ 1,728	\$ 2,564	\$ 3,498
Average final average salary	\$ 42,373	\$ 48,258	\$ 51,403	\$ 61,555	\$ 69,493
Number of active retirants	483	353	296	716	589
<b>2018</b>					
Average monthly benefit	\$ 779	\$ 1,189	\$ 1,848	\$ 2,510	\$ 3,641
Average final average salary	\$ 41,733	\$ 43,797	\$ 51,794	\$ 57,665	\$ 68,460
Number of active retirants	508	403	325	808	486
<b>2017</b>					
Average monthly benefit	\$ 777	\$ 1,219	\$ 1,851	\$ 2,480	\$ 3,529
Average final average salary	\$ 40,630	\$ 43,568	\$ 52,468	\$ 57,172	\$ 65,786
Number of active retirants	559	354	329	701	464
<b>2016</b>					
Average monthly benefit	\$ 756	\$ 1,212	\$ 1,655	\$ 2,349	\$ 3,341
Average final average salary	\$ 39,679	\$ 44,655	\$ 47,798	\$ 54,386	\$ 61,838
Number of active retirants	516	340	357	852	425
<b>2015</b>					
Average monthly benefit	\$ 714	\$ 1,182	\$ 1,726	\$ 2,398	\$ 3,379
Average final average salary	\$ 38,049	\$ 43,986	\$ 48,618	\$ 55,372	\$ 62,969
Number of active retirants	548	384	334	808	364
<b>2014</b>					
Average monthly benefit	\$ 737	\$ 1,144	\$ 1,676	\$ 2,326	\$ 3,258
Average final average salary	\$ 38,296	\$ 42,040	\$ 48,423	\$ 54,092	\$ 60,078
Number of active retirants	532	319	316	725	337
<b>2013</b>					
Average monthly benefit	\$ 718	\$ 1,257	\$ 1,738	\$ 2,392	\$ 3,236
Average final average salary	\$ 37,933	\$ 46,357	\$ 49,200	\$ 54,929	\$ 59,595
Number of active retirants	537	385	321	661	337
<b>2012</b>					
Average monthly benefit	\$ 723	\$ 1,214	\$ 1,856	\$ 2,475	\$ 3,170
Average final average salary	\$ 38,160	\$ 43,479	\$ 49,415	\$ 54,904	\$ 58,675
Number of active retirants	566	370	486	757	283
<b>2011</b>					
Average monthly benefit	\$ 728	\$ 1,230	\$ 1,871	\$ 2,423	\$ 3,207
Average final average salary	\$ 38,584	\$ 43,878	\$ 49,583	\$ 55,598	\$ 59,990
Number of active retirants	529	341	434	975	459
<b>2010</b>					
Average monthly benefit	\$ 667	\$ 1,144	\$ 1,819	\$ 2,386	\$ 3,054
Average final average salary	\$ 35,383	\$ 41,444	\$ 48,399	\$ 55,257	\$ 57,575
Number of active retirants	399	316	366	954	420

RETIREMENT SYSTEMS OF ALABAMA

Statistical Section

Judicial Retirement Fund

Ten-Year History of Average Monthly Benefit Payments as of September 30

	Years of Credited Service				
	10-14	15-19	20-24	25-29	30+
<b>2019</b>					
Average monthly benefit	\$ 7,864	\$ 8,451	\$ 8,373	\$ 8,647	\$ 9,241
Average final average salary	\$ 125,822	\$ 135,209	\$ 133,963	\$ 138,344	\$ 147,854
Number of active retirants	12	17	4	6	13
<b>2018</b>					
Average monthly benefit	\$ 2,713	\$ 9,115	\$ 9,200	\$ 9,371	\$ -
Average final average salary	\$ 43,414	\$ 145,838	\$ 147,199	\$ 149,936	\$ -
Number of active retirants	4	5	1	1	-
<b>2017</b>					
Average monthly benefit	\$ 8,409	\$ 8,519	\$ 9,345	\$ 8,453	\$ 9,262
Average final average salary	\$ 134,539	\$ 136,297	\$ 149,518	\$ 135,243	\$ 148,185
Number of active retirants	8	8	3	4	4
<b>2016</b>					
Average monthly benefit	\$ 6,928	\$ 8,952	\$ 9,293	\$ 8,204	\$ -
Average final average salary	\$ 110,854	\$ 143,234	\$ 148,686	\$ 131,271	\$ -
Number of active retirants	2	3	1	4	-
<b>2015</b>					
Average monthly benefit	\$ 8,692	\$ 9,043	\$ 9,319	\$ 9,332	\$ 8,202
Average final average salary	\$ 139,065	\$ 144,688	\$ 149,102	\$ 149,311	\$ 131,231
Number of active retirants	4	2	3	2	4
<b>2014</b>					
Average monthly benefit	\$ 8,528	\$ 9,158	\$ 9,051	\$ 9,371	\$ -
Average final average salary	\$ 136,441	\$ 146,529	\$ 144,812	\$ 149,936	\$ -
Number of active retirants	2	3	2	1	-
<b>2013</b>					
Average monthly benefit	\$ 7,458	\$ 8,297	\$ 9,128	\$ 9,216	\$ 7,224
Average final average salary	\$ 119,322	\$ 132,747	\$ 146,050	\$ 147,448	\$ 115,578
Number of active retirants	5	10	3	5	9
<b>2012</b>					
Average monthly benefit	\$ 6,993	\$ 9,184	\$ 9,371	\$ 7,230	\$ -
Average final average salary	\$ 111,884	\$ 146,937	\$ 149,936	\$ 115,676	\$ -
Number of active retirants	1	1	1	3	-
<b>2011</b>					
Average monthly benefit	\$ 7,940	\$ 8,658	\$ 8,381	\$ 9,170	\$ 10,897
Average final average salary	\$ 127,032	\$ 138,522	\$ 134,096	\$ 146,720	\$ 174,352
Number of active retirants	7	9	5	8	2
<b>2010</b>					
Average monthly benefit	\$ 6,796	\$ 8,819	\$ 9,319	\$ 7,147	\$ -
Average final average salary	\$ 108,736	\$ 141,102	\$ 149,104	\$ 114,352	\$ -
Number of active retirants	3	2	3	2	-

