

Component Units of the State of Alabama

Annual Comprehensive Financial Report

For the Fiscal Year Ended September 30, 2021





The Retirement Systems of Alabama

ANNUAL COMPREHENSIVE FINANCIAL REPORT

For the Fiscal Year Ended September 30, 2021

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)

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

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Introductory Section

Letter of Transmittal.....	2
Certificate of Achievement for Excellence in Financial Reporting.....	6
Public Pension Coordinating Council Recognition Award for Funding 2020.....	7
Organizational Chart.....	8
Teachers' Retirement System Board of Control.....	9
Employees' Retirement System Board of Control.....	9
Staff, Advisors, and Medical Board.....	10

Financial Section

Independent Auditors' Report.....	12
Management's Discussion and Analysis.....	16
Financial Statements	
Combining Statement of Fiduciary Net Position.....	22
Combining Statement of Changes in Fiduciary Net Position.....	24
Notes to the Combined Financial Statements.....	26
Required Supplementary Information	
Schedules of Changes in the Net Pension Liability & Related Ratios.....	68
Schedules of Employer Pension Contributions.....	71
Schedule of Investment Returns.....	72
Schedules of Proportionate Share of the Net Pension Liability.....	73
Schedules of Pension Contributions – RSA Employees.....	74
Schedules of Proportionate Share of the Net Other Postemployment Benefit Liability.....	75
Schedules of Other Postemployment Benefit Contributions – RSA Employees	76
Notes to the Required Supplementary Information.....	77
Supporting Schedules	
Schedule of Administrative Expenses.....	80
Schedule of Investment Expenses.....	81
Schedule of Professional/Consultant Fees.....	82

Investment Section

Report on Investment Activity.....	84
Teachers' Retirement System Investment Policy Statement.....	87
Employees' Retirement System Investment Policy Statement.....	95
Investment Results	
Schedules of Investment Performance.....	104
Investment Portfolio at Fair Value.....	107
Investment Income.....	108
Interest and Dividend Income.....	109
Teachers' Retirement System	
Schedule of Investment Allocation.....	110
Investment Summary at Fair Value.....	110
Largest Stock and Bond Holdings.....	111
Employees' Retirement System	
Schedule of Investment Allocation.....	112
Investment Summary at Fair Value.....	112
Largest Stock and Bond Holdings.....	113
Judicial Retirement Fund	
Schedule of Investment Allocation.....	114
Investment Summary at Fair Value.....	114
Largest Stock and Bond Holdings.....	115
Broker Commissions Paid.....	116

Actuarial Section

Teachers' Retirement System

Actuary's Certification Letter.....	118
Summary of Actuarial Assumptions and Methods.....	121
Actuarial Cost Method.....	126
Summary of Plan Provisions.....	126
Schedule of Active Member Valuation Data.....	130
Schedule of Funding Progress.....	131
Solvency Test.....	131
Schedule of Retirants and Beneficiaries Added and Removed from Rolls.....	132
Analysis of Actuarial Gains and Losses.....	132

Employees' Retirement System

Actuary's Certification Letter.....	134
Summary of Actuarial Assumptions and Methods.....	137
Actuarial Cost Method.....	141
Summary of Plan Provisions.....	141
Schedule of Active Member Valuation Data.....	148
Schedule of Funding Progress.....	149
Solvency Test.....	149
Schedule of Retirants and Beneficiaries Added and Removed from Rolls.....	150
Analysis of Actuarial Gains and Losses.....	150

Judicial Retirement Fund

Actuary's Certification Letter.....	152
Summary of Actuarial Assumptions and Methods.....	155
Actuarial Cost Method.....	157
Summary of Plan Provisions.....	157
Schedule of Active Member Valuation Data.....	161
Schedule of Funding Progress.....	161
Solvency Test.....	162
Schedule of Retirants and Beneficiaries Added and Removed from Rolls.....	162
Analysis of Actuarial Gains and Losses.....	163

Statistical Section

Overview.....	166
Schedules of Additions by Source – Ten-Year History.....	167
Schedules of Deductions by Type – Ten-Year History.....	168
Schedules of Benefits by Type – Ten-Year History.....	169
Schedules of Additions, Reductions, and Changes in Net Position – Ten-Year History.....	170
Schedules of Retired Members by Type of Benefit.....	176
Schedules of Average Monthly Benefit Payments – Ten-Year History.....	179
Employees' Retirement System - Schedule of Local Participating Employers.....	182
Employees' Retirement System - Schedule of Largest Employers – Ten-Year History.....	191





Introductory Section

Annual Comprehensive Financial Report
Component Units of the State of Alabama



THE RETIREMENT SYSTEMS OF ALABAMA

David G. Bronner, CEO

Jo Moore, Deputy Director for Administration

R. Marc Green, Deputy Director for Investments

January 31, 2022

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 Annual Comprehensive Financial Report (ACFR) of the Retirement Systems of Alabama (RSA or Systems) for the fiscal year ended September 30, 2021. 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 2021 and 2020. Also, an analysis of significant variances between fiscal years 2021 and 2020 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, 2020, the date of the most recent actuarial valuation, the number of participants in the TRS was 288,718, ERS participants totaled 181,701, and JRF participants totaled 862. The following table compares the funded status as of September 30, 2020 and 2019:

Funded Status (%)			
System	9/30/2020	9/30/2019	% Increase/ (Decrease)
TRS	70.7	69.4	1.3
ERS	68.2	68.2	0.0
JRF	66.1	65.3	0.8

The funded status of the TRS increased because salary increases were lower than expected. The funded status of the ERS did not increase or decrease because the losses due to higher than expected salary increases were offset by gains due to investment earnings greater than expected, mortality rates for retired members higher than expected, and service retirements lower than expected. The funded status of the JRF increased because salary increases were lower than expected and investment earnings were higher than expected.

Investment Activity

Total investments for the RSA increased in fiscal year 2021, primarily due to increases in fair value of investments. Total pension fund investments managed by the RSA increased from \$39.0 billion at September 30, 2020, to \$46.0 billion at September 30, 2021, an increase of 17.77%.

	Investments, at Fair Value		Interest & Dividend Income	
	9/30/2021	9/30/2020	9/30/2021	9/30/2020
TRS	\$30.2 billion	\$25.6 billion	\$576.5 million	\$576.2 million
ERS	\$15.4 billion	\$13.0 billion	\$302.8 million	\$298.8 million
JRF	\$360.5 million	\$313.9 million	\$6.7 million	\$6.9 million

Net Change in Fair Value of Investments		
	9/30/2021	9/30/2020
TRS	\$5.2 billion	\$801.5 million
ERS	\$2.6 billion	\$425.6 million
JRF	\$57.0 million	\$16.2 million

Total returns were 22.62%, 22.18%, and 20.52% for TRS, ERS, and JRF, respectively. Fiscal Year 2021 was obviously a good total return year despite much churn underneath the surface. As COVID waves continued to ebb and flow, we saw various style rotations within equities, yield curve steepening and flattening, and a commensurate spike in volatility. Fiscal policy makers continued to pump money into the economy through various channels, and the Federal Reserve (the Fed) remained very dovish throughout the year. Some of this resulted in one of the biggest rebounds in inflation in generations. The CPI was up over 5% for the fiscal year, and the great transitory/permanent inflation debate rages on. As we write this, the Fed has begun the process of tapering their asset purchases, and that has introduced a new factor into the equation. We expect volatility to remain heightened as the Fed continues to unwind their balance sheet and possibly begin to raise the Fed Funds rate in the future. 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 included in the Investment Section of this report. The Schedule of Broker Commissions Paid can be found on page 116 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, 2021. The independent auditors' report is located at the front of the Financial Section of this report.

Highlights and Initiatives

During the fiscal year, several RSA-owned properties continued to be recognized and honored. The Battle House Renaissance Mobile Hotel & Spa was named "Best Historic Hotel" by the Historic Hotels of America. The Battle House was among the group's 2020 Awards of Excellence recipients within the midsize hotel category. *U.S. News & World Report* named three RSA properties in its top five ranking of Alabama hotels. The Battle House Renaissance Mobile Hotel & Spa was ranked first, with the Grand Hotel Golf Resort & Spa, Autograph Collection, and Marriott Shoals Hotel & Spa also recognized.

In other real estate news, the National Association of Home Builders named its 2021 Gold Award Winners for new home sales and marketing, which recognizes the best in the building industry. The Colony at the Grand in Fairhope won top honors for its 2020 Showhome for the Baldwin County Parade of Homes, beating out communities in Canada, Illinois, Kentucky, and South Carolina. *Golfweek* has again included courses from the Robert Trent Jones Golf Trail in its Top 5 ranking of courses in Alabama. Grand National's Lake Course in Opelika, Ross Bridge near Birmingham, Capitol Hill's The Judge course in Prattville, and Oxmoor Valley's Ridge Course near Birmingham were all named.

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 annual comprehensive financial report for the fiscal year ended September 30, 2020. In order to be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized annual comprehensive financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. We believe our current annual comprehensive 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 2021. 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 Annual Comprehensive
Financial Report
For the Fiscal Year Ended

September 30, 2020

Christopher P. Morrell

Executive Director/CEO



Public Pension Coordinating Council

***Recognition Award for Funding
2021***

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, reading 'Alan H. Winkle'.

Alan H. Winkle
Program Administrator

The Retirement Systems of Alabama

Organizational Chart



Teachers' Retirement System Board of Control

Ex Officio Members

Honorable John McMillan, Jr., State Treasurer

Mr. Bill Poole, 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. Thomas E. Jones, Principal Position

Ms. Mary Beth Tate, Teacher Position

Ms. Amy C. Crew, Teacher Position

Mrs. Susan Lockridge, Support Personnel Position

Mrs. Amy K. Fowler, 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. Bill Poole, State Finance Director

Elected Members

Vice Chair, Mr. James Fibbe, Retired Local Employee Position

Mr. Norris Green, Retired State Employee Position

Mr. Derrick T. Turner, Sr., 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. Edward N. Austin

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

Staff, Advisors, and Medical Board

David G. Bronner, Ph.D., J.D., Chief Executive Officer
Jo Moore, J.D., Deputy Director – Administration
Marc Green, M.B.A., CFA, Deputy Director - Investments

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, Jared H. Morris, 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

Private Placements Analyst, Rachel W. Daniels, MACC, 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, Steve R. Lambdin, M.B.A., CFA
Assistant Director of Equities, Hunter Bronson, M.S., CFA
Senior Equity Analyst Portfolio Manager, Adam Rogers, M.A., CFA
Equity Analyst Portfolio Manager, Bobby Long, M.B.A., CFA
Equity Analyst, Kevin W. Gamble, M.B.A., CFA
Equity Analyst, Michael 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

Annual Comprehensive Financial Report
Component Units of the State of Alabama

INDEPENDENT AUDITORS' REPORT

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

Report on the Financial Statements

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, a component unit of the State of Alabama), which comprise the combining statement of fiduciary net position as of September 30, 2021 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 and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the 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, 2021, 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, 2020, 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 January 15, 2021. In our opinion, the summarized comparative information presented herein as of and for the year ended September 30, 2020, 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 OPEB contributions for the Retirement Systems of Alabama 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.

Other Reporting Required by Government Auditing Standards

In accordance with Government Auditing Standards, we have also issued our report dated January 31, 2022, on our consideration the Retirement Systems of Alabama's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Retirement Systems of Alabama's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards in considering the Retirement Systems of Alabama's internal control over financial reporting and compliance.

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

January 31, 2022
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, 2021. 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, 2021 and 2020 (Dollar Amounts in Thousands)

	2021	2020	Variance	% Increase/ (Decrease)
<i>Assets & Deferred Outflows of Resources</i>				
Cash	\$ 101,360	\$ 92,598	\$ 8,762	9.46
Receivables	280,319	275,541	4,778	1.73
Investment Sales Receivable	187,906	83,743	104,163	124.38
Investments, at Fair Value	45,887,933	38,963,720	6,924,213	17.77
Invested Securities Lending Collateral	1,521,152	1,138,806	382,346	33.57
Property and Equipment, Net	139,401	150,765	(11,364)	(7.54)
Total Assets	48,118,071	40,705,173	7,412,898	
Deferred Outflows of Resources	14,072	11,552	2,520	21.81
Total Assets & Deferred Outflows of Resources	48,132,143	40,716,725	7,415,418	18.21
<i>Liabilities & Deferred Inflows of Resources</i>				
Accounts Payable and Other Liabilities	13,558	13,374	184	1.38
Investment Purchases Payable	116,078	74,816	41,262	55.15
Net Other Postemployment Benefits Liability	9,468	16,672	(7,204)	(43.21)
Net Pension Liability	46,796	41,281	5,515	13.36
Securities Lending Collateral	1,521,152	1,138,806	382,346	33.57
Total Liabilities	1,707,052	1,284,949	422,103	32.85
Deferred Inflows of Resources	18,356	16,291	2,065	12.68
Total Liabilities & Deferred Inflows of Resources	1,725,408	1,301,240	424,168	32.60
<i>Net Position</i>	\$ 46,406,735	\$ 39,415,485	\$ 6,991,250	17.74

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, 2021 and 2020 (Dollar Amounts in Thousands)

	2021	2020	Variance	% Increase/ (Decrease)
Additions				
Employee Contributions	\$ 805,755	\$ 780,899	\$ 24,856	3.18
Employer Contributions	1,409,063	1,400,380	8,683	0.62
New Units	-	344,352	(344,352)	(100.00)
Investment Income	8,652,518	2,121,145	6,531,373	307.92
Transfers Between Systems	10,667	9,235	1,432	15.51
Transfers from an Internal Service Fund	628	997	(369)	(37.01)
Total Additions	10,878,631	4,657,008	6,221,623	133.60
Deductions				
Retirement Allowance Payments	3,714,376	3,577,141	137,235	3.84
Return of Contributions, Unit Withdrawals & Death Benefits	117,932	107,602	10,330	9.60
Transfers Between Systems	10,667	9,235	1,432	15.51
Administrative Expenses	31,753	35,442	(3,689)	(10.41)
Depreciation	12,653	12,565	88	0.70
Total Deductions	3,887,381	3,741,985	145,396	3.89
Net Increase in				
Fiduciary Net Position	6,991,250	915,023	6,076,227	664.05
Net Position - Beginning of Year	39,415,485	38,500,462	915,023	2.38
Net Position - End of Year	\$ 46,406,735	\$ 39,415,485	\$ 6,991,250	17.74

Comparison of Individual Fiduciary Net Position As of September 30, 2021 and 2020 (Dollar Amounts in Thousands)

	2021	2020	Variance	% Increase/ (Decrease)
TRS	\$ 30,561,930	\$ 25,946,389	\$ 4,615,541	17.79
ERS	15,479,476	13,150,538	2,328,938	17.71
JRF	365,329	318,558	46,771	14.68
Total	\$ 46,406,735	\$ 39,415,485	\$ 6,991,250	17.74

RETIREMENT SYSTEMS OF ALABAMA

Financial Section

Management's Discussion and Analysis (Continued)

Financial Analysis

- Primarily all cash on hand at September 30, 2021, 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, 2021.
- 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 2021 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 not settled in the previous fiscal year.
- The RSA's investment portfolio presented in percentages by investment type:

	TRS	ERS	JRF
Equity	73.38%	72.73%	69.87%
Fixed	17.48%	18.10%	28.04%
Real Estate	9.14%	9.17%	2.09%
Total	100.00%	100.00%	100.00%

- Employer contributions increased as a result of salary increases for fiscal year 2021 due to cost-of-living adjustments. The employer contribution rates for fiscal year 2021 are in the table below. ERS local participating employer contribution rates differ for each employer.

	Tier 1	Tier 2
TRS	12.36%	11.22%
ERS - State Employees	14.64%	14.24%
ERS - State Police	51.75%	42.89%
JRF - Groups 1 & 2	40.80%	-
JRF - Group 3 - Judges & Clerks' Plan	35.61%	-
JRF - District Attorneys' Plan	19.77%	-

- During fiscal year 2021, returns on investments of the TRS, ERS, and JRF were 22.62%, 22.18%, and 20.52%, respectively. The returns were calculated by State Street Bank.
- During fiscal year 2021, investment income increased by 307.92% primarily due to a large increase in the unrealized gains and losses and a small increase in interest and dividend income and realized gains and losses. Net securities lending income increased by 19.74% for RSA which was primarily driven by an increase in demand. At September 30, 2021, cash loan balances increased approximately 32% and non-cash loan balances decreased approximately 22% from their balances at September 30, 2020. 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 22%.
- Retirement allowance payments increased as a result of 7,977 members who retired during fiscal year 2021.
- 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 \$40.0 billion and \$503.9 million, respectively. The plan fiduciary net position of TRS and JRF employers was \$30.6 billion and \$365.3 million, respectively, resulting in a net pension liability of \$9.4 billion and \$138.6 million, respectively. The plan fiduciary net position as a percentage of the total pension liability for TRS and JRF employers was 76.44% and 72.50%, 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 \$46.4 billion at September 30, 2021, was available to meet future benefit payments.
- At September 30, 2020, the date of the most recent actuarial valuation, the funding level (actuarial value of assets as a percentage of actuarial accrued liabilities) was 70.7% for the TRS, 68.2% for the ERS, and 66.1% for the JRF.



RETIREMENT SYSTEMS OF ALABAMA

Financial Section

Combining Statement of Fiduciary Net Position

September 30, 2021 with comparative figures for 2020

(Dollar Amounts in Thousands)

	2021			
	Teachers' Retirement System	Employees' Retirement System	Judicial Retirement Fund	Total
Assets				
Cash (Note 4)	\$ 65,144	\$ 32,629	\$ 3,587	\$ 101,360
Receivables				
Employee Contributions	48,920	14,510	167	63,597
Employer Contributions	83,814	28,922	655	113,391
Transfers Receivable from Teachers' Retirement System	-	123	-	123
Transfers Receivable from Employees' Retirement System	530	-	-	530
Investment Sales Receivable	147,033	40,873	-	187,906
Dividends and Interest	67,020	34,407	887	102,314
Miscellaneous Receivable	89	275	-	364
Total Receivables	347,406	119,110	1,709	468,225
Investments, at Fair Value (Note 5)				
Domestic Equity	17,565,017	8,851,872	196,181	26,613,070
Domestic Fixed Income	3,569,934	1,815,287	76,494	5,461,715
International Equities	4,576,563	2,316,334	55,706	6,948,603
Real Estate	2,757,252	1,408,756	7,540	4,173,548
Short-Term	1,703,749	962,679	24,569	2,690,997
Total Investments	30,172,515	15,354,928	360,490	45,887,933
Invested Securities Lending Collateral (Note 5)	1,095,386	421,801	3,965	1,521,152
Property and Equipment less				
Accumulated Depreciation (Note 8)	96,318	43,083	-	139,401
Total Assets	31,776,769	15,971,551	369,751	48,118,071
Deferred Outflows of Resources - Pensions	8,276	2,934	69	11,279
Deferred Outflows of Resources - Other Postemployment Benefits	1,917	871	5	2,793
Total Assets and Deferred Outflows of Resources	31,786,962	15,975,356	369,825	48,132,143
Liabilities				
Accounts Payable and Other Liabilities	8,685	4,135	85	12,905
Transfers Payable to Teachers' Retirement System	-	530	-	530
Transfers Payable to Employees' Retirement System	123	-	-	123
Investment Purchases Payable	75,509	40,569	-	116,078
Net Other Postemployment Benefits Liability (Note 9)	5,705	3,732	31	9,468
Net Pension Liability (Note 10)	28,764	17,674	358	46,796
Securities Lending Collateral (Note 5)	1,095,386	421,801	3,965	1,521,152
Total Liabilities	1,214,172	488,441	4,439	1,707,052
Deferred Inflows of Resources - Pensions	499	264	-	763
Deferred Inflows of Resources - Other Postemployment Benefits	10,361	7,175	57	17,593
Total Liabilities and Deferred Inflows of Resources	1,225,032	495,880	4,496	1,725,408
Net Position Restricted for Pension Benefits (Note 3)	\$ 30,561,930	\$ 15,479,476	\$ 365,329	\$ 46,406,735

See accompanying Notes to the Combined Financial Statements.