# RETIREMENT SYSTEMS OF ALABAMA

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## *Statistical Section*

### Employees' Retirement System

#### Local Participating Employers

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Abbeville Water Works & Sewer Board  
Abbeville, City of  
Adamsville, City of  
Addison, Town of  
Alabama Cooperative Extension System  
Alabama Historic Ironworks Commission  
Alabama League of Municipalities  
Alabama Municipal Electric Authority  
Alabama Rural Water Association  
Alabama Space Science Exhibit Commission  
Alabama Sports Hall of Fame  
Alabama Tombigbee Regional Commission  
Alabaster Water Board  
Alabaster, City of  
Albertville Housing Authority  
Albertville Municipal Utilities Board  
Albertville, City of  
Alexander City Housing Authority  
Alexander City, City of  
Aliceville Housing Authority  
Aliceville, City of  
AltaPointe Health Systems  
Altoona, Town of  
Andalusia Housing Authority  
Andalusia Utilities Board  
Andalusia, City of  
Anniston & Calhoun County Public Library  
Anniston Housing Authority  
Anniston Water Works & Sewer Board  
Anniston, City of  
Arab Housing Authority  
Arab Sewer Board  
Arab Water Works Board  
Arab, Town of  
Argo, Town of  
Arley, Town of  
Ashford Housing Authority  
Ashland Housing Authority  
Ashland Water Works & Sewer Board  
Ashland, City of  
Ashville, Town of  
Association of County Commissioners of  
Alabama  
Athens Utilities  
Athens, City of  
Athens-Limestone County Emergency  
Management Communications District  
Athens-Limestone Public Library  
Atmore Housing Authority  
Atmore, City of  
Attalla Housing Authority  
Attalla Water Works Board  
Attalla, City of  
Auburn Housing Authority  
Auburn Water Works Board  
Auburn, City of  
Autauga County Commission  
Autauga County Emergency Management  
Communication District  
Autauga County Water Authority  
Autauga-Prattville Public Library  
B. B. Comer Memorial Library  
Bakerhill Water Authority  
Bakerhill, Town of  
Baldwin County Commission  
Baldwin County Emergency Communication  
District  
Baldwin County Sheriff's Office  
Baldwin County Soil & Water Conservation  
District  
Barbour County Commission  
Bay Minette Housing Authority  
Bay Minette, City of  
Bayou La Batre Utilities Board  
Bayou La Batre, City of  
Bear Creek Development Authority  
Bear Creek Water Works Board  
Bear Creek, Town of  
Beauregard Water Authority  
Berry, Town of  
Bessemer, City of  
Beulah Utilities District  
Bibb County Commission  
Bibb County Emergency Management  
Communication District  
Big Wills Water Authority  
Birmingham Racing Commission  
Birmingham Regional Planning Commission  
Birminghamport Fire District  
Black Warrior Solid Waste Disposal Authority  
Blount County Commission  
Blount County Communications District  
Blount County Water Authority  
Blountsville Utility Board  
Blountsville, Town of  
Boaz Board of Water & Sewer Commissioners  
Boaz, City of  
Boldo Water & Fire Protection Authority  
Boston Housing Authority  
Brantley Housing Authority  
Brent Housing Authority  
Brent, City of  
Brewton Housing Authority  
Brewton, City of  
Bridgeport Housing Authority  
Bridgeport Utilities Board  
Bridgeport, City of  
Brilliant, Town of  
Brookwood, Town of  
Brundidge, City of  
Buhl-Elrod-Holman Water Authority  
Bullock County Commission  
Butler County Commission