	2020			
	Teachers' Retirement System	Employees' Retirement System	Judicial Retirement Fund	Total
Assets				
Cash	\$ 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	256,828	100,669	1,787	359,284
Investments, at Fair Value				
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	25,612,336	13,037,497	313,887	38,963,720
Invested Securities Lending Collateral	703,046	429,656	6,104	1,138,806
Property and Equipment less Accumulated Depreciation	104,458	46,307	-	150,765
Total Assets	26,742,357	13,637,674	325,142	40,705,173
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	26,750,631	13,640,901	325,193	40,716,725
Liabilities				
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	9,902	6,716	54	16,672
Net Pension Liability	24,246	16,713	322	41,281
Securities Lending Collateral	703,046	429,656	6,104	1,138,806
Total Liabilities	794,477	483,889	6,583	1,284,949
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	804,242	490,363	6,635	1,301,240
Net Position Restricted for Pension Benefits	\$ 25,946,389	\$ 13,150,538	\$ 318,558	\$ 39,415,485

RETIREMENT SYSTEMS OF ALABAMA

Financial Section

Combining Statement of Changes in Fiduciary Net Position

For the Fiscal Year Ended September 30, 2021 with comparative figures for 2020

(Dollar Amounts in Thousands)

	2021			
	Teachers' Retirement System	Employees' Retirement System	Judicial Retirement Fund	Total
Additions				
Contributions				
Employee	\$ 519,627	\$ 281,975	\$ 4,153	\$ 805,755
Employer	874,401	516,402	18,260	1,409,063
Transfers from Teachers' Retirement System	-	4,421	-	4,421
Transfers from Employees' Retirement System	6,128	-	118	6,246
Transfers from an Internal Service Fund	377	251	-	628
Total Contributions	1,400,533	803,049	22,531	2,226,113
Investment Income (Note 5)				
From Investing Activities				
Net Increase in Fair Value of Investments	5,155,012	2,558,276	56,970	7,770,258
Interest and Dividends	576,552	302,802	6,689	886,043
Total Investment Income from Investing Activities	5,731,564	2,861,078	63,659	8,656,301
Less: Investment Expenses, Net	11,191	4,003	-	15,194
Net Investment Income from Investing Activities	5,720,373	2,857,075	63,659	8,641,107
From Securities Lending Activities				
Securities Lending Income	11,019	5,685	106	16,810
Less Securities Lending Expenses:				
Borrower Rebates	108	39	1	148
Management Fees	3,445	1,773	33	5,251
Total Securities Lending Expenses	3,553	1,812	34	5,399
Net Income from Securities Lending Activities	7,466	3,873	72	11,411
Total Net Investment Income	5,727,839	2,860,948	63,731	8,652,518
Total Additions	7,128,372	3,663,997	86,262	10,878,631
Deductions				
Retirement Allowance Payments	2,415,128	1,260,159	39,089	3,714,376
Return of Contributions and Death Benefits	63,747	54,157	28	117,932
Transfers to Teachers' Retirement System	-	6,128	-	6,128
Transfers to Employees' Retirement System	4,421	-	-	4,421
Transfers to Judicial Retirement Fund	-	118	-	118
Administrative Expenses	20,402	10,977	374	31,753
Depreciation (Note 8)	9,133	3,520	-	12,653
Total Deductions	2,512,831	1,335,059	39,491	3,887,381
Net Increase in Fiduciary Net Position	4,615,541	2,328,938	46,771	6,991,250
Net Position Restricted for Pension Benefits (Note 3)				
Beginning of Year	25,946,389	13,150,538	318,558	39,415,485
End of Year	<u>\$ 30,561,930</u>	<u>\$ 15,479,476</u>	<u>\$ 365,329</u>	<u>\$ 46,406,735</u>

See accompanying Notes to the Combined Financial Statements.

2020				
	Teachers' Retirement System	Employees' Retirement System	Judicial Retirement Fund	Total
Additions				
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				
<i>From Investing Activities</i>				
Net Increase in Fair Value of Investments	801,465	425,632	16,173	1,243,270
Interest and Dividends	<u>576,193</u>	<u>298,770</u>	<u>6,928</u>	<u>881,891</u>
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	<u>9,719</u>	<u>3,828</u>	<u>-</u>	<u>13,547</u>
Net Investment Income from Investing Activities	<u>1,367,939</u>	<u>720,574</u>	<u>23,101</u>	<u>2,111,614</u>
<i>From Securities Lending Activities</i>				
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	<u>3,120</u>	<u>1,482</u>	<u>29</u>	<u>4,631</u>
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>
Deductions				
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	<u>9,154</u>	<u>3,411</u>	<u>-</u>	<u>12,565</u>
Total Deductions	<u>2,425,495</u>	<u>1,277,065</u>	<u>39,425</u>	<u>3,741,985</u>
Net Increase in Fiduciary Net Position	326,941	582,065	6,017	915,023
Net Position Restricted for Pension Benefits				
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>

RETIREMENT SYSTEMS OF ALABAMA

Financial Section

Notes to the Combined Financial Statements For the Fiscal Year Ended September 30, 2021

(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, 2021, the number of participating units in each system was as follows:

	<u>TRS</u>	<u>ERS</u>	<u>JRF</u>
Cities	-	304	-
Counties	-	65	67
Other Public Entities	-	510	-
Universities	13	-	-
Postsecondary			
Institutions	25	-	-
City and County			
Boards of Education	138	-	-
State Agencies & Other	39	1	1
Total	<u>215</u>	<u>880</u>	<u>68</u>

At September 30, 2020, 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	100,866	24,655	456
State Police	-	943	-
Employees of Local Employers	-	28,769	-
Terminated employees entitled to benefits but not yet receiving benefits:			
General	24,655	5,552	16
State Police	-	56	-
Employees of Local Employers	-	16,150	-
Non-vested inactive members who have not contributed for more than 5 years	30,490	20,091	25
Active Employees:			
General	132,707	28,193	365
State Police	-	826	-
Employees of Local Employers	-	56,466	-
Total	<u>288,718</u>	<u>181,701</u>	<u>862</u>

RETIREMENT SYSTEMS OF ALABAMA

Financial Section

Notes to the Combined Financial Statements For the Fiscal Year Ended September 30, 2021

(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 formula method. 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 up to 80% of their average final compensation. 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.

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.

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.

RETIREMENT SYSTEMS OF ALABAMA

Financial Section

Notes to the Combined Financial Statements For the Fiscal Year Ended September 30, 2021

(Dollar Amounts in Thousands)

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.

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, 2021, are as follows (dollar amounts in thousands):

	TRS	ERS	JRF
Annuity Savings	\$ 6,589,861	\$ 3,292,498	\$ 47,304
Pension Accumulation	23,697,619	12,069,811	314,727
Deferred Retirement Option Plan	102,760	54,816	-
Preretirement Death Benefit	57,850	22,969	160
Term Life Insurance	4,371	-	-
Plant Fund	96,318	43,083	-
Expense	13,151	(3,701)	3,138
Net Position at 9/30/2021	\$ 30,561,930	\$ 15,479,476	\$ 365,329

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, 2021, was held for administrative expenses.

RETIREMENT SYSTEMS OF ALABAMA

Financial Section

Notes to the Combined Financial Statements For the Fiscal Year Ended September 30, 2021

(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 22.75%, 22.28%, and 20.75%, 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.

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, 2021, the TRS, ERS, and JRF owned debt and equity securities of The Goldman Sachs Group, Inc. with approximated values of 7.05%, 6.03%, and 5.30% of the investments of the TRS, ERS, and JRF, respectively.

RETIREMENT SYSTEMS OF ALABAMA

Financial Section

Notes to the Combined Financial Statements For the Fiscal Year Ended September 30, 2021

(Dollar Amounts in Thousands)

The following tables provide information as of September 30, 2021, concerning the fair value of investments, interest rate risk, and foreign currency risk:

Type of Investment	TRS 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	\$ 506,266	\$ -	\$ -	\$ -	\$ 506,266	\$ 506,266
Commercial Paper	1,197,483	-	-	-	1,197,483	1,197,483
U.S. Agency	13,777	64,677	50,107	6,672	135,233	130,413
U.S. Government Guaranteed	106,402	348,854	148,698	215,828	819,782	788,897
Corporate Bonds	162,554	488,723	336,292	485,686	1,473,255	1,335,178
Private Placements	80,735	146,062	139,850	115,788	482,435	457,950
GNMAs	-	1,711	8	178,065	179,784	177,755
CMOs	-	1,569	25,493	452,383	479,445	470,570
Total Domestic Fixed Maturity	<u>\$2,067,217</u>	<u>\$1,051,596</u>	<u>\$700,448</u>	<u>\$1,454,422</u>	<u>5,273,683</u>	<u>5,064,512</u>
<i>Equities</i>						
Preferred					24,485	24,441
Domestic					16,051,081	9,050,862
Private					1,489,451	1,125,639
International						
Australian Dollar					212,497	114,621
Swiss Franc					349,550	132,310
Danish Krone					95,188	26,426
Euro					1,084,338	742,909
Pound Sterling					512,086	506,270
Hong Kong Dollar					96,845	50,380
New Israeli Shekel					14,878	15,353
Japanese Yen					848,796	499,546
Norwegian Krone					20,607	12,510
New Zealand Dollar					2,467	2,219
Swedish Krona					116,734	51,590
Singapore Dollar					34,031	28,039
US Dollar					1,188,546	977,447
Total International Equities					4,576,563	3,159,620
Total Equities					<u>22,141,580</u>	<u>13,360,562</u>
Real Estate						
Real Estate - Buildings					2,395,629	1,893,199
Real Estate - Equity					361,623	296,259
Total Real Estate					<u>2,757,252</u>	<u>2,189,458</u>
Total Investments					<u>\$ 30,172,515</u>	<u>\$ 20,614,532</u>

Type of Investment	ERS				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	\$ 253,073	\$ -	\$ -	\$ -	\$ 253,073	\$ 253,073
Commercial Paper	709,606	-	-	-	709,606	709,607
U.S. Agency	6,468	32,482	27,887	3,354	70,191	67,775
U.S. Government Guaranteed	57,978	174,003	76,236	107,183	415,400	400,662
Corporate Bonds	81,066	246,857	186,126	237,776	751,825	682,890
Private Placements	39,765	71,941	66,647	58,150	236,503	224,946
GNMAs	-	612	-	90,661	91,273	90,289
CMOs	-	728	11,828	237,539	250,095	245,407
Total Domestic Fixed Maturity	<u>\$ 1,147,956</u>	<u>\$ 526,623</u>	<u>\$368,724</u>	<u>\$734,663</u>	<u>2,777,966</u>	<u>2,674,649</u>
<i>Equities</i>						
Preferred					11,132	11,112
Domestic					7,963,265	4,442,784
Private					877,475	679,399
International						
Australian Dollar					103,325	58,992
Swiss Franc					169,785	71,263
Danish Krone					46,261	14,427
Euro					527,410	367,945
Pound Sterling					248,945	244,315
Hong Kong Dollar					47,025	26,625
New Israeli Shekel					7,234	7,281
Japanese Yen					412,003	250,937
Norwegian Krone					10,015	6,290
New Zealand Dollar					1,199	1,082
Swedish Krona					56,757	26,785
Singapore Dollar					16,545	13,824
US Dollar					669,830	558,840
Total International Equities					2,316,334	1,648,606
Total Equities					11,168,206	6,781,901
Real Estate						
Real Estate - Buildings					1,160,799	943,654
Real Estate - Equity					247,957	203,139
Total Real Estate					1,408,756	1,146,793
Total Investments					\$ 15,354,928	\$ 10,603,343

RETIREMENT SYSTEMS OF ALABAMA

Financial Section

Notes to the Combined Financial Statements For the Fiscal Year Ended September 30, 2021

(Dollar Amounts in Thousands)

Type of Investment	JRF 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	\$ 11,570	\$ -	\$ -	\$ -	\$ 11,570	\$ 11,570
Commercial Paper	12,999	-	-	-	12,999	12,999
U.S. Agency	377	1,568	939	169	3,053	2,949
U.S. Government Guaranteed	838	10,366	3,373	4,915	19,492	18,672
Corporate Bonds	4,945	13,343	6,688	11,114	36,090	33,271
Private Placements	-	-	-	1,147	1,147	972
GNMAs	-	-	-	4,070	4,070	4,018
CMOs	-	35	983	11,624	12,642	12,398
Total Domestic Fixed Maturity	<u>\$ 30,729</u>	<u>\$ 25,312</u>	<u>\$ 11,983</u>	<u>\$ 33,039</u>	101,063	96,849
<i>Equities</i>						
Preferred					608	607
Domestic					195,494	82,000
Private					79	71
International						
Australian Dollar					2,801	2,099
Swiss Franc					4,540	2,266
Danish Krone					1,264	427
Euro					14,212	10,525
Pound Sterling					6,686	7,030
Hong Kong Dollar					1,290	778
New Israeli Shekel					195	201
Japanese Yen					11,257	7,008
Norwegian Krone					271	222
New Zealand Dollar					33	23
Swedish Krona					1,530	844
Singapore Dollar					439	386
US Dollar					11,188	8,876
Total International Equities					55,706	40,685
Total Equities					251,887	123,363
Real Estate						
Real Estate - Buildings					4,201	1,067
Real Estate - Equity					3,339	2,735
Total Real Estate					7,540	3,802
Total Investments					\$ 360,490	\$ 224,014

The following tables provide information as of September 30, 2021, 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	\$ 144,221	\$ 152,317	2.89
Aa1	16,433	17,581	0.33
Aa2	6,566	6,435	0.12
P-1	38,000	38,000	0.72
P-2	1,029,483	1,029,483	19.52
A1	83,400	94,248	1.79
A2	119,574	136,649	2.59
A3	193,396	215,707	4.09
Baa1	283,256	318,122	6.03
Baa2	433,725	472,252	8.96
Baa3	55,674	61,209	1.16
Ba1	22,517	24,388	0.46
Ba2	59,739	60,436	1.15
Ba3	2,243	2,345	0.05
B1	2,126	2,210	0.04
B2	20,032	19,767	0.38
NR	1,116,905	1,143,523	21.68
Total Moody's Rated Fixed Maturities	3,627,290	3,794,672	71.96
U.S. Agency Mortgage-Backed Securities	470,570	479,445	9.09
U.S. Government Guaranteed	966,652	999,566	18.95
Total Fixed Maturities	\$ 5,064,512	\$ 5,273,683	100.00

Standard & Poor's Ratings	Cost	Fair Value	Fair Value as a Percentage of Total Fair Value of Fixed Maturities
AAA	\$ 14,887	\$ 17,662	0.34
AA+	143,946	150,040	2.85
AA	10,465	12,551	0.24
AA-	12,333	12,860	0.24
A-1	49,996	49,996	0.95
A-2	1,017,486	1,017,487	19.29
A+	53,036	60,117	1.14
A	55,787	64,155	1.22
A-	250,453	279,725	5.30
BBB+	354,707	392,639	7.45
BBB	363,406	404,962	7.68
BBB-	93,348	98,355	1.87
BB+	33,003	33,840	0.64
BB	38,222	39,245	0.74
BB-	2,243	2,345	0.04
B-	20,032	19,767	0.37
NR	1,113,940	1,138,926	21.60
Total S&P Rated Fixed Maturities	3,627,290	3,794,672	71.96
U.S. Agency Mortgage-Backed Securities	470,570	479,445	9.09
U.S. Government Guaranteed	966,652	999,566	18.95
Total Fixed Maturities	\$ 5,064,512	\$ 5,273,683	100.00

RETIREMENT SYSTEMS OF ALABAMA

Financial Section

Notes to the Combined Financial Statements For the Fiscal Year Ended September 30, 2021

(Dollar Amounts in Thousands)

ERS

Moody's Ratings	Cost	Fair Value	Fair Value as a Percentage of Total Fair Value of Fixed Maturities
Aaa	\$ 74,004	\$ 77,930	2.81
Aa1	9,148	9,759	0.35
Aa2	2,978	2,918	0.11
P-1	19,999	19,999	0.72
P-2	619,608	619,608	22.30
A1	45,859	51,565	1.86
A2	60,898	69,371	2.50
A3	92,961	103,297	3.72
Baa1	146,528	163,868	5.90
Baa2	227,487	247,385	8.90
Baa3	27,875	30,706	1.10
Ba1	10,235	11,081	0.40
Ba2	29,602	30,094	1.08
Ba3	1,015	1,060	0.04
B1	989	1,031	0.04
B2	10,241	10,105	0.36
NR	558,864	571,421	20.57
Total Moody's Rated Fixed Maturities	1,938,291	2,021,198	72.76
U.S. Agency Mortgage-Backed Securities	245,407	250,095	9.00
U.S. Government Guaranteed	490,951	506,673	18.24
Total Fixed Maturities	\$ 2,674,649	\$ 2,777,966	100.00

Standard & Poor's Ratings	Cost	Fair Value	Fair Value as a Percentage of Total Fair Value of Fixed Maturities
AAA	\$ 6,896	\$ 8,172	0.29
AA+	75,429	78,519	2.83
AA	4,999	5,951	0.21
AA-	5,589	5,828	0.21
A-1	73,270	73,270	2.64
A-2	566,337	566,337	20.39
A+	26,374	29,820	1.07
A	26,729	30,541	1.10
A-	128,488	142,985	5.15
BBB+	184,801	203,954	7.34
BBB	189,132	210,473	7.58
BBB-	45,387	47,681	1.72
BB+	15,683	16,127	0.58
BB	19,627	20,267	0.73
BB-	1,015	1,060	0.04
B-	10,241	10,105	0.36
NR	558,294	570,108	20.52
Total S&P Rated Fixed Maturities	1,938,291	2,021,198	72.76
U.S. Agency Mortgage-Backed Securities	245,407	250,095	9.00
U.S. Government Guaranteed	490,951	506,673	18.24
Total Fixed Maturities	\$ 2,674,649	\$ 2,777,966	100.00

JRF

Moody's Ratings	Cost	Fair Value	Fair Value as a Percentage of Total Fair Value of Fixed Maturities
Aaa	\$ 3,356	\$ 3,553	3.52
Aa1	508	541	0.54
Aa2	157	154	0.15
P-2	12,999	12,999	12.86
A1	1,755	1,976	1.96
A2	1,941	2,203	2.18
A3	4,596	5,052	5.00
Baa1	6,606	7,328	7.25
Baa2	10,744	11,610	11.49
Baa3	2,110	2,213	2.19
Ba1	1,410	1,458	1.44
Ba2	1,339	1,342	1.33
Ba3	663	657	0.64
B1	63	65	0.06
B2	487	480	0.48
NR	13,027	13,228	13.09
Total Moody's Rated Fixed Maturities	61,761	64,859	64.18
U.S. Agency Mortgage-Backed Securities	12,398	12,642	12.51
U.S. Government Guaranteed	22,690	23,562	23.31
Total Fixed Maturities	\$ 96,849	\$ 101,063	100.00

Standard & Poor's Ratings	Cost	Fair Value	Fair Value as a Percentage of Total Fair Value of Fixed Maturities
AAA	\$ 436	\$ 517	0.51
AA+	3,387	3,528	3.49
AA	270	322	0.32
AA-	293	305	0.30
A-2	12,999	12,999	12.86
A+	968	1,090	1.08
A	1,345	1,532	1.52
A-	5,251	5,798	5.74
BBB+	9,351	10,177	10.07
BBB	7,754	8,537	8.45
BBB-	3,158	3,293	3.26
BB+	1,606	1,632	1.61
BB	881	891	0.88
BB-	663	657	0.65
B-	487	480	0.48
NR	12,912	13,101	12.96
Total S&P Rated Fixed Maturities	61,761	64,859	64.18
U.S. Agency Mortgage-Backed Securities	12,398	12,642	12.51
U.S. Government Guaranteed	22,690	23,562	23.31
Total Fixed Maturities	\$ 96,849	\$ 101,063	100.00

(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 not publicly traded 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, 2021, concerning fair value measurement (dollar amounts in thousands):

		TRS		
		Fair Value Measurements Using:		
		Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
	9/30/2021			
<i>Domestic Fixed Maturity</i>				
Money Market Funds	\$ 506,266	\$ -	\$ 506,266	\$ -
Commercial Paper	1,197,483	-	1,067,483	130,000
U.S. Agency	135,233	-	135,233	-
U.S. Government Guaranteed	819,782	-	819,782	-
Corporate Bonds	1,473,255	-	1,470,005	3,250
Private Placements	482,435	-	-	482,435
GNMAs	179,784	-	179,784	-
CMOs	479,445	-	479,445	-
Total Domestic Fixed Maturity	5,273,683	-	4,657,998	615,685
<i>Equities</i>				
Preferred	24,485	24,485	-	-
Domestic	16,051,081	14,409,061	1,642,020	-
Private	1,489,451	56,945	-	1,432,506
International	4,576,563	4,172,974	403,589	-
Total Equities	22,141,580	18,663,465	2,045,609	1,432,506
<i>Real Estate</i>				
Real Estate - Buildings	2,395,629	-	-	2,395,629
Real Estate - Equity	361,623	361,623	-	-
Total Real Estate	2,757,252	361,623	-	2,395,629
Total Investments	30,172,515	19,025,088	6,703,607	4,443,820
Securities Lending Collateral	1,095,386	-	1,095,386	-
Total Fair Value	\$ 31,267,901	\$ 19,025,088	\$ 7,798,993	\$ 4,443,820

RETIREMENT SYSTEMS OF ALABAMA

Financial Section

Notes to the Combined Financial Statements

For the Fiscal Year Ended September 30, 2021

(Dollar Amounts in Thousands)

	9/30/2021	ERS		
		Fair Value Measurements Using:		
		Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Domestic Fixed Maturity				
Money Market Funds	\$ 253,073	\$ -	\$ 253,073	\$ -
Commercial Paper	709,607	-	639,607	70,000
U.S. Agency	70,190	-	70,190	-
U.S. Government Guaranteed	415,400	-	415,400	-
Corporate Bonds	751,824	-	750,174	1,650
Private Placements	236,504	-	-	236,504
GNMAs	91,273	-	91,273	-
CMOs	250,095	-	250,095	-
Total Domestic Fixed Maturity	2,777,966	-	2,469,812	308,154
Equities				
Preferred	11,132	11,132	-	-
Domestic	7,963,265	7,291,992	671,273	-
Private	877,475	40,202	-	837,273
International	2,316,334	2,101,726	214,608	-
Total Equities	11,168,206	9,445,052	885,881	837,273
Real Estate				
Real Estate - Buildings	1,160,799	-	-	1,160,799
Real Estate - Equity	247,957	247,957	-	-
Total Real Estate	1,408,756	247,957	-	1,160,799
Total Investments	15,354,928	9,693,009	3,355,693	2,306,226
Securities Lending Collateral	421,801	-	421,801	-
Total Fair Value	\$ 15,776,729	\$ 9,693,009	\$ 3,777,494	\$ 2,306,226

		JRF		
		Fair Value Measurements Using:		
		Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
	9/30/2021			
<i>Domestic Fixed Maturity</i>				
Money Market Funds	\$ 11,570	\$ -	\$ 11,570	\$ -
Commercial Paper	12,999	-	12,999	-
U.S. Agency	3,053	-	3,053	-
U.S. Government Guaranteed	19,492	-	19,492	-
Corporate Bonds	36,090	-	35,990	100
Private Placements	1,147	-	-	1,147
GNMAs	4,070	-	4,070	-
CMOs	12,642	-	12,642	-
Total Domestic Fixed Maturity	101,063	-	99,816	1,247
<i>Equities</i>				
Preferred	608	608	-	-
Domestic	195,494	181,212	14,282	-
Private	79	-	-	79
International	55,706	52,597	3,109	-
Total Equities	251,887	234,417	17,391	79
<i>Real Estate</i>				
Real Estate - Buildings	4,201	-	-	4,201
Real Estate - Equity	3,339	3,339	-	-
Total Real Estate	7,540	3,339	-	4,201
Total Investments	360,490	237,756	117,207	5,527
Securities Lending Collateral	3,965	-	3,965	-
Total Fair Value	\$ 364,455	\$ 237,756	\$ 121,172	\$ 5,527

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, 2021, the average term of the loans secured by QDF was 9 days for the TRS, 14 days for the ERS, and 26 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, 2021, the fair value of the securities on loan was \$2,307,115, \$1,043,219, and \$14,529 for the TRS, ERS, and JRF, respectively. The fair value of the collateral pledged by the borrowers was \$2,443,401, \$1,101,152, and \$15,528 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, 2021. 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, 2021, concerning securities lent (dollar amounts in thousands):

Securities Lending - Investments Lent & Collateral Received (at Fair Value)				
Type of Investment Lent	TRS	ERS	JRF	Total
<i>For Cash Collateral</i>				
Domestic Fixed Maturities	\$ 113,394	\$ 84,144	\$ 418	\$ 197,956
Domestic Equity	406,414	129,722	834	536,970
International Equity - JPY	478,847	173,067	1,708	653,622
International Equity - USD	48,792	15,889	805	65,486
Total Lent for Cash Collateral	1,047,447	402,822	3,765	1,454,034
<i>For Non-Cash Collateral</i>				
Domestic Fixed Maturities	371,348	237,624	6,651	615,623
Domestic Equity	737,841	303,347	2,529	1,043,717
International Equity	150,479	99,426	1,584	251,489
Total Lent for Non-Cash Collateral	1,259,668	640,397	10,764	1,910,829
Total Securities Lent	\$2,307,115	\$1,043,219	\$14,529	\$3,364,863
Type of Collateral Received				
<i>Cash Collateral</i>				
Invested in State Street Global Securities Lending Trust - JPY	\$ 512,680	\$ 185,771	\$ 1,834	\$ 700,285
Invested in State Street Global Securities Lending Trust - USD	582,706	236,030	2,131	820,867
Total Cash Collateral Denominated in USD	1,095,386	421,801	3,965	1,521,152
<i>Non-Cash Collateral</i>				
Domestic Fixed Securities				
AUD			248	248
EUR			24	24
GBP			64	64
USD	199,933	109,814	1,959	311,706
Domestic Equity Securities				
USD	796,391	331,919	2,776	1,131,086
International Fixed Maturities & Equity				
EUR	5,993	109	9	6,111
GBP	156	-	-	156
USD	345,542	237,509	6,483	589,534
Total Non-Cash Collateral	1,348,015	679,351	11,563	2,038,929
Total Collateral Received	\$2,443,401	\$1,101,152	\$15,528	\$3,560,081

RETIREMENT SYSTEMS OF ALABAMA

Financial Section

Notes to the Combined Financial Statements For the Fiscal Year Ended September 30, 2021

(Dollar Amounts in Thousands)

F. Mortgage-backed Securities

As of September 30, 2021, 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, 2021, as reported in the System's Combining Statement of Fiduciary Net Position and Combining Statement of Changes in Fiduciary Net Position:

Investment Derivative Instruments					
	Changes in Fair Value		Fair Value as of September 30, 2021		
	Classification	Amount	Classification	Amount	Notional
TRS					
Domestic Options Written	Investment Income	\$ (92,934)	Domestic Equity	\$ (49,543)	\$ (2,354,303)
Domestic Options Purchased	Investment Income	116,142	Domestic Equity	-	1,101,582
Total Domestic Options		23,208		(49,543)	(1,252,721)
International Options Written	Investment Income	(69)	International Equity	(342)	(241,525)
Grand Total TRS Options		<u>\$ 23,139</u>		<u>\$ (49,885)</u>	<u>\$ (1,494,246)</u>
ERS					
Domestic Options Written	Investment Income	\$ (44,951)	Domestic Equity	\$ (24,474)	\$ (1,163,779)
Domestic Options Purchased	Investment Income	56,227	Domestic Equity	-	543,580
Total Domestic Options		11,276		(24,474)	(620,199)
International Options Written	Investment Income	(34)	International Equity	(162)	(113,589)
Grand Total ERS Options		<u>\$ 11,242</u>		<u>\$ (24,636)</u>	<u>\$ (733,788)</u>
JRF					
Domestic Options Written	Investment Income	\$ (1,697)	Domestic Equity	\$ (951)	\$ (45,238)
Domestic Options Purchased	Investment Income	2,128	Domestic Equity	-	21,571
Total Domestic Options		431		(951)	(23,667)
International Options Written	Investment Income	(1)	International Equity	(6)	(5,371)
Grand Total JRF Options		<u>\$ 430</u>		<u>\$ (957)</u>	<u>\$ (29,038)</u>
Total					
Domestic Options Written	Investment Income	\$(139,582)	Domestic Equity	\$ (74,968)	\$ (3,563,320)
Domestic Options Purchased	Investment Income	174,497	Domestic Equity	-	1,666,733
Total Domestic Options		34,915		(74,968)	(1,896,587)
International Options Written	Investment Income	(104)	International Equity	(510)	(360,485)
Grand Total Options		<u>\$ 34,811</u>		<u>\$ (75,478)</u>	<u>\$ (2,257,072)</u>

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, 2021, were as follows (dollar amounts in thousands):

	TRS	ERS	JRF
Total Pension Liability	\$ 39,982,250	\$ 21,063,964	\$ 503,881
Less: Plan Net Position (see Note 3G)	(30,561,930)	(15,479,476)	(365,329)
Net Pension Liability	\$ 9,420,320	\$ 5,584,488	\$ 138,552

Plan Net Position as a Percentage of the Total Pension Liability

76.44% 73.49% 72.50%

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, 2020, and rolled forward in accordance with GASB Statement No. 67 to the measurement date of September 30, 2021, using the following actuarial assumptions, applied to all periods included in the measurement:

	TRS	ERS	JRF
Inflation	2.50%	2.50%	2.50%
Projected Salary Increases	3.25% - 5.00%	3.25% - 5.00%	2.75% - 3.50%
Investment Rate of Return*	7.45%	7.45%	7.40%

*Net of pension plan investment expense.

There were no ad hoc postemployment benefit changes, including ad hoc COLAs, during fiscal year 2021.

The actuarial assumptions used in the actuarial valuation as of September 30, 2020, 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, 2020, 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 2021 which became effective at the beginning of fiscal year 2020.

The assumed investment rates of return used to prepare the actuarial valuations as of September 30, 2020, were 7.45% for the TRS & ERS and 7.40% for the JRF. The Boards of Control accepted and approved these new assumed investment rates of return in September 2021 which became effective September 30, 2020. The new assumed investment rates of return were used to measure the total pension liability as of September 30, 2021.

Mortality rates for the TRS and JRF were based on the Pub-2010 Teacher tables with the following adjustments, projected generationally using scale MP-2020 adjusted by 66-2/3% beginning with year 2019:

Group	Membership Table	Set Forward (+)/Setback (-)	Adjustment to Rates
Service Retirees	Teacher Retiree - Below Median	Male: +2, Female: +2	Male: 108% ages < 63, 96% ages > 67; Phasing down 63 - 67 Female: 112% ages < 69, 98% > age 74; Phasing down 69 - 74
Beneficiaries	Contingent Survivor - Below Median	Male: +2, Female: None	None
Disabled Retirees	Teacher Disability	Male: +8, Female: +3	None

Mortality rates for the ERS were based on the Pub-2010 Public Mortality Plans Mortality Tables projected using a generational approach based on the mortality improvement scale, MP-2020, with an adjustment of 66-2/3% to the table beginning in year 2019.

RETIREMENT SYSTEMS OF ALABAMA

Financial Section

Notes to the Combined Financial Statements For the Fiscal Year Ended September 30, 2021

(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, 2020. The expected total pension liability is determined as of September 30, 2021, using standard roll-forward techniques as shown in the following table:

	TRS		
	Expected	Actual Before 2020 Experience Study	Actual After 2020 Experience Study
Total Pension Liability as of 9/30/2020 (a)	\$ 38,316,039	\$ 37,793,618	\$ 38,952,647
Expected Rate of Return (b)	7.70%	7.70%	7.45%
Entry Age Normal Cost* for 10/1/2020 - 9/30/2021 (c)	\$ 660,269	\$ 660,269	\$ 703,430
Actual Benefit Payments (including refunds) for 10/1/2020 - 9/30/2021 (d)	\$ 2,483,296	\$ 2,483,296	\$ 2,483,296
Total Pension Liability as of 9/30/2021	\$ 39,347,740	\$ 38,785,093	\$ 39,982,250
[(a) x (1 + (b))] + (c) - [(d) x (1 + 0.5 x (b))]			
Difference between Expected and Actual Before Experience Study - Experience (Gain)/Loss		\$ (562,647)	
Difference between Actual Before and After Experience Study - Assumption Change (Gain)/Loss			\$ 1,197,157

	ERS			
	Expected	Actual Before Final Act 2019-132 Elections or Experience Study	Actual After Final Act 2019-132 Elections But Before 2020 Experience Study	Actual After 2020 Experience Study
Total Pension Liability as of 9/30/2020 (a)	\$ 19,706,965	\$ 19,796,932	\$ 19,828,004	\$ 20,512,918
Expected Rate of Return (b)	7.70%	7.70%	7.70%	7.45%
Entry Age Normal Cost* for 10/1/2020 - 9/30/2021 (c)	\$ 348,684	\$ 348,684	\$ 354,413	\$ 392,588
Actual Benefit Payments (including refunds) for 10/1/2020 - 9/30/2021 (d)	\$ 1,320,563	\$ 1,320,563	\$ 1,320,563	\$ 1,320,563
Total Pension Liability as of 9/30/2021	\$ 20,201,681	\$ 20,298,575	\$ 20,337,768	\$ 21,063,964
[(a) x (1 + (b))] + (c) - [(d) x (1 + 0.5 x (b))]				
Difference between Expected and Actual Before Experience Study - Experience (Gain)/Loss		\$ 96,894		
Difference between Actual TPL Before and After Final Act 2019-132 Elections - Benefit Change (Gain)/Loss			\$ 39,193	
Difference between Actual TPL Before and After Experience Study - Assumption Change (Gain)/Loss				\$ 726,196

	JRF		
	Expected	Actual Before 2020 Experience Study	Actual After 2020 Experience Study
Total Pension Liability as of 9/30/2020 (a)	\$ 481,205	\$ 481,899	\$ 497,364
Expected Rate of Return (b)	7.65%	7.65%	7.40%
Entry Age Normal Cost* for 10/1/2020 - 9/30/2021 (c)	\$ 9,825	\$ 9,825	\$ 10,277
Actual Benefit Payments (including refunds) for 10/1/2020 - 9/30/2021 (d)	\$ 39,117	\$ 39,117	\$ 39,117
Total Pension Liability as of 9/30/2021	\$ 487,230	\$ 487,976	\$ 503,881
[(a) x (1 + (b))] + (c) - [(d) x (1 + 0.5 x (b))]			
Difference between Expected and Actual Before Experience Study - Experience (Gain)/Loss		\$ 746	
Difference between Actual Before and After Experience Study - Assumption Change (Gain)/Loss			\$ 15,905

*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	15.00%	15.00%	22.00%	2.80%	2.80%	2.80%
U.S. Large Stocks	32.00%	32.00%	39.00%	8.00%	8.00%	8.00%
U.S. Mid Stocks	9.00%	9.00%	11.00%	10.00%	10.00%	10.00%
U.S. Small Stocks	4.00%	4.00%	5.00%	11.00%	11.00%	11.00%
International Developed Market Stocks	12.00%	12.00%	12.00%	9.50%	9.50%	9.50%
International Emerging Market Stocks	3.00%	3.00%	3.00%	11.00%	11.00%	11.00%
Alternatives	10.00%	10.00%	1.00%	9.00%	9.00%	9.00%
Real Estate	10.00%	10.00%	2.00%	6.50%	6.50%	6.50%
Cash	5.00%	5.00%	5.00%	2.50%	1.50%	1.50%
Total	100.00%	100.00%	100.00%			

*Includes assumed rate of inflation of 2.00%.

The discount rate used to measure the total pension liability was 7.45% for the TRS and ERS and 7.40% 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 (6.45%)	Discount Rate (7.45%)	1% Increase (8.45%)
TRS	\$ 13,865,812	\$ 9,420,320	\$ 5,676,078
ERS	\$ 7,930,396	\$ 5,584,488	\$ 3,604,071

	Current		
	1% Decrease (6.40%)	Discount Rate (7.40%)	1% Increase (8.40%)
JRF	\$ 184,358	\$ 138,552	\$ 98,953

RETIREMENT SYSTEMS OF ALABAMA

Financial Section

Notes to the Combined Financial Statements For the Fiscal Year Ended September 30, 2021

(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 2021 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, 2021:

	TRS	ERS
Land	\$ 5,085	\$ 2,535
Building and Improvements	107,896	53,948
Software	42,889	14,264
Furniture and Equipment	10,739	2,599
Intangible Assets in Progress	-	-
Total Property and Equipment	166,609	73,346
Less: Accumulated Depreciation	(70,291)	(30,263)
Net Property and Equipment	\$ 96,318	\$ 43,083

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 24th, 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*.

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, 2020, the membership covered by the benefit terms consisted of:

Active Members	31,439
Inactive Members	<u>24,262</u>
Total	<u>55,701</u>

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, 2021, the TRS reported a liability of \$5,705 (dollar amount in thousands) for its proportionate share of the net OPEB liability. The net OPEB liability was measured as of September 30, 2020, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of September 30, 2019. 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, 2020, the TRS's proportion was 0.574476%, which was an increase of 0.002024% from its proportion measured as of September 30, 2019.

RETIREMENT SYSTEMS OF ALABAMA

Financial Section

Notes to the Combined Financial Statements For the Fiscal Year Ended September 30, 2021

(Dollar Amounts in Thousands)

For the year ended September 30, 2021, the TRS recognized OPEB expense of (\$467). At September 30, 2021, the TRS reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between Expected & Actual Experience	\$ -	\$ 5,632
Changes of Assumptions	565	4,729
Net Difference between Projected & Actual		
Earnings on OPEB Plan Investments	7	-
Changes in Proportion & Differences between Employer		
Contributions & Proportionate Share of Contributions	998	-
Employer Contributions Subsequent to the Measurement Date	347	-
Total	\$ 1,917	\$ 10,361

The TRS will recognize \$347 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, 2022. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

Fiscal Year Ended September 30:

2022	\$ (2,597)
2023	\$ (2,413)
2024	\$ (2,181)
2025	\$ (1,322)
2026	\$ (278)
Thereafter	\$ -

At September 30, 2020, the ERS reported a liability of \$3,732 for its proportionate share of the net OPEB liability. The net OPEB liability was measured as of September 30, 2020, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of September 30, 2019. 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, 2020, the ERS's proportion was 0.375819%, which was a decrease of 0.012460% from its proportion measured as of September 30, 2019.

For the year ended September 30, 2021, the ERS recognized OPEB expense of (\$709). At September 30, 2021, the ERS reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between Expected & Actual Experience	\$ -	\$ 3,684
Changes of Assumptions	370	3,094
Net Difference between Projected & Actual		
Earnings on OPEB Plan Investments	5	-
Changes in Proportion & Differences between Employer		
Contributions & Proportionate Share of Contributions	284	397
Employer Contributions Subsequent to the Measurement Date	212	-
Total	\$ 871	\$ 7,175

The ERS will recognize \$212 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, 2022 (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):

**Fiscal Year Ended
September 30:**

2022	\$ (2,017)
2023	\$ (1,812)
2024	\$ (1,540)
2025	\$ (940)
2026	\$ (207)
Thereafter	\$ -

At September 30, 2021, the JRF reported a liability of \$31 for its proportionate share of the net OPEB liability (dollar amount in thousands). The net OPEB liability was measured as of September 30, 2020, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of September 30, 2019. 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, 2020, the JRF's proportion was 0.003092%, which was a decrease of 0.000025% from its proportion measured as of September 30, 2019.

For the year ended September 30, 2021, the JRF recognized OPEB expense of (\$4) (dollar amount in thousands). At September 30, 2021, the JRF reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources (dollar amounts in thousands):

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between Expected & Actual Experience	\$ -	\$ 30
Changes of Assumptions	3	25
Net Difference between Projected & Actual		
Earnings on OPEB Plan Investments	-	-
Changes in Proportion & Differences between Employer		
Contributions & Proportionate Share of Contributions	-	2
Employer Contributions Subsequent to the Measurement Date	2	-
Total	\$ 5	\$ 57

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, 2022 (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):

**Fiscal Year Ended
September 30:**

2022	\$ (16)
2023	\$ (15)
2024	\$ (13)
2025	\$ (8)
2026	\$ (2)
Thereafter	\$ -

RETIREMENT SYSTEMS OF ALABAMA

Financial Section

Notes to the Combined Financial Statements For the Fiscal Year Ended September 30, 2021

(Dollar Amounts in Thousands)

The total OPEB liability was determined by an actuarial valuation as of September 30, 2019, using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.75%
Salary Increases*	3.25% - 5.00% for State and Local Employees 4.50% for State Police 3.25% - 3.50% for Judges
Long-Term Investment Rate of Return**	7.50%
Municipal Bond Index Rate at Measurement Date	2.25%
Municipal Bond Index Rate at Prior Measurement Date	3.00%
Projected Year for Fiduciary Net Position to be Depleted	Not Applicable
Single Equivalent Interest Rate at Measurement Date	7.50%
Single Equivalent Interest Rate at Prior Measurement Date	3.63%
Healthcare Cost Trend Rate	
Pre-Medicare Eligible	6.75%
Medicare Eligible	***
Ultimate Trend Rate	
Pre-Medicare Eligible	4.75%
Medicare Eligible	4.75%
Year of Ultimate Trend Rate	2027 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, 2019 valuation were based on a review of recent plan experience done concurrently with the September 30, 2019 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:

	Target Allocation	Long-Term Expected Rate of Return*
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%
Total	100.00%	

*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 7.50% at September 30, 2020. The discount rate used to measure the total OPEB liability at the prior measurement date was 3.63%. The projection of cash flows used to determine the discount rate assumed that plan contributions will be equal to the lesser of the average of the plan contributions over the last 4 years indexed with inflation or actual benefit payments plus expenses. Also, due to a Board decision on September 16, 2020, an additional \$1.2 million per year will be contributed on top of the base contribution. 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, 2020, were 2.21%, 2.41%, and 2.14%, respectively, which resulted in an average Municipal Bond Index Rate of 2.25%. Projected future benefit payments for all current plan members were projected through 2118.

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):

	1% Decrease (5.75% decreasing to 3.75% for Pre-Medicare and Known decreasing to 3.75% Medicare Eligible)	Current Healthcare Trend Rate (6.75% decreasing to 4.75% for Pre-Medicare and Known decreasing to 4.75% for Medicare Eligible)	1% Increase (7.75% decreasing to 5.75% for Pre-Medicare and Known decreasing to 5.75% for Medicare Eligible)
TRS	\$ 4,897	\$ 5,705	\$ 6,685
ERS	\$ 3,203	\$ 3,732	\$ 4,373
JRF	\$ 26	\$ 31	\$ 36

RETIREMENT SYSTEMS OF ALABAMA

Financial Section

Notes to the Combined Financial Statements For the Fiscal Year Ended September 30, 2021

(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 7.50%, 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:

	1% Decrease (6.50%)	Current Discount Rate (7.50%)	1% Increase (8.50%)
TRS	\$ 6,523	\$ 5,705	\$ 5,017
ERS	\$ 4,267	\$ 3,732	\$ 3,282
JRF	\$ 35	\$ 31	\$ 27

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.

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, 2021, was 12.36% of annual pay for Tier 1 members and 11.22% 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 \$2,072 for the fiscal year ended September 30, 2021 (dollar amounts in thousands).

At September 30, 2021, in accordance with GASB Statement No. 68, the TRS reported a net pension liability of \$28,764 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, 2019 and rolled forward to TRS's measurement date of September 30, 2020. 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, 2020, the TRS's proportion was 0.232533%, which was an increase of 0.013245% from its proportion measured as of September 30, 2019.

For the year ended September 30, 2021, the TRS recognized pension expense of \$3,726 (dollar amounts in thousands). At September 30, 2021, the TRS reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources (dollar amounts in thousands):

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between Expected & Actual Experience	\$ 1,424	\$ 499
Changes of Assumptions	299	-
Net Difference between Projected & Actual		
Earnings on Pension Plan Investments	2,136	-
Changes in Proportion & Differences between Employer		
Contributions & Proportionate Share of Contributions	2,345	-
Employer Contributions Subsequent to the Measurement Date	2,072	-
Total	\$ 8,276	\$ 499

The TRS will recognize \$2,072 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, 2022 (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):

Fiscal Year Ended September 30:	
2022	\$ 1,479
2023	\$ 1,771
2024	\$ 1,618
2025	\$ 837
2026	\$ -
Thereafter	\$ -

RETIREMENT SYSTEMS OF ALABAMA

Financial Section

Notes to the Combined Financial Statements For the Fiscal Year Ended September 30, 2021

(Dollar Amounts in Thousands)

The total pension liability was determined by an actuarial valuation as of September 30, 2019, 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, 2019, 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:

	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%
Total	<u>100.00%</u>	

*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):

	1% Decrease (6.70%)	Current Discount Rate (7.70%)	1% Increase (8.70%)
TRS's Proportionate Share of Collective Net Pension Liability	\$ 38,377	\$ 28,764	\$ 20,630

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, 2020. The supporting actuarial information is included in the GASB Statement No. 67 Report for the TRS prepared as of September 30, 2020. The auditor's report dated April 23, 2021, 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.