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Butler County Emergency Communication District  
Butler, City of  
Cahaba Center for Mental Health & Mental Retardation  
Cahaba Valley Fire & Emergency Medical Rescue District  
Calera, City of  
Calhoun County 9-1-1 District  
Calhoun County Commission  
Calhoun County Community Punishment & Corrections Authority  
Calhoun County Economic Development Council  
Calhoun County Water & Fire Protection Authority  
Calhoun-Cleburne Mental Health Board  
Camden, City of  
Carbon Hill Utilities Board  
Carbon Hill, City of  
Carl Elliott Regional Library  
Carroll's Creek Water Authority  
Carrollton, Town of  
Castleberry, Town of  
Cedar Bluff Utilities Board & Solid Waste Authority  
Cedar Bluff, Town of  
Center Point Fire District  
Center Point, City of  
Central Alabama Aging Consortium  
Central Alabama Regional Planning & Development Commission  
Central Elmore Water & Sewer Authority  
Central Talladega County Water District  
Centre Water Works & Sewer Board  
Centre, City of  
Centreville, City of  
Chambers County Commission  
Chambers County Development Authority  
Chambers County Emergency Management Communications District  
Chambers County Library Board  
Chatom, City of  
Chelsea, City of  
Cherokee County Commission  
Cherokee County Water & Sewer Authority  
Cherokee, Town of  
Chickasaw Housing Authority  
Chickasaw Utilities Board  
Chickasaw, Town of  
Childersburg Water Works, Sewer & Gas Board  
Childersburg, City of  
Chilton County Commission  
Chilton County Soil & Water Conservation District  
Chilton Water Authority  
Chilton/Clanton Public Library

Chilton-Shelby Mental Health Center  
Choctaw County Emergency Communications District  
Citizenship Trust American Village  
Clanton Housing Authority  
Clanton Water Works & Sewer Board  
Clanton, City of  
Clarke County Commission  
Clarke County Soil & Water Conservation District  
Clarke-Mobile Counties Gas District  
Clay County Commission  
Clay County E-911  
Clay County Water Authority  
Clayton Housing Authority  
Clayton Water Works & Sewer Board  
Clayton, City of  
Cleburne County Commission  
Cleveland, Town of  
Coaling Water Authority  
Coaling, Town of  
Coffee County Commission  
Coffee County Water Authority  
Coffeerville, Town of  
Coker Water Authority  
Colbert County Commission  
Colbert County Emergency Management Communications District  
Colbert County Tourism & Convention Bureau  
Collinsville Water Works & Sewer Board  
Collinsville, City of  
Columbia, Town of  
Columbiana Housing Authority  
Columbiana Water Works Board  
Columbiana, Town of  
Concord Fire District  
Conecuh County Commission  
Conecuh County E-911  
Conecuh County Soil & Water Conservation District  
Cook Springs Water Authority  
Cooperative District for Northeast Alabama Gas  
Coosa County Commission  
Coosa County Emergency Communication Management Board  
Coosa Valley Youth Services  
Coosada, Town of  
Cordova Water & Gas Board  
Cordova, City of  
Cottonwood Housing Authority  
Cottonwood, City of  
Courtland, Town of  
Covington County Commission  
Covington County E-911 Board  
Covington County Water Authority  
Cowarts, Town of  
Crenshaw County Commission

# RETIREMENT SYSTEMS OF ALABAMA

## *Statistical Section*

### Employees' Retirement System

#### Local Participating Employers

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Crenshaw County Emergency Communications District  
Creola, City of  
Crossville, Town of  
Cuba, Town of  
Cullman County Center for the Developmentally Disabled  
Cullman County Commission  
Cullman County E-911  
Cullman Power Board  
Cullman, City of  
Cullman-Jefferson Counties Gas District  
Cumberland Mountain Water Authority  
Curry Water Authority  
Dadeville Housing Authority  
Dadeville Water Supply & Gas Board  
Dadeville, City of  
Dadeville, Waterworks and Sewer Board of  
Dale County Commission  
Dale County Water Authority  
Daleville Housing Authority  
Daleville, City of  
Dallas County Commission  
Dallas County Water & Sewer Authority  
Daphne Utilities Board  
Daphne, City of  
Dauphin Island Park & Beach Board  
Dauphin Island Water & Sewer Authority  
Dauphin Island, Town of  
Decatur Utilities  
Decatur, City of  
DeKalb County Commission  
DeKalb County Economic Development Authority  
DeKalb County Emergency Communications District  
DeKalb County Hospital Association  
DeKalb County Mental Retardation Board  
DeKalb-Cherokee Counties Gas District  
DeKalb-Jackson Water Supply District Board  
Demopolis Housing Authority  
Demopolis Water Works & Sewer Board  
Demopolis, City of  
Dora Waterworks & Gas Board  
Dora, City of  
Dothan, City of  
Dothan-Houston County Communications District  
Dothan-Houston County Intellectual Disabilities Board  
Double Springs Water Works Board  
Double Springs, Town of  
Douglas Water Authority  
Douglas, Town of  
Dutton, Town of  
East Alabama Mental Health-Mental Retardation Board  
East Alabama Regional Planning & Development Commission  
East Alabama Water, Sewer & Fire Protection District  
East Brewton Water Works & Sewer Board  
East Brewton, City of  
East Central Alabama Gas District  
East Central Baldwin County Water & Fire Protection Authority  
East Lauderdale County Water & Fire Protection Authority  
Eclectic, Town of  
Elba Water & Electric Board  
Elba, City of  
Elberta, City of  
Electric Cities of Alabama  
Elmore County Commission  
Elmore County Emergency Communications District  
Elmore Water & Sewer Authority  
Enterprise Housing Authority  
Enterprise Water Works Board  
Enterprise, City of  
Ernest F. Ladd Memorial Stadium  
Escambia County Commission  
Escambia County Cooperative Library System  
Escambia County Emergency Communications District  
Etowah County Commission  
Etowah County Communications District  
Etowah County Community Corrections  
Etowah County Tourism Board  
Eufaula Housing Authority  
Eufaula Water Works & Sewer Board  
Eufaula, City of  
Eutaw, City of  
Evergreen Housing Authority  
Evergreen, City of  
Excel, Town of  
Fairfield, City of  
Fairhope Public Library  
Fairhope, City of  
Falkville, Town of  
Fayette County Commission  
Fayette County E-911 District  
Fayette County Water Authority  
Fayette Gas Board  
Fayette Housing Authority  
Fayette Water Works Board  
Fayette, City of  
Fayetteville Water Authority  
Five Star Water Supply District  
Flomaton, Town of  
Florence Housing Authority  
Florence Lauderdale Port Authority  
Florence/Lauderdale Tourism Board  
Foley Utilities Board