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. Effective October 1, 2021, Act 390 of the Legislature of 2021 will create two additional representatives and change the composition of representatives within the ERS Board of Control. 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.

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

Financial Section

Notes to the Combined Financial Statements For the Fiscal Year Ended September 30, 2021

(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.

Act 132 of the Legislature of 2019 allowed employers who participate in the ERS pursuant to *Code of Alabama 1975, Section 36-27-6* to provide Tier 1 retirement benefits to their Tier 2 members. Tier 2 members of employers adopting Act 2019-132 will contribute 7.50% of earnable compensation for regular employees and 8.50% for certified law enforcement officers and firefighters. A total of 590 employers adopted Act 2019-132.

As of September 30, 2020, ERS membership included approximately 101,245 active, terminated, and retired local 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.

Employers participating in the ERS pursuant to *Code of Alabama 1975, Section 36-27-6* were not required by statute to increase covered member contribution rates but were provided the opportunity to do so through Act 2011-676. By adopting Act 2011-676, Tier 1 regular members' contribution rates increased from 5% to 7.50% of earnable compensation and Tier 1 certified law enforcement and firefighters increased from 6% to 8.50% of earnable compensation.

The participating employer contribution rate for the ERS State Regular Employees contractually required contribution rate for the year ended September 30, 2021, was 14.64% of annual pay for Tier 1 members and 14.24% 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 \$1,245 and from JRF were \$27 for the fiscal year ended September 30, 2021.

At September 30, 2021, in accordance with GASB Statement No. 68, the ERS reported a net pension liability of \$17,674 and the JRF reported a net pension liability of \$358 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, 2020, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of September 30, 2019 and rolled forward to the ERS and JRF's measurement date of September 30, 2020. 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, 2020, ERS's proportion was 0.568539%, which was a decrease of 0.012443% from its proportion measured as of September 30, 2019. At September 30, 2020, the JRF's proportion was 0.011505%, which was an increase of 0.000328% from its proportion measured as of September 30, 2019.

For the fiscal year ended September 30, 2021, the ERS recognized pension expense of \$1,338 (dollar amounts in thousands). At September 30, 2021, ERS reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources (dollar amounts in thousands):

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between Expected & Actual Experience	\$ 546	\$ 13
Changes of Assumptions	29	-
Net Difference between Projected & Actual		
Earnings on Pension Plan Investments	884	-
Changes in Proportion & Differences between Employer		
Contributions & Proportionate Share of Contributions	229	251
Employer Contributions Subsequent to the Measurement Date	1,246	-
Total	\$ 2,934	\$ 264

The ERS will recognize \$1,246 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, 2022 (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):

Fiscal Year Ended September 30:	
2022	\$ 366
2023	\$ 489
2024	\$ 459
2025	\$ 110
2026	\$ -
Thereafter	\$ -

For the fiscal year ended September 30, 2021, the JRF recognized pension expense of \$37 (dollar amount in thousands). At September 30, 2021, the JRF reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources (dollar amounts in thousands):

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between Expected & Actual Experience	\$ 11	\$ -
Changes of Assumptions	1	-
Net Difference between Projected & Actual		
Earnings on Pension Plan Investments	18	-
Changes in Proportion & Differences between Employer		
Contributions & Proportionate Share of Contributions	12	-
Employer Contributions Subsequent to the Measurement Date	27	-
Total	\$ 69	\$ -

RETIREMENT SYSTEMS OF ALABAMA

Financial Section

Notes to the Combined Financial Statements For the Fiscal Year Ended September 30, 2021

(Dollar Amounts in Thousands)

The JRF will recognize \$27 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, 2022. 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:**

2022	\$	13
2023	\$	15
2024	\$	12
2025	\$	2
2026	\$	-
Thereafter	\$	-

The total pension liability was determined by an actuarial valuation as of September 30, 2019, 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, 2019, 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%
Total	100.00%	

*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):

		1% Decrease	Current	1% Increase
		(6.70%)	Discount Rate	(8.70%)
			(7.70%)	
ERS's Proportionate Share of				
Collective Net Pension Liability	\$	22,317	\$	17,674
JRF's Proportionate Share of				
Collective Net Pension Liability	\$	452	\$	358
				\$ 278

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, 2020. The supporting actuarial information is included in the GASB Statement No. 68 Report for the ERS prepared as of September 30, 2020. The auditor's report dated April 30, 2021, 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.

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 2039. Rental payments and other agreed upon payments (reported as investment income) from leases with state agencies totaled \$33,867,577 (dollar amount not in thousands) during the 2021 fiscal year.

12) FUTURE ACCOUNTING PRONOUNCEMENTS

GASB issued Statement No. 87, *Leases*, issued in June 2017 and is effective for reporting periods beginning after June 15, 2021. GASB Statement No. 87 addresses requirements for both government lessees and lessors. This Statement requires that government lessees recognize a lease liability and an intangible asset representing the lessee's right to use the leased asset. It also requires that the government lessees report amortization expense for using the leased asset over the shorter of the term of the lease or the useful life of the underlying asset, interest expense on the lease liability, and note disclosures about the lease in its financial statements. This Statement requires government lessors recognize a lease receivable and a deferred inflow of resources and continue to report the leased asset in its financial statements. It also requires that the government lessors report lease revenue recognized over the term of the lease corresponding with the reduction of the deferred inflow, interest income on the receivable, and note disclosures about the lease in its financial statements.

The Systems will be subject to the provisions of GASB Statement No. 87 beginning with the fiscal year ending September 30, 2022.

GASB issued Statement No. 92, *Omnibus 2020*, in January 2020 and is effective for reporting periods beginning after June 15, 2021. GASB Statement No. 92 includes guidance addressing various accounting and financial reporting

RETIREMENT SYSTEMS OF ALABAMA

Financial Section

Notes to the Combined Financial Statements For the Fiscal Year Ended September 30, 2021

(Dollar Amounts in Thousands)

issues identified during the implementation and application of certain GASB pronouncements. The issues covered by GASB Statement No. 92, *Omnibus 2020*, include:

- Modification of the effective date of GASB Statement No. 87, *Leases*, as well as associated implementation guidance, to fiscal years beginning after December 15, 2019, to address concerns regarding interim financial reports;
- Reporting intra-entity transfers of assets between a primary government employer and a component unit defined benefit pension plan or defined benefit other postemployment benefit (OPEB) plan;
- The applicability of GASB Statement No. 73, *Accounting and Financial Reporting for Pensions and Related Assets That Are Not within the Scope of GASB Statement 68, and Amendments to Certain Provisions of GASB Statements 67 and 68*, as amended, and GASB Statement No. 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*, as amended, to reporting assets accumulated for pensions and OPEB;
- The applicability of certain requirements of GASB Statement No. 84, *Fiduciary Activities*, to pension and OPEB arrangements; and
- Measurement of liabilities and assets, if any, related to asset retirement obligations in a government acquisition.

The Systems will be subject to the provisions of GASB Statement No. 92 beginning with the fiscal year ending September 30, 2022.

GASB issued Statement No. 98, *The Annual Comprehensive Financial Report*, in October 2021 and is effective for reporting periods after December 15, 2021. Statement No. 98 establishes the term annual comprehensive financial report and its acronym ACFR. That new term and acronym replace instances of comprehensive annual financial report and its acronym in generally accepted accounting principles for state and local governments.

The Systems will be subject to the provisions of GASB Statement No. 98 beginning with the fiscal year ending September 30, 2022.



RETIREMENT SYSTEMS OF ALABAMA

Financial Section

Required Supplementary Information For the Fiscal Year Ended September 30, 2021

SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY

& RELATED RATIOS

TRS

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

	2021	2020	2019	2018	2017	2016	2015	2014
Total Pension Liability								
Service Cost*	\$ 660,269	\$ 677,424	\$ 645,409	\$ 637,532	\$ 617,120	\$ 627,938	\$ 660,390	\$ 602,605
Interest	2,854,728	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	(562,647)	624,754	(226,777)	265,644	(261,067)	(290,388)	(70,200)	-
Changes of Assumptions	1,197,157	-	-	178,049	-	942,133	-	-
Benefit Payments	(2,424,490)	(2,335,705)	(2,238,966)	(2,208,925)	(2,117,351)	(2,161,570)	(2,080,896)	(1,997,877)
Refunds of Contributions	(58,806)	(58,679)	(55,596)	(58,552)	(53,526)	(57,566)	(55,898)	(56,145)
Net Change in Total Pension Liability	1,666,211	1,639,689	798,336	1,398,078	717,633	1,548,857	875,000	901,387
Total Pension Liability - Beginning	38,316,039	36,676,350	35,878,014	34,479,936	33,762,303	32,213,446	31,338,446	30,437,059
Total Pension Liability - Ending (A)	\$ 39,982,250	\$ 38,316,039	\$ 36,676,350	\$ 35,878,014	\$ 34,479,936	\$ 33,762,303	\$ 32,213,446	\$ 31,338,446

Plan Fiduciary Net Position reserved to fund Total Pension Liability

Contributions - Employer	\$ 874,401	\$ 862,475	\$ 869,336	\$ 802,598	\$ 782,702	\$ 751,909	\$ 737,677	\$ 716,753
Contributions - Member	525,755	515,003	522,909	493,466	489,638	475,980	477,918	480,849
Other	-	-	-	13,445	-	-	172,982	-
Net Investment Income	5,728,217	1,374,958	614,427	2,264,234	2,636,098	2,199,396	261,461	2,468,499
Benefit Payments	(2,424,490)	(2,335,705)	(2,238,966)	(2,208,925)	(2,117,351)	(2,161,570)	(2,080,896)	(1,997,877)
Refunds of Contributions	(58,806)	(58,679)	(55,596)	(58,552)	(53,526)	(57,566)	(55,898)	(56,145)
Administrative Expenses	(29,536)	(31,111)	(28,095)	(22,290)	(22,402)	(19,582)	(19,331)	-
Net Change in Plan Fiduciary Net Position	4,615,541	326,941	(315,985)	1,283,976	1,715,159	1,188,567	(506,087)	1,612,079
Plan Fiduciary Net Position - Beginning	25,946,389	25,619,448	25,935,433	24,651,457	22,936,298	21,747,731	22,253,818	20,641,739
Plan Fiduciary Net Position - Ending (B)	\$ 30,561,930	\$ 25,946,389	\$ 25,619,448	\$ 25,935,433	\$ 24,651,457	\$ 22,936,298	\$ 21,747,731	\$ 22,253,818
Net Pension Liability - Ending (A - B)	\$ 9,420,320	\$ 12,369,650	\$ 11,056,902	\$ 9,942,581	\$ 9,828,479	\$ 10,826,005	\$ 10,465,715	\$ 9,084,628

Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	76.44%	67.72%	69.85%	72.29%	71.50%	67.93%	67.51%	71.01%
Covered Payroll**	\$ 7,212,288	\$ 7,409,647	\$ 6,959,168	\$ 6,899,800	\$ 6,623,929	\$ 6,541,310	\$ 6,541,054	\$ 6,466,923
Net Pension Liability as a Percentage of Covered Payroll	130.61%	166.94%	158.88%	144.10%	148.38%	165.50%	160.00%	140.48%

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)

	2021	2020	2019	2018	2017	2016	2015	2014
Total Pension Liability								
Service Cost*	\$ 348,684	\$ 329,995	\$ 315,841	\$ 307,064	\$ 325,138	\$ 308,840	\$ 346,440	\$ 298,985
Interest	1,466,595	1,407,878	1,329,988	1,303,322	1,271,712	1,233,415	1,199,079	1,164,853
Benefit Changes	39,193	71,320	-	-	-	-	-	-
Difference Between Expected & Actual Experience	96,894	243,909	24,803	(79,478)	(64,111)	101	(35,546)	-
Changes of Assumptions	726,196	-	-	87,608	-	544,310	-	-
Benefit Payments	(1,268,499)	(1,215,223)	(1,123,150)	(1,102,478)	(1,056,006)	(1,043,293)	(1,023,732)	(948,645)
Refunds of Contributions	(52,064)	(45,303)	(55,478)	(44,890)	(46,374)	(44,660)	(49,865)	(49,767)
New Unit	-	560,498	-	-	-	-	-	-
Net Change in Total Pension Liability	1,356,999	1,353,074	492,004	471,148	430,359	998,713	436,376	465,426
Total Pension Liability - Beginning	19,706,965	18,353,891	17,861,887	17,390,739	16,960,380	15,961,667	15,525,291	15,059,865
Total Pension Liability - Ending (A)	\$ 21,063,964	\$ 19,706,965	\$ 18,353,891	\$ 17,861,887	\$ 17,390,739	\$ 16,960,380	\$ 15,961,667	\$ 15,525,291
Plan Fiduciary Net Position reserved to fund Total Pension Liability								
Contributions - Employer	\$ 516,402	\$ 519,806	\$ 467,553	\$ 426,340	\$ 426,369	\$ 435,243	\$ 411,087	\$ 379,163
Contributions - Member	286,396	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	2,861,199	724,025	320,585	1,098,412	1,402,009	1,052,886	126,335	1,183,377
Benefit Payments	(1,268,499)	(1,215,223)	(1,123,150)	(1,102,478)	(1,056,006)	(1,043,293)	(1,023,732)	(948,645)
Refunds of Contributions	(52,064)	(45,303)	(55,478)	(44,890)	(46,374)	(44,660)	(49,865)	(49,767)
Administrative Expenses	(14,496)	(16,539)	(15,829)	(13,763)	(14,502)	(13,023)	(13,182)	-
Net Change in Plan Fiduciary Net Position	2,328,938	582,065	(151,879)	597,881	945,397	625,170	(251,206)	790,143
Plan Fiduciary Net Position - Beginning	13,150,538	12,568,473	12,720,352	12,122,471	11,177,074	10,551,904	10,803,110	10,012,967
Plan Fiduciary Net Position - Ending (B)	\$ 15,479,476	\$ 13,150,538	\$ 12,568,473	\$ 12,720,352	\$ 12,122,471	\$ 11,177,074	\$ 10,551,904	\$ 10,803,110
Net Pension Liability - Ending (A - B)	\$ 5,584,488	\$ 6,556,427	\$ 5,785,418	\$ 5,141,535	\$ 5,268,268	\$ 5,783,306	\$ 5,409,763	\$ 4,722,181
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability								
Covered Payroll**	73.49%	66.73%	68.48%	71.22%	69.71%	65.90%	66.11%	69.58%
Net Pension Liability as a Percentage of Covered Payroll	\$ 4,124,367	\$ 4,003,430	\$ 3,789,556	\$ 3,692,241	\$ 3,680,078	\$ 3,592,658	\$ 3,556,282	\$ 3,511,115
	135.40%	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, 2021

SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY & RELATED RATIOS

JRF

For the Fiscal Years Ended September 30

(Dollar Amounts in Thousands)

	2021	2020	2019	2018	2017	2016	2015	2014
Total Pension Liability								
Service Cost*	\$ 9,825	\$ 9,512	\$ 9,574	\$ 9,811	\$ 9,815	\$ 9,807	\$ 9,644	\$ 9,481
Interest	35,316	33,960	33,910	34,112	33,668	32,695	32,385	31,521
Benefit Changes	-	-	-	-	-	-	-	-
Difference Between Expected & Actual Experience	746	13,351	(4,518)	(9,134)	(4,399)	(2,487)	(7,391)	-
Changes of Assumptions	15,905	-	-	3,873	-	17,792	-	-
Benefit Payments	(39,089)	(38,812)	(36,909)	(33,419)	(32,807)	(30,902)	(30,356)	(29,838)
Refunds of Contributions	(28)	(256)	(646)	(130)	(353)	(106)	(147)	(46)
Net Change in Total Pension Liability	22,675	17,755	1,411	5,113	5,924	26,799	4,135	11,118
Total Pension Liability - Beginning	481,206	463,451	462,040	456,927	451,003	424,204	420,069	408,951
Total Pension Liability - Ending (A)	\$ 503,881	\$ 481,206	\$ 463,451	\$ 462,040	\$ 456,927	\$ 451,003	\$ 424,204	\$ 420,069
Plan Fiduciary Net Position reserved to fund Total Pension Liability								
Contributions - Employer	\$ 18,260	\$ 18,099	\$ 18,022	\$ 17,180	\$ 17,373	\$ 17,529	\$ 15,077	\$ 15,250
Contributions - Member	4,272	4,184	4,101	3,867	3,972	3,723	3,683	3,764
Net Investment Income	63,732	23,159	11,016	27,622	32,685	28,322	(856)	31,343
Benefit Payments	(39,089)	(38,812)	(36,909)	(33,419)	(32,807)	(30,902)	(30,356)	(29,838)
Refunds of Contributions	(28)	(256)	(646)	(130)	(353)	(106)	(147)	(46)
Administrative Expenses	(376)	(357)	(357)	(328)	(334)	(398)	(356)	-
Other	-	-	-	(56)	-	-	1,854	-
Net Change in Plan Fiduciary Net Position	46,771	6,017	(4,773)	14,736	20,536	18,168	(11,101)	20,473
Plan Fiduciary Net Position - Beginning	318,558	312,541	317,314	302,578	282,042	263,874	274,975	254,502
Plan Fiduciary Net Position - Ending (B)	\$ 365,329	\$ 318,558	\$ 312,541	\$ 317,314	\$ 302,578	\$ 282,042	\$ 263,874	\$ 274,975
Net Pension Liability - Ending (A - B)	\$ 138,552	\$ 162,648	\$ 150,910	\$ 144,726	\$ 154,349	\$ 168,961	\$ 160,330	\$ 145,094
Plan Fiduciary Net Position as a								
Percentage of the Total Pension Liability	72.50%	66.20%	67.44%	68.68%	66.22%	62.54%	62.20%	65.46%
Covered Payroll**	\$ 48,379	\$ 46,686	\$ 45,134	\$ 45,622	\$ 44,314	\$ 44,099	\$ 44,087	\$ 43,275
Net Pension Liability as a Percentage of								
Covered Payroll	286.39%	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 §

Fiscal Year	Actuarially Determined Employer Contributions	Actual Employer Contributions	Annual Contribution Deficiency (Excess)	Covered Payroll*	Actual Contributions as a % of Covered Payroll**
2021	\$ 874,401	\$ 874,401	\$ -	\$ 7,292,752	11.99
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

JUDICIAL RETIREMENT FUND ¥

Fiscal Year	Actuarially Determined Employer Contributions	Actual Employer Contributions	Annual Contribution Deficiency (Excess)	Covered Payroll*	Actual Contributions as a % of Covered Payroll***
2021	\$ 18,260	\$ 18,260	\$ -	\$ 47,404	38.52
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

§ 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

Fiscal Year	TRS	ERS	JRF
2021	22.75%	22.28%	20.75%
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%

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

Measurement Date	Fiscal Year Ended	Proportion of the Net Pension Liability (%)	Proportionate Share of the Net Pension Liability	Covered Payroll	Proportionate Share of the Net Pension Liability as a Percentage of Covered Payroll	Plan Fiduciary Net Position as a Percentage of the Total Pension Liability
9/30/2020	9/30/2021	0.23	\$ 28,764	\$ 9,440	304.70	67.72
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

Measurement Date	Fiscal Year Ended	Proportion of the Net Pension Liability (%)	Proportionate Share of the Net Pension Liability	Covered Payroll	Proportionate Share of the Net Pension Liability as a Percentage of Covered Payroll	Plan Fiduciary Net Position as a Percentage of the Total Pension Liability
9/30/2020	9/30/2021	0.57	\$ 17,674	\$ 6,350	278.33	61.62
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

Measurement Date	Fiscal Year Ended	Proportion of the Net Pension Liability (%)	Proportionate Share of the Net Pension Liability	Covered Payroll	Proportionate Share of the Net Pension Liability as a Percentage of Covered Payroll	Plan Fiduciary Net Position as a Percentage of the Total Pension Liability
9/30/2020	9/30/2021	0.01	\$ 358	\$ 189	189.42	61.62
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, 2021

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

	2021	2020	2019	2018	2017	2016	2015
Contractually Required Contribution	\$ 2,072	\$ 1,946	\$ 1,883	\$ 1,725	\$ 1,444	\$ 1,453	\$ 1,271
Contributions in relation to the							
Contractually Required Contribution	(2,072)	(1,946)	(1,883)	(1,725)	(1,444)	(1,453)	(1,271)
Contribution Deficiency/(Excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Covered Payroll	\$ 9,975	\$ 9,440	\$ 8,748	\$ 7,663	\$ 7,235	\$ 6,739	\$ 6,593
Contributions as a Percentage of							
Covered Payroll	20.77%	20.61%	21.52%	22.51%	19.96%	21.56%	19.28%

EMPLOYEES' RETIREMENT SYSTEM

	2021	2020	2019	2018	2017	2016	2015
Contractually Required Contribution	\$ 1,245	\$ 1,302	\$ 1,209	\$ 1,059	\$ 1,014	\$ 1,133	\$ 896
Contributions in relation to the							
Contractually Required Contribution	(1,245)	(1,302)	(1,209)	(1,059)	(1,014)	(1,133)	(896)
Contribution Deficiency/(Excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Covered Payroll	\$ 5,821	\$ 6,350	\$ 5,848	\$ 5,197	\$ 5,113	\$ 4,904	\$ 4,695
Contributions as a Percentage of							
Covered Payroll	21.39%	20.50%	20.67%	20.38%	19.83%	23.10%	19.08%

JUDICIAL RETIREMENT FUND

	2021	2020	2019	2018	2017	2016	2015
Contractually Required Contribution	\$ 27	\$ 26	\$ 23	\$ 21	\$ 19	\$ 21	\$ 17
Contributions in relation to the							
Contractually Required Contribution	(27)	(26)	(23)	(21)	(19)	(21)	(17)
Contribution Deficiency/(Excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Covered Payroll	\$ 189	\$ 189	\$ 176	\$ 157	\$ 152	\$ 144	\$ 136
Contributions as a Percentage of							
Covered Payroll	14.29%	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

Measurement Date	Fiscal Year Ended	Proportion of the Net OPEB Liability (%)	Proportionate Share of the Net OPEB Liability	Covered Payroll	Proportionate Share of the Net OPEB Liability as a Percentage of Covered Payroll	Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability
9/30/2020	9/30/2021	0.57	\$ 5,705	\$ 9,440	60.43	17.16
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

Measurement Date	Fiscal Year Ended	Proportion of the Net OPEB Liability (%)	Proportionate Share of the Net OPEB Liability	Covered Payroll	Proportionate Share of the Net OPEB Liability as a Percentage of Covered Payroll	Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability
9/30/2020	9/30/2021	0.38	\$ 3,732	\$ 6,350	58.77	17.16
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

Measurement Date	Fiscal Year Ended	Proportion of the Net OPEB Liability (%)	Proportionate Share of the Net OPEB Liability	Covered Payroll	Proportionate Share of the Net OPEB Liability as a Percentage of Covered Payroll	Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability
9/30/2020	9/30/2021	0.00	\$ 31	\$ 189	16.40	17.16
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, 2021

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>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>
Contractually Required Contributions	\$ 347	\$ 313	\$ 428	\$ 454
Contributions in relation to the				
Contractually Required Contributions	(347)	(313)	(428)	(454)
Contribution Deficiency/(Excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Covered Payroll	\$9,975	\$9,440	\$8,748	\$7,663
Contributions as a Percentage of				
Covered Payroll	3.48%	3.32%	4.89%	5.92%

EMPLOYEES' RETIREMENT SYSTEM

	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>
Contractually Required Contributions	\$ 214	\$ 205	\$ 290	\$ 306
Contributions in relation to the				
Contractually Required Contributions	(214)	(205)	(290)	(306)
Contribution Deficiency/(Excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Covered Payroll	\$5,821	\$6,350	\$5,848	\$5,197
Contributions as a Percentage of				
Covered Payroll	3.68%	3.23%	4.96%	5.89%

JUDICIAL RETIREMENT FUND

	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>
Contractually Required Contributions	\$ 2	\$ 2	\$ 2	\$ 2
Contributions in relation to the				
Contractually Required Contributions	(2)	(2)	(2)	(2)
Contribution Deficiency/(Excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Covered Payroll	\$ 189	\$ 189	\$ 176	\$ 157
Contributions as a Percentage of				
Covered Payroll	1.06%	1.06%	1.14%	1.27%

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

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 2021 are in the table below. ERS local participating employer contribution rates differ for each employer.

	Tier 1	Tier 2
TRS	12.36%	11.22%
ERS - State Employees	14.64%	14.24%
ERS - State Police	51.75%	42.89%
JRF - Groups 1 & 2	40.80%	-
JRF - Group 3 - Judges & Clerks	35.61%	-
JRF - District Attorneys	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, 2018, 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.

	TRS	ERS	JRF
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	28.3 years	Within 28.3 years - Varies by Employer	20.3 years
Actuarial Assumptions:			
Investment Rate of Return* ‡	7.70%	7.70%	7.65%
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 2021, rates of withdrawal, retirement, disability, and mortality were adjusted to more closely reflect actual experience. In 2021, economic assumptions and the assumed rates of salary increase were adjusted to more closely reflect actual and anticipated experience, including a change in the discount rate from 7.70% to 7.45% for the TRS and the ERS and 7.65% to 7.40% for the JRF. In 2021 and later, the expectation of retired life mortality for the TRS and JRF was changed to the Pub-2010 Teacher Retiree Below Median Tables projected generationally with 66-2/3% of the MP-2020 scale beginning in 2019. In 2021 and later, the expectation of retired life mortality for the ERS was changed to the Pub-2010 Public Mortality Plans Mortality Tables projected using a generational approach based on the mortality improvement scale, MP-2020, with an adjustment of 66-2/3% to the table beginning in year 2019.

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, 2019, 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.

Actuarial Cost Method	Projected Unit Credit
Amortization Method	Level Percent of Pay, Open
Remaining Amortization Period	30 years
Asset Valuation Method	Market Value of Assets
Inflation	2.75%
Healthcare Cost Trend Rate	
Pre-Medicare Eligible	6.75%
Medicare Eligible	**
Ultimate Trend Rate	
Pre-Medicare Eligible	4.75% in 2027
Medicare Eligible	4.75% in 2024
Dental Trend Rate	4.50%
Investment Rate of Return*	5.00%

*Includes inflation at 2.75%

**Initial Medicare claims are based on scheduled increase through plan year 2022.

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, 2020, the MAPD plan moved from self-insured to fully-insured.

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 2019, assumed rates of tobacco use, spouse participation, and the payment of the spousal surcharge were adjusted to more closely reflect actual and anticipated experience.

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, 2021

(Dollar Amounts in Thousands)

	Teachers' Retirement System	Employees' Retirement System	Judicial Retirement Fund	Totals
Personnel Services:				
Salaries	\$ 9,974	\$ 5,821	\$ 188	\$ 15,983
Employee Fringe Benefits	2,253	367	45	2,665
Total Personnel Services	12,227	6,188	233	18,648
Professional Services:				
Actuarial	274	695	99	1,068
Accounting and Auditing	106	76	21	203
Information Technology	3,097	1,130	9	4,236
Mailing Services	112	73	-	185
Legal Services	78	52	-	130
Personnel Services	129	-	-	129
Other Professional Services and Fees	467	254	-	721
Total Professional Services	4,263	2,280	129	6,672
Communications and Travel:				
Telecommunications	240	133	-	373
Postage	1,085	720	-	1,805
Travel	31	17	-	48
Total Communications and Travel	1,356	870	-	2,226
Rentals:				
Office Space	494	329	8	831
Equipment Leasing	2	2	-	4
Total Rentals	496	331	8	835
Miscellaneous:				
Supplies	1,571	952	4	2,527
Maintenance	489	356	-	845
Total Miscellaneous	2,060	1,308	4	3,372
Total Administrative Expenses	\$ 20,402	\$ 10,977	\$ 374	\$ 31,753

RETIREMENT SYSTEMS OF ALABAMA

Financial Section

Schedule of Investment Expenses

For the Fiscal Year Ended September 30, 2021

(Dollar Amounts in Thousands)

	Teachers' Retirement System	Employees' Retirement System	Judicial Retirement Fund	Totals
Investment Activity				
Investment Management Fees:				
Salaries and Benefits	\$ 9,149	\$ 2,957	\$ -	\$ 12,106
Dues, Subscriptions, and Supplies	1,384	919	-	2,303
Travel	6	4	-	10
Professional Services:				
Investment Advisor	60	30	-	90
Appraisal of Private Placements and Real Estate	601	360	-	961
Investment Activity Expenses before Reimbursement	11,200	4,270	-	15,470
Less: Reimbursement for Investment Management Fees	9	267	-	276
Total Investment Activity Expenses	11,191	4,003	-	15,194
Securities Lending Activity				
Securities Lending Borrower Rebates	108	39	1	148
Securities Lending Management Fees	3,445	1,773	33	5,251
Total Securities Lending Activity Expenses	3,553	1,812	34	5,399
Total Investment Expenses	\$ 14,744	\$ 5,815	\$ 34	\$ 20,593

RETIREMENT SYSTEMS OF ALABAMA

Financial Section

Schedule of Professional/Consultant Fees

For the Fiscal Year Ended September 30, 2021

(Dollar Amounts in Thousands)

Professional/Consultant	Nature of Service	Teachers' Retirement System	Employees' Retirement System	Judicial Retirement Fund	Totals
Cavanaugh Macdonald Consulting, LLC	Actuary	\$ 170	\$ 636	\$ 90	\$ 896
The Segal Company	Actuary	60	30	9	99
Milliman	Actuary	44	29	-	73
Carr, Riggs & Ingram, LLC	Auditor	81	43	14	138
A-LIGN	Auditor	25	33	7	65
Baker & McKenzie	Legal	30	20	-	50
Balch & Bingham, LLP	Legal	9	6	-	15
Bradley Arant Boult Cummings, LLP	Legal	38	25	-	63
Buchalter	Legal	1	1	-	2
Wells Mailing	Mail	17	11	-	28
Alabama Department of Finance	Mail	35	24	-	59
Walker360	Mail	60	38	-	98
State Personnel Department	Personnel	129	-	-	129
Fine Geddie & Associates, LLC	Consultant	75	-	-	75
Alabama Department of Finance	Comptroller's Accounting Services	60	30	9	99
Alabama Department of Finance	Information Technology	173	115	-	288
Deloitte Consulting, LLP	Information Technology	2,780	926	-	3,706
Admiral Consulting	Information Technology	3	2	-	5
Stamp Idea Group	Information Technology	29	20	-	49
Packet Ninjas	Information Technology	24	16	-	40
Various	Other	420	275	-	695
Total Professional/Consultant Fees - Administrative Services		4,263	2,280	129	6,672
Regions Bank	Investment Advisor	60	30	-	90
Pearson Realty Services, Inc.	Real Estate Appraiser	283	188	-	471
Houlihan Lokey	Investment Appraiser	318	172	-	490
Total Professional/Consultant Fees - Investment Services		661	390	-	1,051
Total Professional/Consultant Fees		\$ 4,924	\$ 2,670	\$ 129	\$ 7,723



Investment Section

Annual Comprehensive Financial Report
Component Units of the State of Alabama

RETIREMENT SYSTEMS OF ALABAMA

Investment Section

Report on Investment Activity

For the Fiscal Year Ended September 30, 2021

Dear Members,

I am pleased to present the following report on investment activity for the fiscal year ended September 30, 2021. 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.

After the wild ride experience in fiscal year 2020, the last year was more of a rapid ascent with short bouts of minor drawdowns. We had just witnessed one of the fastest and deepest recessions in history and the recovery proved to be just as rapid on the upside. The markets fought through a tough election season, a roller coaster on the Covid-19 front, supply chain shocks, as well as the resurgence of inflation.

Monetary authorities around the globe never slowed down the overwhelming surge of money they started pumping into the economy when the world went into lockdown mode. Fast forward a year and change and we are getting close to the Federal Reserve (the Fed) beginning to taper down their asset purchases. As conditioned as the markets are to this coming, it seems there still is a low probability being assigned to another "taper tantrum" like 2013. Since the financial crisis/great recession in the late 2000's, we have been living in a disinflationary world that led the Fed to perennially undershoot their 2% inflation target. Fiscal year 2021 has been a breakout year in terms of inflation roaring back. The debate about inflation being transitory or more permanent is paramount. Unfortunately, the politicization of the Fed Board has somewhat led them to painting themselves in a corner. With the increased transparency at the Fed, it has caused a lot of investors to pile into the same type trades. It would not be overly surprising to see another taper tantrum episode as the Fed starts to unwind their balance sheet.

As we are all aware, the markets climb a wall of worry, and there is an extensive list of worries at the moment. It is reasonable to assume that we are mid-cycle in this recovery/ expansion, and there will be turbulence along the way. We are mindful of that but also take a long-term view on asset classes. There is a good chance that the long-term bull market in bonds may be exhausted. More interesting will be how stocks react in a rising interest rate environment. We continue to maintain ample short-term liquidity to take advantage of drawdowns/trading opportunities as they appear.

RSA Performance Summary

As of September 30, 2021, aggregate defined benefit assets under management totaled \$46 billion. During fiscal year 2021, annualized total returns of the TRS, ERS, and the JRF were 22.62%, 22.18%, and 20.52% respectively.

Equities

Looking back at the myriad of events that happened in fiscal year 2021, it is safe to say that equity market returns exceeded expectations. We have written about this numerous times, but all else being equal, the market generally follows the path of earnings. There are obvious exceptions like the dot-com bubble 21 years ago, but that was in fact a bubble.

Following the pandemic and lockdown, both equity prices and earnings got crushed. From the lows in the summer of 2020, earnings expectations for 2021 are up 27%. That is a huge revision and obviously explains a large part of why the markets have performed so well the last year. We are now in the mid-cycle phase of the economic recovery where valuations often get stretched like they are presently, but they are not untenable. The bullish path forward is that the Fed is able to start tapering their asset purchases without causing another "taper tantrum" like that experienced in 2013. Maybe they are being given too much credit, but this is not a brand new game plan for them this time around. The dividend yield of the market has declined as equities have rallied, but corporations are still sitting on large cash hoards that could be used to raise dividends and increase share buybacks. If our choice is between stocks and bonds, we think the risk/reward favors stocks for the foreseeable future.

This new bull market feels as bad as the last one following the global financial crisis, as the market continues to climb a wall of worry. Although we are currently seeing a big spike in inflation, a little inflation is not necessarily

bad for stocks. Too much inflation for too long is. Our expectation is that inflation likely peaks soon as supply bottlenecks are alleviated and the labor force normalizes and government subsidies shrink.

As for activity this year, given the tremendous outperformance of equities versus other asset classes, we have been a net seller of stocks. Our longstanding overweighting in US equities has continued to pay off as both emerging and developed international equity returns have lagged. We have also maintained an overweight in very short-term fixed income assets as a barbell approach to our overweighting in equities.

For the year, the RSA domestic equity portfolios returned 33.86%, 33.35%, and 32.79% for the TRS, ERS, and JRF funds, respectively. Both developed and emerging international equities performance lagged U.S. equities. Total international equity returns were 23.92% for the TRS, 23.75% for the ERS, and 24.14% for the JRF. The combined total returns for the overall equity portfolios were 31.61%, 31.13%, and 30.82% for the TRS, ERS, and JRF, respectively. Three-, five-, and ten-year annualized global equity returns were 12.62%, 14.06%, and 14.10% for the TRS, 12.66%, 14.10%, and 14.13% for the ERS, and 13.09%, 14.27%, and 14.43% for the JRF, respectively.

Fixed Income

At the beginning of the fiscal year, volatility within financial markets was subsiding as Covid-19 hospitalizations began to slow and employment continued to recover. After the large amount of corporate debt already issued during the calendar year, options within fixed income markets had become fairly limited. A vast amount of negative-yielding sovereign debt, historically low yields within the treasury market, and fully valued corporate debt left investors hard-pressed to locate profitable investments in the current environment.

The strong demand for corporate debt and yield continued into the new fiscal year, however the objective from primary issuers shifted from cash accumulation for liquidity purposes to advantageous refinancing and liability management. There was a substantial tightening of corporate spreads during this time, with lower-rated ones being the biggest beneficiary. The long end began to rise quite dramatically, driving the curve to its widest level in three years. This move was engineered with the front end remaining anchored by Fed policy, while the rest of the curve reacted to vaccine announcements and potential fiscal stimulus due to the Democratic sweep. The interest rate sell-off experienced during the first quarter went into overdrive in the new calendar year. As one would expect, high-yield debt massively outperformed due to the strength in corporate credit and its short-duration profile. A further rate increase ensued in March as markets began pricing in faster economic growth with the passage of the \$1.9 trillion American Rescue Plan and the accelerated deployments of vaccinations. Mortgage-backed and high-yield securities were able to narrowly post positive returns, as both carry less interest rate risk relative to its fixed income brethren.

The month of April provided the market with a little more stability, after the Treasury and investment grade sectors accumulated negative returns of approximately 4.5% in the first quarter of the calendar year. However, for the first time in quite a while, inflation had begun to rear its head. The evidence started to reveal itself in breakeven markets, commodity prices, consumer sentiment, and in the actual data itself. Prices began to rise at the fastest rate in more than a decade, as the strong economic recovery produced increasing demand coupled with limited supply.

Questions began to arise if what was being witnessed was truly “transitory” as the Fed insisted, or could the market be understating the tail risk after decades of declining inflation. Valuation of credit in general was also being debated during this time as global monetary accommodation had pushed investors into riskier assets, resulting in pre-financial crisis trading levels. With current spreads having little room to narrow and duration levels lengthening considerably over the last decade, investors have become a little more cautious in their approach going forward. All the while, it’s just a matter of time before the Fed begins to taper its \$120 billion monthly asset purchases that have driven its balance sheet to approximately \$8.5 trillion.

A couple of weaker than expected employment reports and a global surge in coronavirus cases, spurred by the Delta variant, pushed Treasury yields lower for a few months during the summer. As expected, growth expectations were questioned, and corporate spreads drifted slightly higher as a result. However, the market seemed to move back towards its underlying trend of higher rates by the end of September after a surge in the latter half of the month.

RETIREMENT SYSTEMS OF ALABAMA

Investment Section

Report on Investment Activity

For the Fiscal Year Ended September 30, 2021

Going forward, there remain lingering questions of how long the current inflation paradigm will last, considering the continuing issues tied to the supply chain, higher energy prices, and wage levels needed to meet the demand for labor in respective industries. At this time, the market fully expects the Fed to begin tapering its asset purchases by year-end and expectations for future rate hikes have been pulled forward as well. While duration was the determining factor in producing returns within fixed income in the last fiscal year, being long credit risk, especially during the first half of this fiscal year, paid nice dividends. It will be interesting to see how this trend plays out going forward as the Fed navigates itself away from outright purchases and allows investors the opportunity to absorb safer alternatives in lieu of the steady diet of corporate credit they have consumed for quite some time.

For the fiscal year, the total annual returns for the public domestic fixed income portfolios were 0.09% for the TRS, 0.07% for the ERS and 0.09% for the JRF. The five-year annualized returns were 3.49% for the TRS, 3.47% for the ERS and 3.23% for the JRF. The ten-year annualized returns were 3.71% for the TRS, 3.69% for the ERS and 3.49% for the JRF.

Sincerely,



Marc Green
Director of Investments

Investment Section

Teachers' Retirement System Investment Policy Statement

For the Fiscal Year Ended September 30, 2021

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, 2021

- 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.

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.

Asset Class	Target Allocation	Strategic Range
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%
Total	100%	

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.

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.

Domestic Equity	Custom Benchmark	(see description below)
International Equity	MSCI EAFE Net, Emerging Markets Net, STOXX Europe 600 Optimised Cyclicals	Beginning of month weighted custom benchmark
Domestic Fixed Income	Custom Benchmark	(see description below)
International Fixed Income	WGBI Non-US	Currently there are no International Fixed portfolios in this plan.
Cash	ML 90-Day T-Bill	
Alternative Investments	-If an equity investment, the Russell 3000 plus 3%. -If a debt investment, the Barclay Capital Agency plus 3%.	
Real Estate	CPI+3% Public REIT portfolio added in FY21 follows S&P 500 Real Estate sector GICS level 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:

Core Fund	S&P 500
S&P 500 Fund	S&P 500
MidCap Active Fund (SSF)	S&P 400 MidCap
S&P MidCap Index	S&P 400 MidCap
S&P SmallCap Index	S&P 600 SmallCap
S&P SmallCap Value	S&P 600 SmallCap
Policy Fund	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:

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

Employees' Retirement System Investment Policy Statement For the Fiscal Year Ended September 30, 2021

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, 2021

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)).

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.

Asset Class	JRF Target Allocation	ERS Target Allocation	Strategic Range
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.”

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

Investment Section

Employees' Retirement System Investment Policy Statement (Continued)

For the Fiscal Year Ended September 30, 2021

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.

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.

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.