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Foley, City of	Grove Hill, City of
Forestdale Fire District	Guin Housing Authority
Fort Deposit Water Works & Sewer Board	Guin Water Works & Sewer Board
Fort Deposit, Town of	Guin, City of
Fort Payne Housing Authority	Gulf Shores Utilities Board
Fort Payne Improvement Authority	Gulf Shores, City of
Fort Payne Water Works Board	Guntersville Electric Board
Fort Payne, City of	Guntersville Housing Authority
Fosters-Ralph Water Authority	Guntersville Water Works & Sewer Board
Franklin County Commission	Guntersville, City of
Franklin County Soil & Water Conservation District	Gurley, Town of
Franklin County Water Service Authority	Hackleburg Housing Authority
Frisco City, Town of	Hackleburg Water Board
Fultondale Gas Board	Hackleburg, Town of
Fultondale, Town of	Hackneyville Water & Fire Protection Authority
Fyffe, Town of	Hale County Commission
Gadsden Water Works & Sewer Board	Hale County Emergency Medical Service
Gadsden, City of	Haleyville, City of
Gantt, Town of	Hamilton Housing Authority
Garden Town, Town of	Hamilton, City of
Gardendale, City of	Hammondville, Town of
Geneva County Commission	Hanceville Water Works & Sewer Board
Geneva County E-911	Hanceville, City of
Geneva Water Works & Sewer Board	Harpersville, Town of
Geneva, City of	Hartford, City of
Georgiana Housing Authority	Hartselle Utilities Board
Georgiana, City of	Hartselle, City of
Geraldine, Town of	Hartselle, Housing Authority of the City of
Gilbertown Utilities Board	Harvest-Monrovia Water, Sewer & Fire Protection Authority
Gilbertown, Town of	Hayden, Town of
Glencoe Water & Sewer Board	Hayneville, City of
Glencoe, City of	Headland Housing Authority
Good Hope, City of	Headland, City of
Gordo, City of	Heflin Water Works & Sewer Board
Governmental Utility Services Corporation of Moody	Heflin, City of
Governmental Utility Services Corporation of the City of Bessemer	Helena Utilities Board
Grant, Town of	Helena, City of
Graysville Public Library	Henagar, City of
Graysville, City of	Henry County Commission
Greater Etowah Mental Retardation 310 Board	Henry County Water Authority
Greene County Ambulance Service	Highland Water Authority
Greene County Commission	Historic Blakeley Authority
Greene County E-911 Communication District	Historic Chattahoochee Commission
Greene County Hospital & Nursing Home	Hodges, Town of
Greene County Housing Authority	Hokes Bluff Water Board
Greene County Industrial Development Authority	Hokes Bluff, Town of
Greene County Racing Commission	Holly Pond, Town of
Greenhill Water & Fire Protection Authority	Hollywood, Town of
Greensboro Housing Authority	Homewood, City of
Greensboro, City of	Hoover, City of
Greenville Housing Authority	Horseshoe Bend Regional Library
Greenville Water Works & Sewer Board	Houston County Commission
Greenville, City of	Houston County Soil Conservation District
	Houston County Water Authority
	Houston-Love Memorial Library
	Hueytown, City of