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

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:

Core Fund	S&P 500
S&P 500 Fund	S&P 500
MidCap Active Fund (SSF)	S&P 400 MidCap
S&P MidCap Index	S&P 400 MidCap
S&P SmallCap Index	S&P 600 SmallCap
SmallCap Active Fund	S&P 600 SmallCap
LargeCap Policy Fund	S&P 500
LargeCap Value Fund	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:

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

RETIREMENT SYSTEMS OF ALABAMA

Investment Section

Teachers' Retirement System

Schedule of Investment Performance

	TIME WEIGHTED RATES OF RETURN - GROSS OF FEE			
	1 Year	3 Years	5 Years	10 Years
U.S. Equity				
TRS Core Fund	29.21%	14.01%	15.95%	15.55%
TRS S&P 500 Fund	29.20%	15.40%	16.18%	16.25%
TRS Mid Cap Index	43.73%	11.17%	13.03%	14.76%
TRS S&P Small Cap Index	58.21%	9.97%	14.13%	16.30%
TRS S&P Small Cap Value	48.13%	n/a	n/a	n/a
TRS Midcap Active Fund (Ssf)	42.86%	12.47%	14.19%	14.23%
TRS Large Cap Policy Fund	30.39%	12.66%	15.65%	n/a
TRS Total Domestic Equity	33.86%	13.94%	15.46%	15.73%
TRS Custom Domestic Equity Index	34.53%	14.63%	15.97%	16.25%
<i>S&P 500</i>	<i>30.00%</i>	<i>15.99%</i>	<i>16.90%</i>	<i>16.63%</i>
<i>S&P Mid Cap 400</i>	<i>43.68%</i>	<i>11.08%</i>	<i>12.97%</i>	<i>14.72%</i>
<i>S&P Smallcap 600</i>	<i>57.64%</i>	<i>9.44%</i>	<i>13.57%</i>	<i>15.69%</i>
International Equity				
TRS Emerging Markets Fund	18.00%	6.76%	8.01%	6.13%
TRS International Equities	26.01%	8.23%	9.35%	8.66%
TRS Total International Equity	23.92%	7.90%	9.04%	8.33%
TRS Custom International Equity Index	24.01%	7.86%	8.90%	n/a
<i>MSCI EAFE (Net)</i>	<i>25.73%</i>	<i>7.62%</i>	<i>8.81%</i>	<i>8.10%</i>
<i>MSCI Emerging Markets</i>	<i>18.20%</i>	<i>8.58%</i>	<i>9.23%</i>	<i>6.09%</i>
<i>STOXX Europe 600 Optimised Cyclical</i>	<i>33.46%</i>	<i>5.98%</i>	<i>7.93%</i>	<i>5.95%</i>
TRS Total Global Equity	31.61%	12.62%	14.06%	14.10%
TRS Custom Global Equity Index	32.17%	13.16%	14.43%	14.40%
Fixed Income				
TRS Domestic Fixed Income	0.09%	5.77%	3.49%	3.71%
TRS Custom Domestic Fixed Index	-0.14%	6.01%	3.45%	3.54%
<i>Barclays Aggregate Bond</i>	<i>-0.90%</i>	<i>5.36%</i>	<i>2.94%</i>	<i>3.01%</i>
TRS Total Fixed Income	0.09%	5.77%	3.49%	3.71%
Alternative Investments				
TRS Private Placements	8.62%	5.88%	-3.29%	4.52%
TRS Preferred And Private Equity	28.97%	9.01%	25.82%	20.17%
TRS Real Estate	2.45%	0.53%	1.29%	3.41%
TRS Total Alternatives	11.94%	4.01%	3.01%	6.40%
TRS Total Fixed Income Plus Alternatives	6.98%	4.92%	3.36%	5.32%
Cash				
TRS Cash Account	0.10%	1.20%	1.23%	0.71%
TRS Short Term Investments	0.20%	1.51%	1.53%	1.00%
TRS Total Cash	0.17%	1.36%	1.41%	n/a
Total Plan				
TRS Total Plan	22.62%	9.95%	10.21%	10.71%
TRS Total Plan Policy	23.95%	11.23%	11.53%	11.01%

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

	TIME-WEIGHTED RATES OF RETURN - GROSS OF FEE			
	1 Year	3 Years	5 Years	10 Years
U.S. Equity				
ERS Core Fund	29.20%	14.01%	15.94%	15.55%
ERS S&P 500 Fund	29.21%	15.40%	16.19%	16.25%
ERS Mid Cap Index	43.75%	11.17%	13.03%	14.76%
ERS S&P Small Cap Index	58.21%	9.97%	14.13%	16.30%
ERS Small Cap Value	46.35%	n/a	n/a	n/a
ERS Midcap Active Fund (Ssf)	42.83%	12.46%	14.18%	14.23%
ERS Large Cap Policy Fund	30.38%	12.65%	15.65%	n/a
ERS Total Domestic Equity	33.35%	14.01%	15.51%	15.71%
ERS Custom Domestic Equity Index	34.06%	14.76%	16.04%	16.28%
<i>S&P 500</i>	<i>30.00%</i>	<i>15.99%</i>	<i>16.90%</i>	<i>16.63%</i>
<i>S&P Mid Cap 400</i>	<i>43.68%</i>	<i>11.08%</i>	<i>12.97%</i>	<i>14.72%</i>
<i>S&P Smallcap 600</i>	<i>57.64%</i>	<i>9.44%</i>	<i>13.57%</i>	<i>15.69%</i>
International Equity				
ERS Emerging Markets Fund	18.23%	7.17%	8.30%	6.28%
ERS International Equities	26.03%	8.08%	9.26%	8.61%
ERS Total International Equity	23.75%	7.88%	8.96%	8.27%
ERS Custom International Equity Index	23.78%	7.90%	8.88%	n/a
<i>MSCI Eafe (Net)</i>	<i>25.73%</i>	<i>7.62%</i>	<i>8.81%</i>	<i>8.10%</i>
<i>MSCI Emerging Markets</i>	<i>18.20%</i>	<i>8.58%</i>	<i>9.23%</i>	<i>6.09%</i>
<i>STOXX Europe 600 Optimised Cyclical</i>	<i>33.46%</i>	<i>5.98%</i>	<i>7.93%</i>	<i>5.95%</i>
ERS Total Global Equity	31.13%	12.66%	14.10%	14.13%
ERS Custom Global Equity Index	31.71%	13.26%	14.51%	14.49%
Fixed Income				
ERS Domestic Fixed Income	0.07%	5.74%	3.47%	3.69%
ERS Custom Domestic Fixed Index	-0.13%	6.00%	3.44%	3.54%
<i>Barclays Aggregate Bond</i>	<i>-0.90%</i>	<i>5.36%</i>	<i>2.94%</i>	<i>3.01%</i>
ERS Total Fixed Income	0.07%	5.74%	3.47%	3.69%
Alternative Investments				
ERS Private Placements	8.65%	5.89%	-3.36%	4.47%
ERS Preferred And Private Equity	27.89%	9.21%	27.54%	20.30%
ERS Real Estate	2.33%	0.51%	1.27%	3.39%
ERS Total Alternatives	12.91%	4.47%	4.24%	7.06%
ERS Total Fixed Income Plus Alternatives	7.63%	5.17%	4.17%	5.72%
Cash				
ERS Cash Account	0.08%	1.19%	1.24%	0.71%
ERS Short Term Investments	0.21%	1.53%	1.55%	1.01%
ERS Total Cash	0.17%	1.36%	1.41%	n/a
Total Plan				
ERS Total Plan	22.18%	9.95%	10.39%	10.71%
ERS Total Plan Policy	24.00%	11.47%	11.77%	11.31%

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
U.S. Equity				
JRF S&P 500 Fund	29.36%	15.46%	16.31%	16.36%
JRF Mid Cap Index	43.76%	11.17%	13.03%	14.77%
JRF S&P Small Cap Index	58.21%	9.97%	14.13%	16.30%
JRF S&P Small Cap Value	47.68%	n/a	n/a	n/a
JRF Large Cap Policy Fund	30.37%	12.60%	15.62%	n/a
JRF Total Domestic Equity	32.79%	14.61%	15.77%	16.15%
JRF Custom Domestic Equity Index	33.37%	15.05%	16.25%	16.35%
<i>S&P 500</i>	<i>30.00%</i>	<i>15.99%</i>	<i>16.90%</i>	<i>16.63%</i>
<i>S&P Mid Cap 400</i>	<i>43.68%</i>	<i>11.08%</i>	<i>12.97%</i>	<i>14.72%</i>
<i>S&P Smallcap 600</i>	<i>57.64%</i>	<i>9.44%</i>	<i>13.57%</i>	<i>15.69%</i>
International Equity				
JRF Emerging Markets Fund	18.04%	6.14%	7.48%	5.88%
JRF International Equities	25.99%	8.22%	9.32%	8.65%
JRF Total International Equity	24.14%	7.81%	8.99%	8.27%
JRF Custom International Equity Index	24.21%	7.83%	8.93%	n/a
<i>MSCI EAFE (Net)</i>	<i>25.73%</i>	<i>7.62%</i>	<i>8.81%</i>	<i>8.10%</i>
<i>MSCI Emerging Markets</i>	<i>18.20%</i>	<i>8.58%</i>	<i>9.23%</i>	<i>6.09%</i>
<i>STOXX Europe 600 Optimised Cyclical</i>	<i>33.46%</i>	<i>5.98%</i>	<i>7.93%</i>	<i>5.95%</i>
JRF Total Global Equity	30.82%	13.09%	14.27%	14.43%
JRF Custom Global Equity Index	31.31%	13.46%	14.65%	14.50%
Fixed Income				
JRF Domestic Fixed Income	0.09%	5.46%	3.23%	3.49%
JRF Custom Domestic Fixed Index	-0.21%	5.96%	3.36%	3.45%
<i>Barclays Aggregate Bond</i>	<i>-0.90%</i>	<i>5.36%</i>	<i>2.94%</i>	<i>3.01%</i>
JRF Total Fixed Income	0.09%	5.46%	3.23%	3.49%
Alternative Investments				
JRF Private Placements	7.50%	10.98%	-30.93%	-13.53%
JRF Preferred And Private Equity	9.28%	7.99%	n/a	n/a
JRF Real Estate	6.14%	2.23%	2.90%	5.49%
JRF Total Alternatives	12.83%	6.03%	0.40%	3.34%
JRF Total Fixed Income Plus Alternatives	1.34%	5.66%	3.15%	3.55%
Cash				
JRF Cash Account	0.08%	1.18%	1.23%	0.71%
JRF Short Term Investments	0.17%	1.49%	1.52%	1.00%
JRF Total Cash	0.12%	1.34%	1.37%	n/a
Total Plan				
JRF Total Plan	20.52%	10.51%	10.55%	10.77%
JRF Total Plan Policy	20.91%	10.94%	10.97%	11.02%

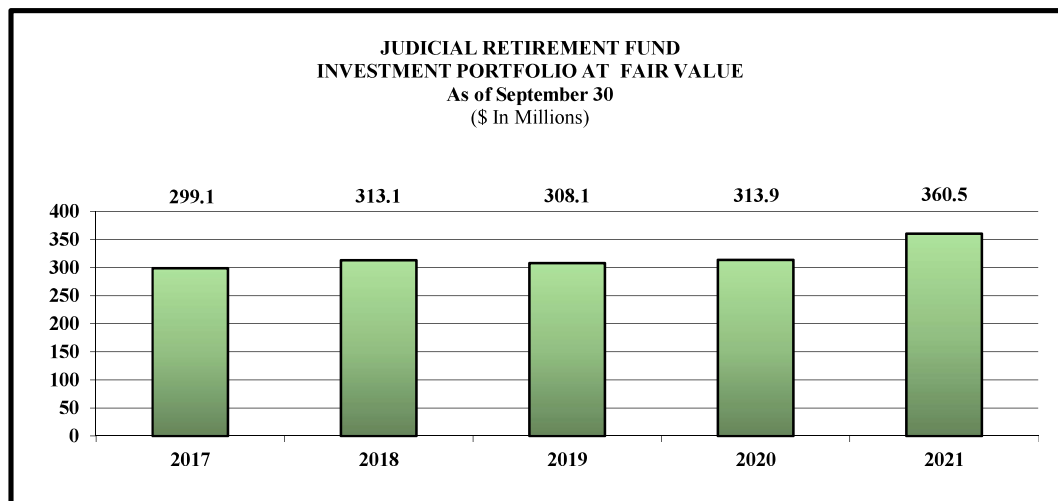
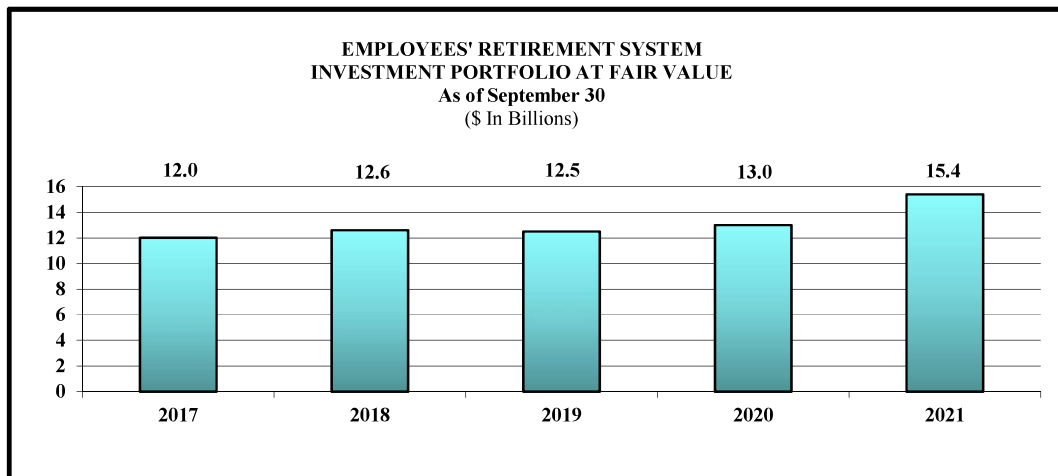
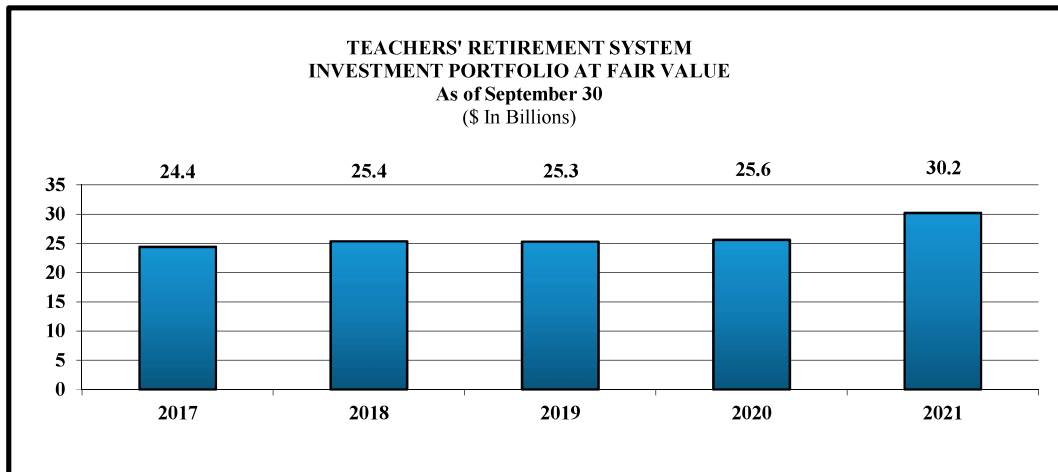
Note: Calculations are prepared using the time-weighted rate-of-return methodology based upon market values.

RETIREMENT SYSTEMS OF ALABAMA

Investment Section

Investment Portfolio at Fair Value

Five-Year Comparison

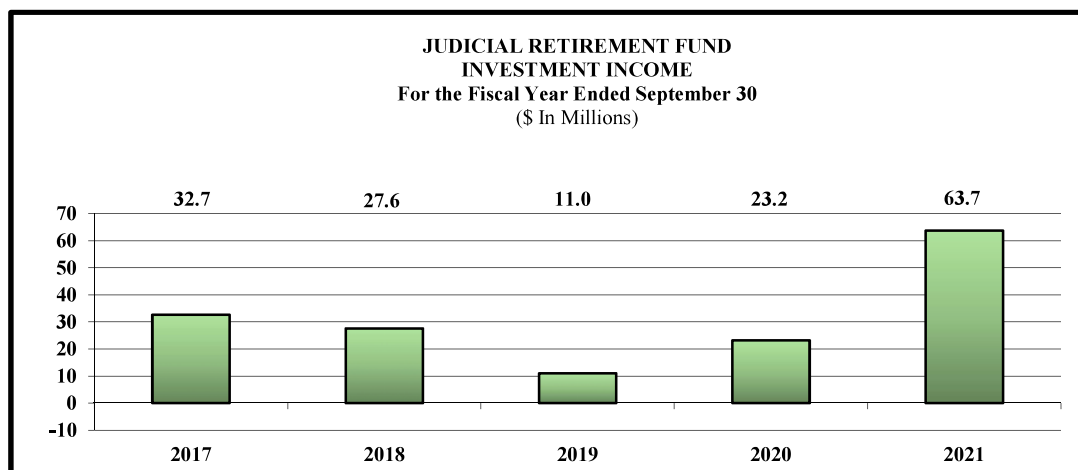
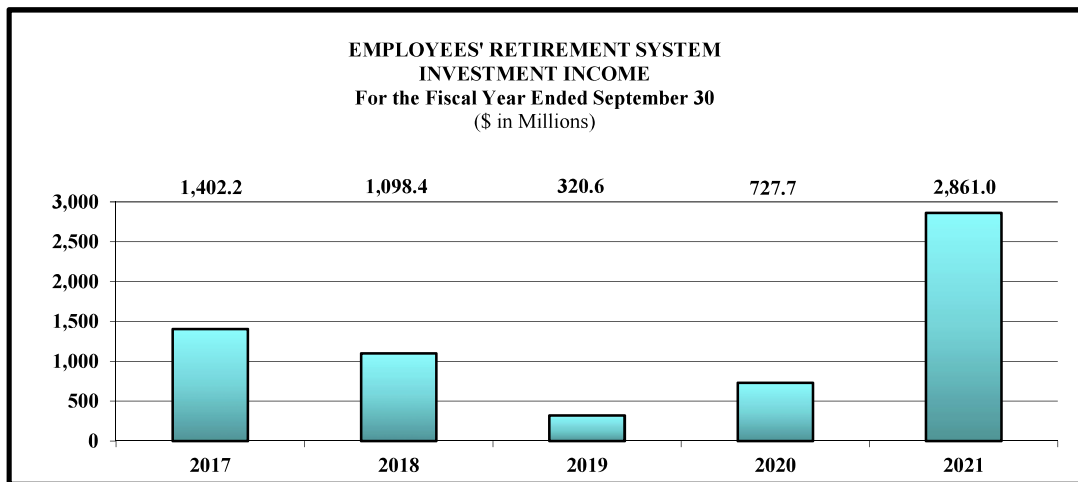
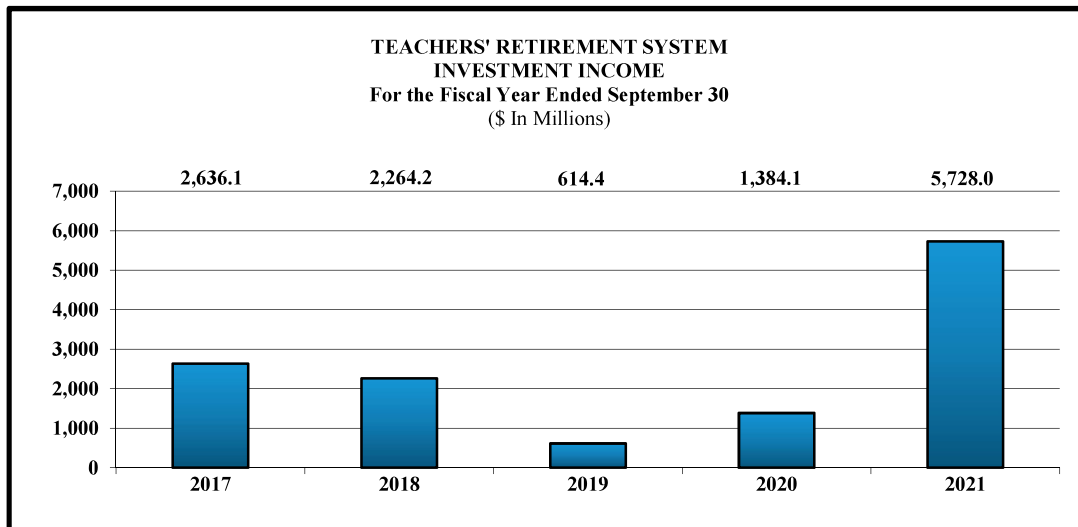


RETIREMENT SYSTEMS OF ALABAMA

Investment Section

Investment Income

Five-Year Comparison

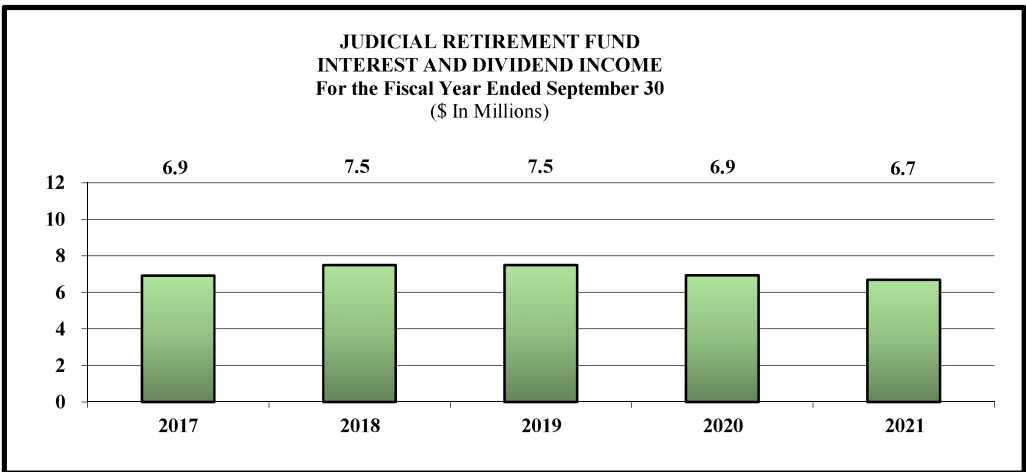
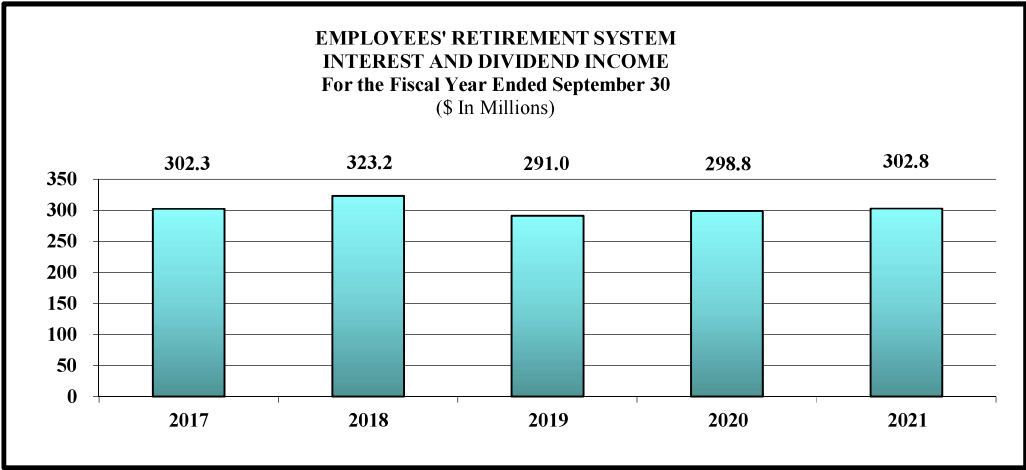
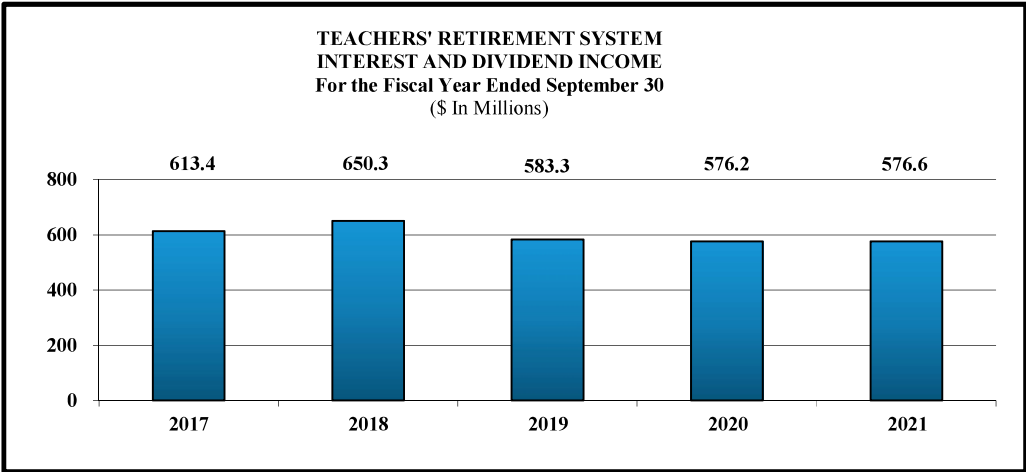


RETIREMENT SYSTEMS OF ALABAMA

Investment Section

Interest and Dividend Income

Five-Year Comparison

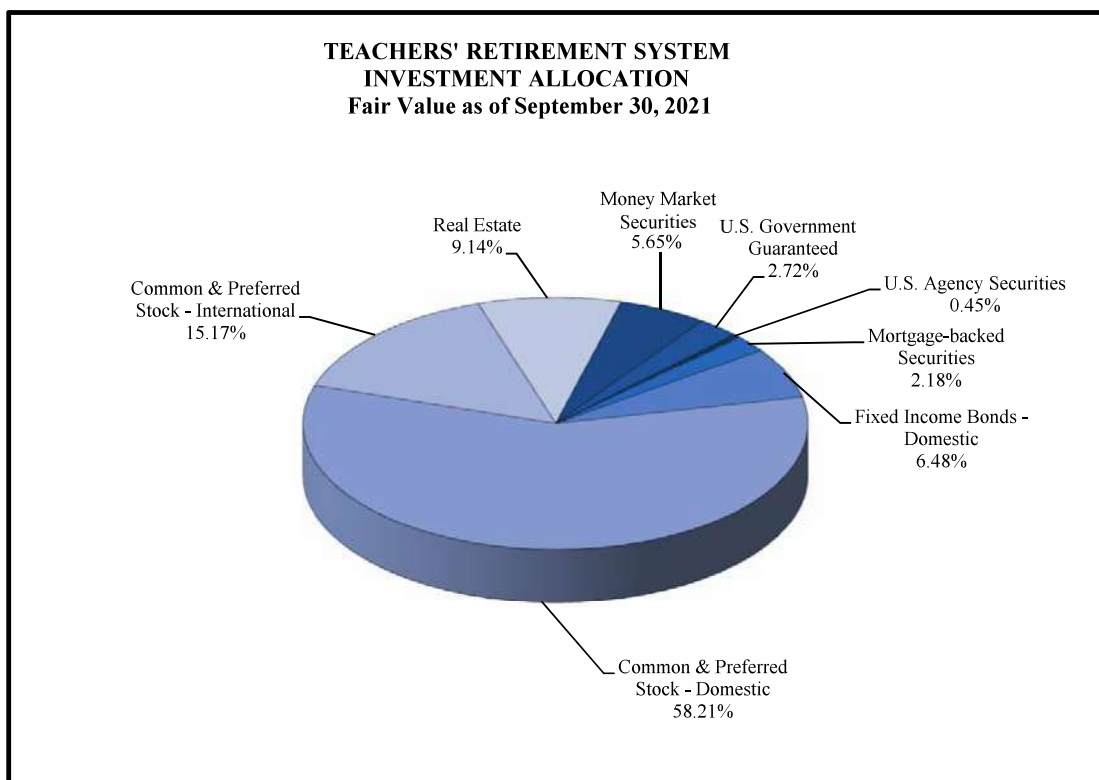


RETIREMENT SYSTEMS OF ALABAMA

Investment Section

Teachers' Retirement System

Investment Allocation and Summary



**TEACHERS' RETIREMENT SYSTEM
INVESTMENT SUMMARY AT FAIR VALUE
As of September 30, 2021
(\$ In Thousands)**

	Fair Value	% of Fair Value
Money Market Securities and Mutual Funds	\$ 1,703,749	5.65
U.S. Government Guaranteed	819,782	2.72
U.S. Agency Securities	135,233	0.45
Mortgage-backed Securities	659,229	2.18
Fixed Income Bonds		
Domestic	1,955,690	6.48
Common and Preferred Stocks		
Domestic	17,565,017	58.21
International	4,576,563	15.17
Real Estate	2,757,252	9.14
Total Investments	\$ 30,172,515	100.00

RETIREMENT SYSTEMS OF ALABAMA

Investment Section

Teachers' Retirement System

Largest Stock and Bond Holdings

**TEACHERS' RETIREMENT SYSTEM
LARGEST STOCK HOLDINGS****September 30, 2021**

(Amounts In Thousands)

	Shares	Stock	Fair Value
1)	932	Morgan Stanley Small Cap Equity Linked Note	\$ 1,690,937
2)	13	New Water Street Corporation	1,297,091
3)	4,686	Apple, Inc.	663,048
4)	2,235	Microsoft Corporation	630,229
5)	11,193	ISHARES MSCI Emerging Markets	563,886
6)	136	Amazon.Com, Inc.	446,253
7)	379	Gray Media Preferred	426,225
8)	92	Alphabet, Inc.	245,860
9)	668	Facebook, Inc.	226,555
10)	359	Goldman Sachs MSCI Emerging Markets Equity Linked Note	221,079

**TEACHERS' RETIREMENT SYSTEM
LARGEST BOND HOLDINGS****September 30, 2021**

(Amounts In Thousands)

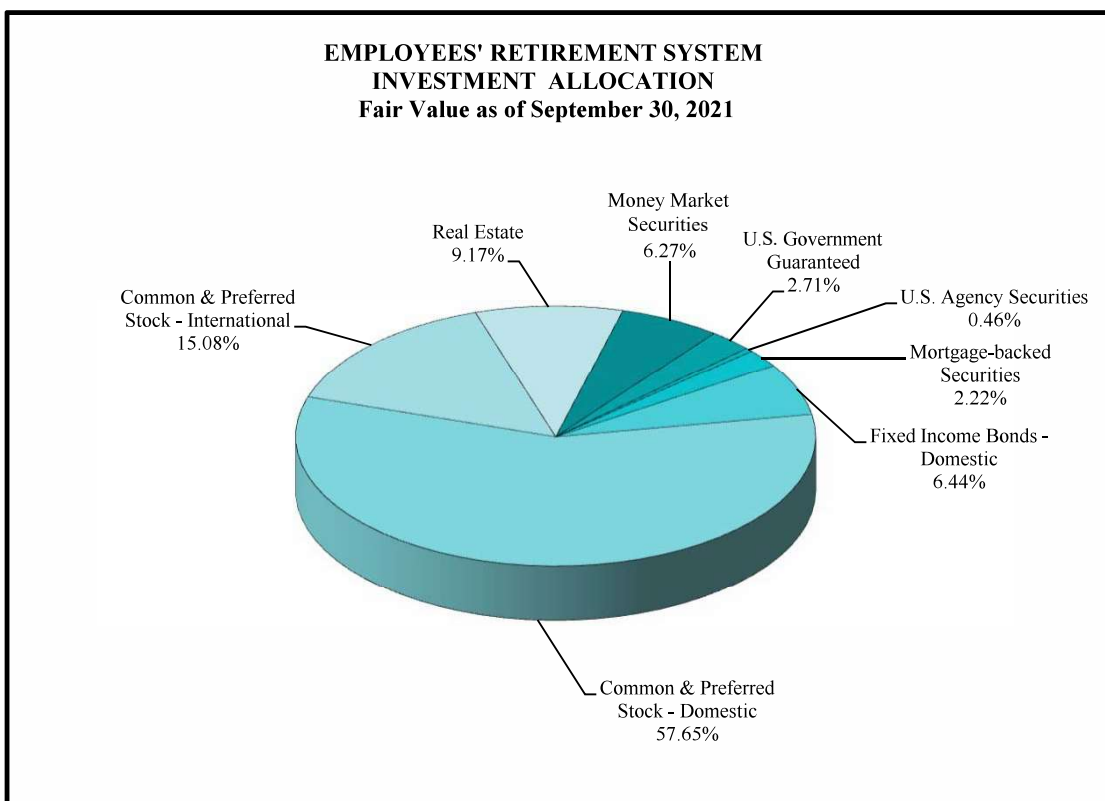
	Par	Bonds	Fair Value
1)	80,616	GNMA Pool MA7534, 2.5%, Due 8/20/2051	\$ 83,291
2)	81,500	SIO2 Medical Products, Inc, 8%, Due 12/31/2021	80,735
3)	74,115	U.S. Treasury, 2.25%, Due 11/15/2024	78,023
4)	64,480	Charter Communications, Inc, 5.55%, Due 7/15/2035	76,104
5)	75,311	U.S. Treasury, 2%, Due 12/31/2021	75,670
6)	68,666	U.S. Treasury, 2.75%, Due 2/15/2024	72,545
7)	68,200	U.S. Treasury, 2.25%, Due 5/15/2041	70,939
8)	65,277	Alliance Laundry Systems, LLC, 4.25%, Due 10/8/2027	66,210
9)	51,331	U.S. Treasury, 3%, Due 5/15/2042	60,033
10)	54,639	U.S. Treasury, 2.25%, Due 8/15/2027	58,088

A complete list of portfolio holdings is available upon request.

Investment Section

Employees' Retirement System

Investment Allocation and Summary



**EMPLOYEES' RETIREMENT SYSTEM
INVESTMENT SUMMARY AT FAIR VALUE
As of September 30, 2021**

(\$ In Thousands)

	Fair Value	% of Fair Value
Money Market Securities and Mutual Funds	\$ 962,679	6.27
U.S. Government Guaranteed	415,400	2.71
U.S. Agency Securities	70,191	0.46
Mortgage-backed Securities	341,368	2.22
Fixed Income Bonds		
Domestic	988,328	6.44
Common and Preferred Stocks		
Domestic	8,851,872	57.65
International	2,316,334	15.08
Real Estate	1,408,756	9.17
Total Investments	\$ 15,354,928	100.00

RETIREMENT SYSTEMS OF ALABAMA

Investment Section

Employees' Retirement System

Largest Stock and Bond Holdings

EMPLOYEES' RETIREMENT SYSTEM LARGEST STOCK HOLDINGS

September 30, 2021

(Amounts in Thousands)

	<u>Shares</u>	<u>Stock</u>	<u>Fair Value</u>
1)	383	Morgan Stanley Small Cap Equity Linked Note	\$ 695,409
2)	6	New Water Street Corporation	595,976
3)	2,402	Apple, Inc.	339,842
4)	1,144	Microsoft Corporation	322,477
5)	271	Gray Media Preferred	304,195
6)	5,264	ISHARES MSCI Emerging Markets	265,190
7)	70	Amazon.Com, Inc.	229,644
8)	3,052	ISHARES CORE MSCI Emerging Markets	188,466
9)	48	Alphabet, Inc.	127,409
10)	205	Goldman Sachs MSCI Emerging Markets Equity Linked Note	126,133

EMPLOYEES' RETIREMENT SYSTEM LARGEST BOND HOLDINGS

September 30, 2021

(Amounts In Thousands)

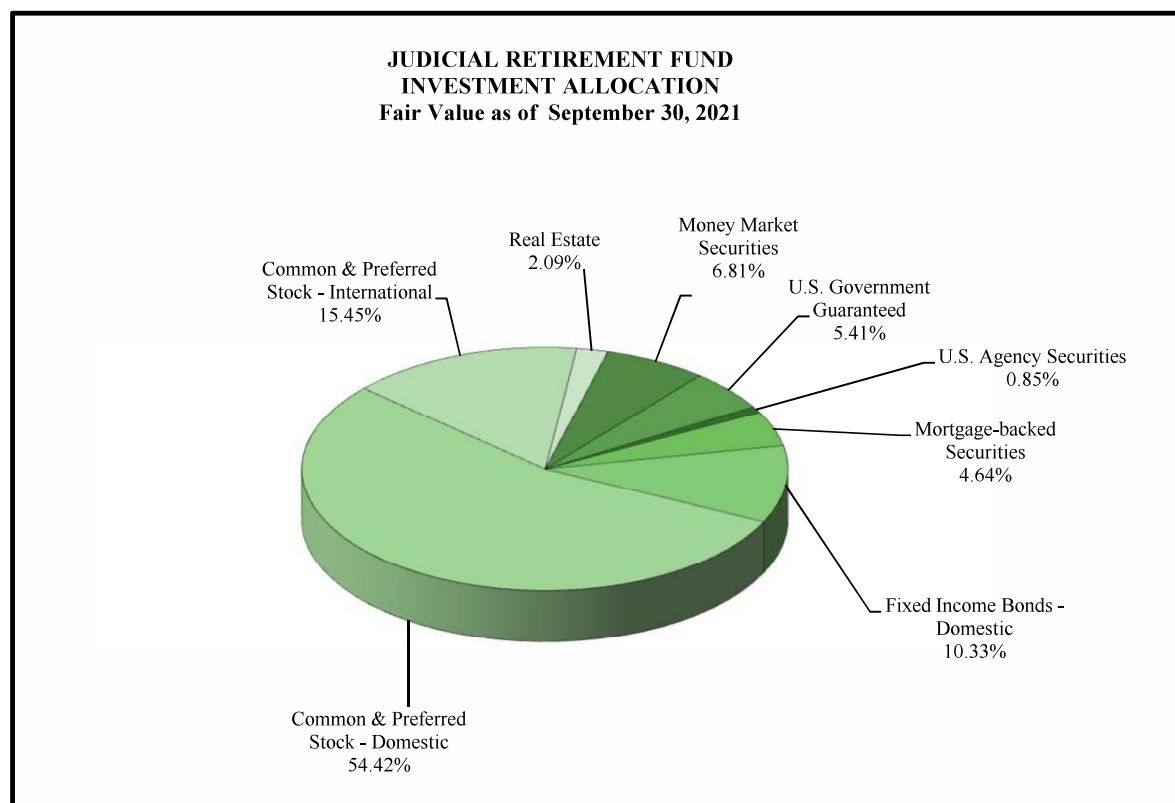
	<u>Par</u>	<u>Bonds</u>	<u>Fair Value</u>
1)	41,135	GNMA Pool MA7534, 2.5%, Due 8/20/2051	\$ 42,500
2)	41,928	U.S. Treasury, 2%, Due 12/31/2021	42,128
3)	40,142	SIO2 Medical Products, Inc, 8%, Due 12/31/2021	39,765
4)	37,516	U.S. Treasury, 2.25%, Due 11/15/2024	39,494
5)	31,759	Charter Communications, Inc, 5.55%, Due 7/15/2035	37,484
6)	34,925	U.S. Treasury, 2.25%, Due 5/15/2041	36,327
7)	31,457	U.S. Treasury, 2.75%, Due 2/15/2024	33,234
8)	32,151	Alliance Laundry Systems, LLC, 4.25% Due 10/8/2027	32,611
9)	29,362	U.S. Treasury, 2.5%, Due 5/15/2024	30,947
10)	25,604	U.S. Treasury, 3%, Due 5/15/2042	29,945

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, 2021**

(\$ In Thousands)

	Fair Value	% of Fair Value
Money Market Securities and Mutual Funds	\$ 24,569	6.81
U.S. Government Guaranteed	19,492	5.41
U.S. Agency Securities	3,053	0.85
Mortgage-backed Securities	16,712	4.64
Fixed Income Bonds		
Domestic	37,237	10.33
Common and Preferred Stocks		
Domestic	196,181	54.42
International	55,706	15.45
Real Estate	7,540	2.09
Total Investments	\$ 360,490	100.00

RETIREMENT SYSTEMS OF ALABAMA

Investment Section

Judicial Retirement Fund

Largest Stock and Bond Holdings

JUDICIAL RETIREMENT FUND LARGEST STOCK HOLDINGS

September 30, 2021

(Amounts in Thousands)

	Shares	Stock	Fair Value
1)	8	Morgan Stanley Small Cap Equity Linked Note	\$ 15,233
2)	65	Apple, Inc.	9,182
3)	31	Microsoft Corporation	8,754
4)	143	ISHARES MSCI Emerging Markets	7,187
5)	2	Amazon.Com, Inc.	5,913
6)	*	New Water Street Corporation	4,201
7)	10	Facebook, Inc.	3,424
8)	1	Alphabet, Inc. CL A	3,326
9)	1	Alphabet, Inc. CL C	3,102
10)	3	Tesla, Inc.	2,600

* Less than 1,000 shares

JUDICIAL RETIREMENT FUND LARGEST BOND HOLDINGS

September 30, 2021

(Amounts In Thousands)

	Par	Bonds	Fair Value
1)	3,986	U.S. Treasury, 2.5%, Due 5/15/2024	\$ 4,201
2)	2,042	U.S. Treasury, 2.25%, Due 11/15/2024	2,150
3)	1,871	U.S. Treasury, 2.75%, Due 2/15/2024	1,977
4)	1,689	U.S. Treasury, 2.25%, Due 8/15/2027	1,796
5)	1,709	GNMA Pool MA7534, 2.5%, Due 8/20/2051	1,765
6)	1,619	U.S. Treasury, 2.5%, Due 2/15/2045	1,749
7)	1,340	U.S. Treasury, 3%, Due 5/15/2042	1,567
8)	1,169	U.S. Treasury, 2.375%, Due 8/15/2024	1,232
9)	972	Charter Communications, Inc, 5.55%, Due 7/15/2035	1,147
10)	843	U.S. Treasury, 2.25%, Due 5/15/2041	877

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, 2021

	Stock		Fixed Securities Commissions (000's)	Total Commissions (000's)
	Commissions Per Share	# of Shares (000's)	Commissions (000's)	
Bank of America Merrill Lynch	0.014	16,045	229	278
Barclays	-	5	-	10
Bernstein	0.030	13,741	409	409
Citigroup	0.050	6,080	304	428
Convergex	0.035	2,712	96	96
Cornerstone	0.049	1,702	84	84
Cowen	0.049	3,701	180	180
Credit Suisse	0.041	1,674	69	76
Goldman Sachs	0.013	13,439	176	225
Harbor Financial	0.051	550	28	28
Instinet	0.050	1,430	72	72
International Strategy and Investment - ISI	0.048	7,840	379	379
Issuer Designated	-	-	-	94
Jefferies	0.032	2,678	87	87
JP Morgan Chase	0.032	4,132	134	196
Keybanc Capital Markets	0.050	1,684	84	113
Leerink Swann	0.049	447	22	22
Morgan Stanley	0.012	53,820	633	874
National Bank of Commerce - NBC Securities	0.050	1,500	75	75
Raymond James & Associates	0.050	2,026	101	101
Renaissance Macro Securities - Renmac	0.050	3,969	198	198
Royal Bank of Canada - RBC	0.046	7,109	330	353
Securities Capital	0.051	552	28	28
Southwest Securities	0.052	252	13	13
Stifel Nicolaus	0.050	8,488	424	456
Strategas	0.031	9,531	292	292
Suntrust	-	-	-	5
Union Bank of Switzerland - UBS	0.050	3,027	151	151
Wells Fargo	0.018	24,017	426	566
Wolfe Research Securities	0.050	644	32	32
Totals		192,795	\$ 5,056	\$ 865
			\$ 5,921	

Average Commission Per Share of Stock = \$ 0.0262

Note: Certain Broker agreements include provisions for commission sharing.



Actuarial Section

Annual Comprehensive Financial Report
Component Units of the State of Alabama



Cavanaugh Macdonald

CONSULTING, LLC

The experience and dedication you deserve

April 16, 2021

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
April 16, 2021
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, 2020. This valuation indicates that the current employer contribution rates of 12.59% of payroll for Tier I members and 11.44% 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 132,707 active members as of September 30, 2020.

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.

In order to prepare the results in this report, we have utilized appropriate actuarial models that were developed for this purpose. These models use assumptions about future contingent events along with recognized actuarial approaches to develop the needed results.



Board of Control
April 16, 2021
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, 2020
- 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'.

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

A handwritten signature in blue ink, appearing to read 'Cathy Turcot'.

Cathy Turcot
Principal and Managing Director

A handwritten signature in blue ink, appearing to read '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							
Age	Death*	Disability**		Withdrawal***			
		Years of Service		Years of Service			
		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.

Service Retirement:

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

Age Group	Annual % Rate	
	Male*	Female **
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:

Age	Annual % Rate	
	Male	Female
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.

Benefits

Service Retirement Allowance

Condition for Allowance	<p>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.</p> <p>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).</p>
Amount of Allowance	<p>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.</p> <p>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.</p> <p>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").</p>

Disability Retirement Allowance

Condition for Allowance	<p>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.</p>
Amount of Allowance	<p>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.</p> <p>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.</p> <p>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").</p>

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

Actuarial Section

Teachers' Retirement System

Summary of Plan Provisions (Continued)

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.

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)

Valuation Date		Number	Annual Payroll	Annual Average Pay	% Increase/ (Decrease) in Average Pay
9/30/2020	A	132,707	\$ 7,019,258,383	\$ 52,893	0.23
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)

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.