# RETIREMENT SYSTEMS OF ALABAMA

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## *Statistical Section*

### Employees' Retirement System

#### Local Participating Employers

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Huguley Water, Sewer & Fire Protection Authority  
Huntsville Electric Utilities System  
Huntsville Gas Utilities System  
Huntsville Solid Waste Disposal Authority  
Huntsville Waterworks Utilities System  
Huntsville, City of  
Huntsville/Madison County Convention & Visitors Bureau  
Huntsville-Madison County Airport Authority  
Huntsville-Madison County Marina & Port Authority  
Huntsville-Madison County Mental Health Center Board  
Indian Pines Recreational Authority  
International Motorsports Hall of Fame  
Irondale, City of  
J. Paul Jones Hospital  
Jackson County Commission  
Jackson County Economic Development Authority  
Jackson County Emergency Management Communications District  
Jackson County Soil & Water Conservation District  
Jackson County Water Authority  
Jackson, City of  
Jackson's Gap Water Authority  
Jackson's Gap, Town of  
Jacksonville Housing Authority  
Jacksonville Water Works, Gas & Sewer Board  
Jacksonville, City of  
Jasper Waterworks & Sewer Board  
Jasper, City of  
Jefferson County Department of Health  
Jefferson County Housing Authority  
Jefferson-Blount-St. Clair Mental Health Authority  
Jemison, Town of  
Joppa, Hulaco & Ryan Water Authority  
Kennedy, City of  
Killen, City of  
Kinsey, Town of  
LaFayette, City of  
Lamar County Commission  
Lamar County Communications District  
Lamar County Gas District  
Lanett, City of  
Lauderdale County Commission  
Lauderdale County Community Corrections Authority  
Lauderdale County Regional Library System  
Lawrence County Commission  
Lee County Commission  
Leeds Housing Authority  
Leeds Water Works Board  
Leeds, City of  
Lee-Russell Council of Governments  
Leesburg, Town of  
Leighton Water & Sewer Board  
Leighton, Town of  
Level Plains, Town of  
Limestone County Commission  
Limestone County Water & Sewer Authority  
Lincoln, City of  
Linden, City of  
Lineville Housing Authority  
Lineville Waterworks & Sewer Board  
Lineville, City of  
Littleville, Town of  
Livingston Housing Authority  
Livingston, City of  
Loachapoka Water Authority  
Locust Fork, Town of  
Lowndes County Commission  
Loxley, City of  
Luverne Housing Authority  
Luverne, City of  
Lynn, Town of  
Macon County Commission  
Macon County Racing Commission  
Madison County 310 Board  
Madison County Commission  
Madison County Communications District  
Madison Water & Wastewater Board  
Madison, City of  
Magnolia Springs, Town of  
Malvern, Town of  
Maplesville Waterworks & Gas Board  
Maplesville, City of  
Marengo County Commission  
Marengo County Emergency Communications District  
Marengo Nursing Home  
Margaret, Town of  
Marion County Commission  
Marion County Emergency Communications District  
Marion County Public Water Authority  
Marion Housing Authority  
Marion, City of  
Marshall County Commission  
Marshall County Community Punishment & Corrections Authority  
Marshall County Emergency Telephone Services  
Marshall County Gas District  
Marshall-Jackson Mental Retardation Authority  
McAdory Area Fire District  
McIntosh, Town of  
Mental Health Board of Bibb, Pickens & Tuscaloosa County  
Mental Health Center of North Central Alabama  
Mental Retardation/Developmental Disabilities Board

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Mentone, Town of  
Middle Alabama Area Agency on Aging  
Midfield Library Board  
Midfield, City of  
Mildred B. Harrison Library  
Millbrook, City of  
Millport Housing Authority  
Millport, Town of  
Mobile Airport Authority  
Mobile Area Water & Sewer System  
Mobile County Commission  
Mobile County Communications District  
Mobile County Emergency Management Agency  
Mobile County Health Department  
Mobile County Housing Authority  
Mobile County Personnel Board  
Mobile County Racing Commission  
Mobile County Water, Sewer & Fire Protection Authority  
Mobile Public Library  
Mobile, City of  
Monroe County Commission  
Monroeville Housing Authority  
Monroeville Water Works Board  
Monroeville, City of  
Montevallo Water Works & Sewer Board  
Montevallo, City of  
Montgomery Airport Authority  
Montgomery Area Mental Health Authority  
Montgomery County Commission  
Montgomery County Soil & Water Conservation District  
Montgomery Water Works & Sanitary Sewer Board  
Montgomery, City of  
Moody, City of  
Morgan County Commission  
Morgan County Emergency Management Communication District  
Morgan County Soil & Water Conservation District  
Moulton Housing Authority  
Moulton, City of  
Moundville, City of  
Mountain Brook Library Board  
Mountain Brook Park & Recreation Board  
Mountain Brook, City of  
Mt. Vernon, Town of  
Munford Water Authority  
Munford, Town of  
Muscle Shoals Electric Board  
Muscle Shoals Utilities Board  
Muscle Shoals, City of  
Myrtlewood, Town of  
Nauvoo, Town of  
Nectar, Town of

New Hope, Town of  
New London Water, Sewer & Fire Protection Authority  
New Site, Town of  
North Alabama Gas District  
North Baldwin Utilities  
North Central Alabama Mental Retardation Authority  
North Central Alabama Regional Council of Governments  
North Dallas County Water Authority  
North Marshall Utilities Board  
North Shelby County Fire & Emergency Medical District  
North Shelby Library  
Northeast Alabama MR/DD Authority  
Northeast Alabama Water, Sewer & Fire Protection District  
Northeast Morgan County Water & Sewer Authority  
Northport Housing Authority  
Northport, City of  
Northwest Alabama Council of Local Governments  
Northwest Alabama Mental Health Center  
Northwest Alabama Regional Airport  
Notasulga, Town of  
Oak Grove, Town of  
Oakman Water Works Board  
Oakman, Town of  
Odenville Utilities Board  
Odenville, Town of  
Ohatchee, Town of  
Oneonta Housing Authority  
Oneonta Utilities Board  
Oneonta, City of  
Opelika Housing Authority  
Opelika Utilities Board  
Opelika, City of  
Opp Utilities Board  
Opp, City of  
Orange Beach Water, Sewer & Fire Protection Authority  
Orange Beach, Town of  
Owassa/Brownville Water Authority  
Owens Cross Roads Water Authority  
Owens Cross Roads, City of  
Oxford Emergency Medical Services  
Oxford, City of  
Ozark Utilities Board  
Ozark, City of  
Ozark-Dale County E-911  
Parrish Water Works & Sewer Board  
Parrish, Town of  
Pelham, City of  
Pell City Housing Authority  
Pell City, City of

# RETIREMENT SYSTEMS OF ALABAMA

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## *Statistical Section*

### Employees' Retirement System

#### Local Participating Employers

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Pennington Utilities Board  
Pennington, City of  
Perdido Bay Water, Sewer and Fire Protection District  
Perry County Commission  
Perry County E-911  
Phenix City Utilities  
Phenix City, City of  
Phil Campbell Housing Authority  
Phil Campbell Water Works & Sewer Board  
Phil Campbell, Town of  
Pickens County Commission  
Pickens County E-911 Board  
Pickens County Water Authority  
Piedmont Housing Authority  
Piedmont, City of  
Pike County Commission  
Pike County Communications District  
Pike County Soil & Water Conservation District  
Pike County Water Authority  
Pike Road Volunteer Fire Protection Authority  
Pike Road, Town of  
Pine Bluff Water Authority  
Pine Hill, Town of  
Pinson, City of  
Pisgah, Town of  
Pleasant Grove, City of  
Prattville Housing Authority  
Prattville Water Works Board  
Prattville, City of  
Priceville, Town of  
Prichard Housing Authority  
Quint-Mar Water Authority  
Ragland Water Works Board  
Ragland, Town of  
Rainbow City Utilities Board  
Rainbow City, City of  
Rainsville, City of  
Randolph County Commission  
Randolph County E9-1-1  
Red Bay Housing Authority  
Red Bay Water Works & Gas Board  
Red Bay, City of  
Reform Housing Authority  
Reform, City of  
Regional Housing Authority of Lawrence, Cullman & Morgan Counties  
Rehobeth, City of  
Remlap-Pine Mountain Water Authority  
Repton, Town of  
Riverbend Center for Mental Health  
Riverside, Town of  
Roanoke Utility Board  
Roanoke, City of  
Robertsdale, City of  
Rockford Utilities Board  
Rocky Ridge Fire District  
Rogersville Water Works & Sewer Board  
Rogersville, Town of  
Russell County Commission  
Russell County Emergency Communications District  
Russell County Water Authority  
Russellville Electric Board  
Russellville Gas Board  
Russellville Housing Authority  
Russellville Water & Sewer Board  
Russellville, City of  
Rutledge, Town of  
Samson, City of  
Saraland Water Service  
Saraland, City of  
Sardis City Water Board  
Sardis, City of  
Satsuma Water Works Board  
Satsuma, City of  
Scottsboro Electric Power Board  
Scottsboro Housing Authority  
Scottsboro Public Library  
Scottsboro Public Park & Recreation Board  
Scottsboro Waterworks, Sewer & Gas Board  
Scottsboro, City of  
Section Waterworks Board  
Section, Town of  
Selma Housing Authority  
Selma Water & Sewer Board  
Selma, City of  
Sheffield Utilities Board  
Sheffield, City of  
Shelby County Commission  
Shelby County Community Corrections  
Shelby County Emergency Management Communications District  
Shelby County Soil Conservation District  
Shoals Committee on Programs & Employment for the Mentally Retarded  
Shoals Economic Development Authority  
Shoals Solid Waste Disposal Authority  
Shorter, Town of  
Silverhill, Town of  
Skyline, Town of  
Slocomb Waterworks & Sewer Board  
Slocomb, Town of  
Smiths Station, City of  
Smiths Water & Sewer Authority  
Snead, Town of  
Somerville, Town of  
South Alabama Gas District  
South Alabama Regional Planning Commission  
South Central Alabama Development Commission  
South Central Alabama Mental Health Board  
South Central Alabama Regional Housing Authority

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South Crenshaw County Water Authority  
South Marengo County Water & Fire Protection Authority  
Southeast Alabama Regional Planning & Development Commission  
Southeast Alabama Solid Waste Disposal Authority  
Southeast Alabama Youth Services  
Southern Alabama Regional Council on Aging  
Southside Water Works & Sewer Board  
Southside, City of  
Southwest Alabama Water Authority  
Spanish Fort Fire Rescue Department  
Spanish Fort, City of  
SpectraCare Health Systems  
Springville, Town of  
St. Clair County Commission  
St. Clair County Community Punishment & Corrections Authority  
St. Clair County Industrial Development Board  
St. Clair County Soil & Water Conservation District  
St. Florian, Town of  
Star-Mindingall Water & Fire Protection Authority  
Steele, Town of  
Stevenson Housing Authority  
Stevenson Utilities Board  
Stevenson, City of  
Stewartville Water Authority  
Sulligent Housing Authority  
Sulligent, City of  
Sumiton Housing Authority  
Sumiton Water Works Board  
Sumiton, City of  
Summerdale, Town of  
Sumter County Commission  
Sumter County Industrial Development Authority  
Sumter County Soil & Water Conservation District  
Sumter County Water Authority  
Sylacauga Parks & Recreation Board  
Sylacauga Utilities Board  
Sylacauga, City of  
Sylvan Springs, Town of  
Sylvania, Town of  
Talladega County Commission  
Talladega County Emergency Management Communications District  
Talladega, City of  
Tallapoosa County Commission  
Tallasse, City of  
Tarrant Alabama Housing Authority  
Tarrant Electric System  
Tarrant, City of  
Taylor, Town of

Thomaston, Town of  
Thomasville, City of  
Thorsby, Town of  
Top of Alabama Regional Council of Governments  
Top Trails Public Park Authority of the Cities of Lincoln and Talladega  
Town Creek, Town of  
Triana, City of  
TriCounty Agency for Intellectual Disabilities  
Trinity, Town of  
Troy Housing Authority  
Troy, City of  
Trussville Utilities Board  
Trussville, City of  
Turnerville Water & Fire Protection District  
Tuscaloosa County Commission  
Tuscaloosa County Community Punishment & Corrections Authority  
Tuscaloosa County E-911  
Tuscaloosa County Industrial Development Authority  
Tuscaloosa County Office of Public Defender  
Tuscaloosa County Park & Recreation Authority  
Tuscaloosa County Parking & Transit Authority  
Tuscaloosa County Soil & Water Conservation District  
Tuscaloosa County Special Tax Board  
Tuscaloosa Housing Authority  
Tuscaloosa Public Library  
Tuscaloosa, City of  
Tuscumbia, City of  
Tuskegee Utilities Board  
Tuskegee, City of  
Union Grove Utilities Board  
Union Springs Utilities Board  
Union Springs, City of  
Uniontown Housing Authority  
Uniontown Utilities Board  
Uniontown, Town of  
USS Alabama Battleship Commission  
Valley Grande, City of  
Valley Head Water Works Board  
Valley Head, City of  
Valley Housing Authority  
Valley, City of  
Vance, Town of  
Vernon Housing Authority  
Vernon, City of  
Vestavia Hills, City of  
Vincent, City of  
Vincent, The Water Works Board of the City of  
Von Braun Civic Center  
Wadley, Town of  
Walker County Commission  
Walker County E9-1-1 District  
Walker County Housing Authority

## RETIREMENT SYSTEMS OF ALABAMA

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### *Statistical Section*

#### Employees' Retirement System

#### Local Participating Employers

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Wall Street Water Authority  
Walnut Hill Water Authority  
Warrior River Water Authority  
Warrior, City of  
Washington County Commission  
Washington County E-911 Communication  
District  
Washington County Soil & Water Conservation  
District  
Wattsville Water Authority  
Weaver, City of  
Webb, Town of  
Wedowee Water, Sewer & Gas Board  
Wedowee, City of  
West Alabama Regional Commission  
West Autauga Water Authority  
West Escambia Utilities  
West Etowah County Water Authority  
West Jefferson, Town of  
West Lauderdale County Water & Fire  
Protection Authority  
West Morgan–East Lawrence Water & Sewer  
Authority  
Wetumpka Water Works & Sewer Board  
Wetumpka, City of  
Wilcox County Commission  
Wilcox County Emergency Communications  
District  
Wilcox County Gas District  
Wilsonville, Town of  
Wilton, Town of  
Winfield Water Works & Sewer Board  
Winfield, City of  
Winston County Commission  
Winston County E9-1-1 Communications  
District  
Woodland, Town of  
Woodstock, Town of  
York Housing Authority  
York, City of



RETIREMENT SYSTEMS OF ALABAMA

Statistical Section

Employees' Retirement System

Ten-Year History of Largest Employers

	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
<b>1) Employer</b>	State of Alabama	State of Alabama	State of Alabama	State of Alabama	State of Alabama	State of Alabama	State of Alabama	State of Alabama	State of Alabama	State of Alabama
<b># of Active Members</b>	28,533	29,548	29,548	29,756	30,109	30,297	30,659	31,795	33,885	35,147
<b>% of Total Active Members</b>	33.75%	34.27%	34.50%	35.08%	35.43%	35.40%	35.84%	36.85%	38.36%	39.24%
<b>2) Employer</b>	Huntsville, City of	Huntsville, City of	Huntsville, City of	Huntsville, City of	Huntsville, City of	Huntsville, City of	Huntsville, City of	Huntsville, City of	Huntsville, City of	Huntsville, City of
<b># of Active Members</b>	2,443	2,362	2,296	2,258	2,207	2,243	2,209	2,192	2,195	2,175
<b>% of Total Active Members</b>	2.89%	2.73%	2.68%	2.66%	2.60%	2.62%	2.38%	2.54%	2.48%	2.43%
<b>3) Employer</b>	Mobile County	Mobile County	Mobile County	Mobile County	Mobile County	Mobile County	Mobile County	Mobile County	Mobile County	Mobile County
<b># of Active Members</b>	1,539	1,596	1,610	1,604	1,587	1,578	1,625	1,657	1,672	1,678
<b>% of Total Active Members</b>	1.82%	1.84%	1.88%	1.89%	1.87%	1.84%	1.90%	1.92%	1.89%	1.87%
<b>4) Employer</b>	Mobile, City of	Mobile, City of	Mobile, City of	Mobile, City of	Mobile, City of	AltaPointe Health*	Mobile, City of	Mobile, City of	Mobile, City of	Mobile, City of
<b># of Active Members</b>	1,058	1,104	1,150	1,195	1,250	1,341	1,282	1,254	1,310	1,335
<b>% of Total Active Members</b>	1.25%	1.28%	1.34%	1.41%	1.47%	1.57%	1.50%	1.45%	1.48%	1.49%
<b>5) Employer</b>	Madison County	Madison County	Madison County	Madison County	Madison County	Mobile, City of	AltaPointe Health*	Madison County	Madison County	Madison County
<b># of Active Members</b>	1,044	1,083	1,107	1,145	1,152	1,254	1,236	1,154	1,162	1,133
<b>% of Total Active Members</b>	1.24%	1.25%	1.29%	1.35%	1.36%	1.47%	1.44%	1.34%	1.32%	1.27%
<b>6) Employer</b>	Dothan, City of	Dothan, City of	Dothan, City of	Dothan, City of	Dothan, City of	Madison County	Madison County	Helen Keller Hospital	Dothan, City of	Helen Keller Hospital
<b># of Active Members</b>	1,035	1,032	1,018	999	995	1,152	1,174	1,002	957	984
<b>% of Total Active Members</b>	1.22%	1.19%	1.19%	1.18%	1.17%	1.35%	1.37%	1.16%	1.08%	1.10%
<b>7) Employer</b>	Auburn, City of	Auburn, City of	Montgomery County	Montgomery County	AltaPointe Health*	Dothan, City of	Dothan, City of	Dothan, City of	Helen Keller Hospital	Dothan, City of
<b># of Active Members</b>	822	828	801	807	792	996	985	966	956	961
<b>% of Total Active Members</b>	0.97%	0.96%	0.94%	0.95%	0.93%	1.16%	1.15%	1.12%	1.08%	1.07%
<b>8) Employer</b>	Tuscaloosa, City of	Tuscaloosa, City of	Auburn, City of	Tuscaloosa, City of	Tuscaloosa, City of	Tuscaloosa, City of	Tuscaloosa, City of	AltaPointe Health*	Montgomery County	Montgomery County
<b># of Active Members</b>	770	759	786	774	777	790	775	911	794	848
<b>% of Total Active Members</b>	0.91%	0.88%	0.92%	0.91%	0.91%	0.92%	0.91%	1.06%	0.90%	0.95%
<b>9) Employer</b>	Montgomery County	Montgomery County	Tuscaloosa, City of	Auburn, City of	Montgomery County	Montgomery County	Montgomery County	Montgomery County	AltaPointe Health*	Tuscaloosa, City of
<b># of Active Members</b>	751	757	783	752	766	769	767	771	762	745
<b>% of Total Active Members</b>	0.89%	0.87%	0.91%	0.89%	0.90%	0.90%	0.90%	0.89%	0.86%	0.83%
<b>10) Employer</b>	Hoover, City of	Hoover, City of	Hoover, City of	Hoover, City of	Auburn, City of	Hoover, City of	Helen Keller Hospital	Tuscaloosa, City of	Tuscaloosa, City of	AltaPointe Health*
<b># of Active Members</b>	726	689	706	704	706	678	729	763	757	668
<b>% of Total Active Members</b>	0.86%	0.80%	0.82%	0.83%	0.83%	0.79%	0.85%	0.88%	0.86%	0.75%
<b>Total # of Active Members</b>	84,534	86,565	85,657	84,814	84,985	85,585	85,549	86,290	88,341	89,560

\* Formerly Greater Mobile-Washington Co. Mental Health Board





201 South Union Street  
Montgomery, Alabama 36104  
877.517.0020  
[www.rsa-al.gov](http://www.rsa-al.gov)