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 Accrued Liability (AAL) (B)	Unfunded AAL (UAAL) (B-A)	% Funded (A/B)	Covered Payroll (C)	UAAL as a % of Covered Payroll ((B-A)/C)
9/30/2020	\$26,684,234	\$37,752,800	\$11,068,566	70.7	\$7,019,253	157.7
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

*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)				
9/30/2020	\$ 6,356,922	\$ 21,781,149	\$ 9,614,729	\$26,681,234	100.00	93.00	0.00
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

*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)		
2020	4,646	\$ 127,102	2,241	\$ 51,643	100,332	\$2,029,772	3.86	\$ 20,231
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

§ 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, 2019	\$ 11,394,143
Normal Cost for 2019 Plan Year	123,920
Contributions Received During the Year	(836,847)
Interest to Year End	854,672
Expected Unfunded Actuarial Liability as of September 30, 2020	11,535,888
Actuarial (Gains)/Losses During the Year	
From Investments	49,581
From Actuarial Liabilities	(513,903)
Total Actuarial (Gains)/Losses During the Year	(464,322)
Actual Unfunded Actuarial Liability as of September 30, 2020	\$ 11,071,566





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May 17, 2021

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 1/15th 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.



- For those employers with a funded percentage 100% or greater in the valuation prior to the adoption of the funding policy: In each valuation 1/15th 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, 2020.

This valuation indicates that the current employer contribution rates for State employees (other than State policemen) of 14.82% of payroll for Tier I members and 14.44% of payroll for Tier II members and employer contribution rates for State policemen of 51.67% 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 85,485 total active members as of September 30, 2020.

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. The valuation reflects the provisions of Act 2019-132, which allows 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, until May 8, 2021. The results shown reflect all local employer elections approved by the Board through October 1, 2020. The contribution rates for local employers for the fiscal year beginning October 1, 2022 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 May 8, 2021.

In order to prepare the results in this report, we have utilized appropriate actuarial models that were developed for this purpose. These models use assumptions about future contingent events along with recognized actuarial approaches to develop the needed results.



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, 2020
- 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		
Annual % Rate of Service Retirement*		
Age	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		
Annual % Rate of Service Retirement		
Age	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			
Annual % Rate of Service Retirement			
Years of Service			
Age	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

Actuarial Section

Employees' Retirement System

Summary of Actuarial Assumption and Methods (Continued)

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

Actuarial Section

Employees' Retirement System

Summary of Plan Provisions (Continued)

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").

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

Actuarial Section

Employees' Retirement System

Summary of Plan Provisions (Continued)

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)*).

Benefits – Members Classified as State Police

Service Retirement Allowance

Condition of Allowance	<p>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.</p> <p>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.</p>
Amount of Allowance	<p>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.</p> <p>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:</p> <ul style="list-style-type: none">• 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. <p>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.</p>

Disability Retirement Allowance

Condition for Allowance	<p>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.</p>
Amount of Allowance	<p>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.</p> <p>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.</p>

RETIREMENT SYSTEMS OF ALABAMA

Actuarial Section

Employees' Retirement System

Summary of Plan Provisions (Continued)

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.

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)

Valuation Date		Number	Annual Payroll	Annual Average Pay	% Increase/ (Decrease) in Average Pay
9/30/2020	A	85,485	\$ 4,011,235,711	\$ 46,923	4.54
9/30/2019	A	84,694	3,387,186,858	44,881	5.59
9/30/2018	A	86,565	3,679,181,111	42,502	1.55
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)

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.

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 Accrued Liability (AAL) (B)	Unfunded AAL (UAAL) (B-A)	Percentage Funded (A/B)	Covered Payroll (C)	UAAL as a % of Covered Payroll ((B-A)/C)
9/30/2020	\$ 13,491,176	\$ 19,786,472	\$ 6,295,296	68.2	\$ 4,011,236	156.9
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

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

SOLVENCY TEST

(Dollar Amounts in Thousands)

		Aggregate Accrued Liabilities For						
		(1)	(2)	(3)				
Valuation Date		Active Member Contributions	Retirants and Beneficiaries	Active Members (Employer Financed Portion)	Reported Assets	% of Accrued Liabilities Covered by Reported Assets		
						(1)	(2)	(3)
9/30/2020	D	\$ 3,207,292	\$ 10,984,239	\$ 5,594,541	\$ 13,491,176	100	94	0.0
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

A - Reflects changes in actuarial assumptions and methods.

B - Reflects changes in actuarial methods.

C - Reflects changes in actuarial assumptions.

D - Reflects impact of Act 2019-132.

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)		
9/30/2020	4,705	\$ 104,970	1,525	\$ 33,476	54,110	\$1,033,518	7.43	\$ 19,100
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

§ 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, 2019	\$ 5,897,753
Normal Cost for 2019 Plan Year	45,164
Contributions Received During the Year	(504,693)
Interest to Year End	438,174
Expected Unfunded Actuarial Liability as of September 30, 2020	5,876,398
Actuarial (Gains)/Losses During the Year	
From Investments	(2,072)
From Actuarial Liabilities	420,970
Total Actuarial (Gains)/Losses During the Year	418,898
Actual Unfunded Actuarial Liability as of September 30, 2020	\$ 6,295,296





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April 19, 2021

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
April 19, 2021
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, 2020. 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 37.34% 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 365 active members as of September 30, 2020.

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.

In order to prepare the results in this report, we have utilized appropriate actuarial models that were developed for this purpose. These models use assumptions about future contingent events along with recognized actuarial approaches to develop the needed results.

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, 2020
- Ten-Year History of Average Monthly Benefit Payments as of September 30



Board of Control
April 19, 2021
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,

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

Cathy Turcot
Principal and Managing Director

Edward Koebel, EA, FCA, MAAA
Chief Executive Officer

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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.

RETIREMENT SYSTEMS OF ALABAMA

Actuarial Section

Judicial Retirement Fund

Summary of Plan Provisions (Continued)

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.

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 pre-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.
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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
9/30/2020	365	\$ 47,084,500	\$ 128,999	4.17
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)

*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 Accrued Liability (AAL) (B)	Unfunded AAL (UAAL) (B-A)	Percentage Funded (A/B)	Covered Payroll (C)	UAAL as a % of Covered Payroll ((B-A)/C)
9/30/2020	\$ 318,673	\$ 481,862	\$ 163,189	66.1	\$47,085	346.6
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

*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				% of Accrued Liabilities Covered by Reported Assets		
	(1)	(2)	(3)	Reported Assets	(1)	(2)	(3)
	Active Member Contributions	Retirants and Beneficiaries	Active Members (Employer Financed Portion)				
9/30/2020	\$ 43,899	\$ 338,492	\$ 99,472	\$ 318,673	100	81	0.0
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

*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)		
2020	11	\$ 950	9	\$ 771	454	\$ 33,807	0.53	\$ 74,465
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

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, 2019	\$ 165,141
Normal Cost for 2019 Plan Year	4,770
Contributions Received During the Year	(17,483)
Interest to Year End	<u>12,329</u>
Expected Unfunded Actuarial Liability as of September 30, 2020	<u>164,757</u>
Actuarial (Gains) Losses During the Year	
From Investments	(2,285)
From Actuarial Liabilities	<u>717</u>
Total Actuarial (Gains) Losses During the Year	<u>(1,568)</u>
Actual Unfunded Actuarial Liability as of September 30, 2020	<u><u>\$ 163,189</u></u>





Statistical Section

Annual Comprehensive Financial Report
Component Units of the State of Alabama

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 167

Deductions by Type – Ten-Year History – page 168

Benefits by Type – Ten-Year History – page 169

Ten-Year History of Additions, Reductions, and Changes in Net Position – page 170

Retirees and Beneficiaries

These schedules provide information concerning the retirees and beneficiaries receiving benefits.

Retired Members by Type of Benefit – page 176

Ten-Year History of Average Monthly Benefit Payments – page 179

Participating Units

These schedules provide information concerning units participating in the Employees' Retirement System.

Local Participating Employers – page 182

Largest Employers – Ten-Year History – page 191

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 \$	Employer Contributions				Transfer In From PEEHIP	Transfers from an Internal Service Fund	Investment Income	Total
		Employer Rate (%)							
		Amount	Tier 1	Tier 2 @					
2021	\$ 525,755	\$ 874,401	12.36	11.22	-	\$ 377	\$ 5,727,839	\$ 7,128,372	
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	-	-	261,468	1,477,057	
2014	\$ 480,849	\$ 739,547	11.71	11.08	-	-	247,315	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	

EMPLOYEES' RETIREMENT SYSTEM ADDITIONS BY SOURCE

Employer Contributions		
Employer Rate (%)		
State	Tier 1	Tier 2 Ⓒ

JUDICIAL RETIREMENT FUND ADDITIONS BY SOURCE

Fiscal Year	Member Contributions \$	Employer Contributions					Investment Income	Total
		Employer Rate (%)						
		Groups 1 & 2	Judges & Clerks**	District Attorney**	Group 3 -			
2021	\$ 4,271	\$ 18,260	40.80	35.61	19.77	\$ 63,731	\$ 86,262	
2020	4,184	18,099	41.40	34.32	19.77	23,159	45,442	
2019	4,101	18,022	41.40	34.32	19.77	11,016	33,139	
2018	3,867	17,180	40.09	34.32	19.77	27,622	48,669	
2017	3,972	17,373	40.65	-	-	32,685	54,030	
2016	3,723	17,529	40.98	-	-	28,321	49,573	
2015	3,683	15,077	35.24	-	-	(856)	17,904	
2014	3,764	15,790	35.24	-	-	31,344	50,898	
2013	3,919	13,903	32.06	-	-	32,245	50,067	
2012	3,681	10,747	24.35	-	-	39,011	53,439	

§ 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

Fiscal Year	Benefit Payments	Contribution Refunds & Death Benefits	Service Transfers	Administrative Expenses	Depreciation	Total
2021	\$ 2,415,128	\$ 63,747	\$ 4,421	\$ 20,402	\$ 9,133	\$ 2,512,831
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

EMPLOYEES' RETIREMENT SYSTEM DEDUCTIONS BY TYPE

Fiscal Year	Benefit Payments	Contribution Refunds & Death Benefits	Unit Withdrawals & Service Transfers	Administrative Expenses	Depreciation	Total
2021	\$ 1,260,159	\$ 54,157	\$ 6,246	\$ 10,977	\$ 3,520	\$ 1,335,059
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

JUDICIAL RETIREMENT FUND DEDUCTIONS BY TYPE

Fiscal Year	Benefit Payments	Contribution Refunds & Death Benefits	Service Transfers	Administrative Expenses	Depreciation	Total
2021	\$ 39,089	\$ 28	\$ -	\$ 374	\$ -	\$ 39,491
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

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
2021	\$ 2,248,819	\$ 95,720	\$ 70,589	\$ 22,929	\$ 40,818
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

EMPLOYEES' RETIREMENT SYSTEM

BENEFITS BY TYPE

Fiscal Year	Age & Service Benefits		Disability Benefits	Death Benefits & Refunds	
	Retirants	Survivors		Death	Resignation
2021	\$ 1,138,176	\$ 59,538	\$ 62,445	\$ 16,506	\$ 37,651
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

JUDICIAL RETIREMENT FUND

BENEFITS BY TYPE

Fiscal Year	Age & Service Benefits		Disability Benefits	Death Benefits & Refunds	
	Retirants	Survivors		Death	Resignation
2021	\$ 34,518	\$ 4,047	\$ 524	\$ -	\$ 28
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

RETIREMENT SYSTEMS OF ALABAMA

Statistical Section

Teachers' Retirement System

Ten-Year History of Additions, Reductions, and Changes in Net Position

(Amounts in Thousands)

	2021	2020	2019	2018	2017
Additions					
Contributions					
Employee	\$ 519,627	\$ 510,818	\$ 516,675	\$ 488,503	\$ 486,542
Employer	874,401	862,475	869,336	802,598	782,695
Transfers from Employees' Retirement System	6,128	4,185	6,234	4,963	3,096
Transfers from Judicial Retirement Fund	-	-	-	-	-
Transfers from PEEHIP	-	-	-	24,700	-
Transfers from an Internal Service Fund	377	602	-	-	-
Total Contributions	1,400,533	1,378,080	1,392,245	1,320,764	1,272,333
Investment Income					
From Investing Activities					
Net Increase/(Decrease) in Fair Value of Investments	5,155,012	801,465	33,671	1,615,440	2,021,774
Interest and Dividends	576,552	576,193	583,329	650,293	613,353
Total Investment Income from Investing Activities	5,731,564	1,377,658	617,000	2,265,733	2,635,127
Less: Investment Expenses, Net	11,191	9,719	9,205	9,171	8,685
Net Investment Income from Investing Activities	5,720,373	1,367,939	607,795	2,256,562	2,626,442
From Securities Lending Activities					
Securities Lending Income	11,019	13,960	28,905	23,246	20,125
Less Securities Lending Expenses:					
Borrower Rebates	108	4,423	19,431	12,385	7,350
Management Fees	3,445	3,120	2,842	3,189	3,112
Total Securities Lending Expenses	3,553	7,543	22,273	15,574	10,462
Net Income from Securities Lending Activities	7,466	6,417	6,632	7,672	9,663
Total Net Investment Income	5,727,839	1,374,356	614,427	2,264,234	2,636,105
Total Additions	7,128,372	2,752,436	2,006,672	3,584,998	3,908,438
Deductions					
Retirement Allowance Payments	2,415,128	2,328,892	2,233,514	2,204,031	2,111,830
Return of Contributions and Death Benefits	63,747	60,601	56,861	58,538	55,634
Transfers to Employees' Retirement System	4,421	4,891	4,187	4,899	3,413
Transfers to Judicial Retirement Fund	-	-	-	9	-
Administrative Expenses	20,402	21,957	20,583	15,952	16,390
Depreciation	9,133	9,154	7,512	6,338	6,012
Total Deductions	2,512,831	2,425,495	2,322,657	2,289,767	2,193,279
Net Increase/(Decrease)	4,615,541	326,941	(315,985)	1,295,231	1,715,159
Net Position Restricted for Pension Benefits					
Beginning of Year - as previously reported	25,946,389	25,619,448	25,935,433	24,651,457	22,936,298
Adjustment for Application of GASB 68	-	-	-	-	-
Adjustment for Application of GASB 75	-	-	-	(11,255)	-
Beginning of Year - as adjusted	25,946,389	25,619,448	25,935,433	24,640,202	22,936,298
End of Year	\$ 30,561,930	\$ 25,946,389	\$ 25,619,448	\$ 25,935,433	\$ 24,651,457

	2016	2015	2014	2013	2012
Additions					
Contributions					
Employee	\$ 472,390	\$ 473,903	\$ 477,300	\$ 474,241	\$ 456,518
Employer	751,902	737,671	739,547	627,892	618,306
Transfers from Employees' Retirement System	3,590	4,015	3,549	3,345	2,016
Transfers from Judicial Retirement Fund	-	-	-	-	-
Transfers from PEEHIP	-	-	-	-	-
Transfers from an Internal Service Fund	-	-	-	-	-
Total Contributions	1,227,882	1,215,589	1,220,396	1,105,478	1,076,840
Investment Income					
From Investing Activities					
Net Increase/(Decrease) in Fair Value of Investments	1,589,279	(381,400)	1,853,288	2,090,646	2,349,955
Interest and Dividends	607,795	640,910	618,861	638,766	634,695
Total Investment Income from Investing Activities	2,197,074	259,510	2,472,149	2,729,412	2,984,650
Less: Investment Expenses, Net	7,731	6,407	5,732	5,712	5,260
Net Investment Income from Investing Activities	2,189,343	253,103	2,466,417	2,723,700	2,979,390
From Securities Lending Activities					
Securities Lending Income	15,930	11,512	9,629	12,753	13,670
Less Securities Lending Expenses:					
Borrower Rebates	2,825	365	65	401	433
Management Fees	3,044	2,782	2,829	3,346	3,465
Total Securities Lending Expenses	5,869	3,147	2,894	3,747	3,898
Net Income from Securities Lending Activities	10,061	8,365	6,735	9,006	9,772
Total Net Investment Income	2,199,404	261,468	2,473,152	2,732,706	2,989,162
Total Additions	3,427,286	1,477,057	3,693,548	3,838,184	4,066,002
Deductions					
Retirement Allowance Payments	2,155,784	2,075,302	1,997,595	1,893,321	1,800,805
Return of Contributions and Death Benefits	57,130	58,060	54,699	55,891	49,453
Transfers to Employees' Retirement System	6,223	3,432	2,880	1,823	1,937
Transfers to Judicial Retirement Fund	-	-	-	-	-
Administrative Expenses	14,873	15,074	13,103	12,591	11,555
Depreciation	4,709	4,258	4,336	4,312	4,344
Total Deductions	2,238,719	2,156,126	2,072,613	1,967,938	1,868,094
Net Increase/(Decrease)	1,188,567	(679,069)	1,620,935	1,870,246	2,197,908
Net Position Restricted for Pension Benefits					
Beginning of Year - as previously reported	21,747,731	22,441,307	20,820,372	18,950,126	16,752,218
Adjustment for Application of GASB 68	-	(14,507)	-	-	-
Adjustment for Application of GASB 75	-	-	-	-	-
Beginning of Year - as adjusted	21,747,731	22,426,800	20,820,372	18,950,126	16,752,218
End of Year	\$ 22,936,298	\$ 21,747,731	\$ 22,441,307	\$ 20,820,372	\$ 18,950,126

RETIREMENT SYSTEMS OF ALABAMA

Statistical Section

Employees' Retirement System

Ten-Year History of Additions, Reductions, and Changes in Net Position

(Amounts in Thousands)

	2021	2020	2019	2018	2017
Additions					
Contributions					
Employee	\$ 281,975	\$ 266,056	\$ 250,253	\$ 236,842	\$ 230,488
Employer	516,402	519,806	467,553	426,340	426,215
New Units	-	344,352	-	-	-
Transfers from Teachers' Retirement System	4,421	4,891	4,187	4,899	3,413
Transfers from Judicial Retirement Fund	-	-	-	-	-
Transfers from an Internal Service Fund	251	395	-	-	-
Total Contributions	803,049	1,135,500	721,993	668,081	660,116
Investment Income					
From Investing Activities					
Net Increase/(Decrease) in Fair Value of Investments	2,558,276	425,632	30,092	775,132	1,098,859
Interest and Dividends	302,802	298,770	291,011	323,182	302,295
Total Investment Income from Investing Activities	2,861,078	724,402	321,103	1,098,314	1,401,154
Less: Investment Expenses, Net	4,003	3,828	3,661	3,395	3,305
Net Investment Income from Investing Activities	2,857,075	720,574	317,442	1,094,919	1,397,849
From Securities Lending Activities					
Securities Lending Income	5,685	6,534	13,884	10,589	9,127
Less Securities Lending Expenses:					
Borrower Rebates	39	1,996	9,394	5,647	3,424
Management Fees	1,773	1,482	1,347	1,449	1,389
Total Securities Lending Expenses	1,812	3,478	10,741	7,096	4,813
Net Income from Securities Lending Activities	3,873	3,056	3,143	3,493	4,314
Total Net Investment Income	2,860,948	723,630	320,585	1,098,412	1,402,163
Total Additions	3,663,997	1,859,130	1,042,578	1,766,493	2,062,279
Deductions					
Retirement Allowance Payments	1,260,159	1,209,437	1,123,150	1,096,883	1,050,340
Return of Contributions and Death Benefits	54,157	46,745	48,675	45,070	47,683
Unit Withdrawals	-	-	380	350	1,000
Transfers to Teachers' Retirement System	6,128	4,185	6,234	4,963	3,096
Transfers to Judicial Retirement Fund	118	159	189	102	261
Administrative Expenses	10,977	13,128	12,934	11,219	11,982
Depreciation	3,520	3,411	2,895	2,544	2,520
Total Deductions	1,335,059	1,277,065	1,194,457	1,161,131	1,116,882
Net Increase/(Decrease)	2,328,938	582,065	(151,879)	605,362	945,397
Net Position Restricted for Pension Benefits					
Beginning of Year - as previously reported	13,150,538	12,568,473	12,720,352	12,122,471	11,177,074
Adjustment for Application of GASB 68	-	-	-	-	-
Adjustment for Application of GASB 75	-	-	-	(7,481)	-
Beginning of Year - as adjusted	13,150,538	12,568,473	12,720,352	12,114,990	11,177,074
End of Year	\$ 15,479,476	\$ 13,150,538	\$ 12,568,473	\$ 12,720,352	\$ 12,122,471

	2016	2015	2014	2013	2012
Additions					
Contributions					
Employee	\$ 231,794	\$ 225,767	\$ 223,135	\$ 221,823	\$ 214,933
Employer	435,098	410,932	391,181	338,819	317,520
New Units	-	-	-	-	-
Transfers from Teachers' Retirement System	6,223	3,432	2,880	1,823	1,937
Transfers from Judicial Retirement Fund	-	55	1	-	-
Transfers from an Internal Service Fund	-	-	-	-	-
Total Contributions	<u>673,115</u>	<u>640,186</u>	<u>617,197</u>	<u>562,465</u>	<u>534,390</u>
Investment Income					
<i>From Investing Activities</i>					
Net Increase/(Decrease) in Fair Value of Investments	753,836	(186,154)	888,303	984,714	1,114,737
Interest and Dividends	297,369	311,516	298,049	310,220	310,748
Total Investment Income from Investing Activities	<u>1,051,205</u>	<u>125,362</u>	<u>1,186,352</u>	<u>1,294,934</u>	<u>1,425,485</u>
Less: Investment Expenses, Net	2,883	2,771	2,766	2,549	2,256
Net Investment Income from Investing Activities	<u>1,048,322</u>	<u>122,591</u>	<u>1,183,586</u>	<u>1,292,385</u>	<u>1,423,229</u>
<i>From Securities Lending Activities</i>					
Securities Lending Income	7,481	5,353	4,199	5,780	6,445
Less Securities Lending Expenses:					
Borrower Rebates	1,356	164	21	186	174
Management Fees	1,416	1,290	1,235	1,519	1,642
Total Securities Lending Expenses	<u>2,772</u>	<u>1,454</u>	<u>1,256</u>	<u>1,705</u>	<u>1,816</u>
Net Income from Securities Lending Activities	<u>4,709</u>	<u>3,899</u>	<u>2,943</u>	<u>4,075</u>	<u>4,629</u>
Total Net Investment Income	<u>1,053,031</u>	<u>126,490</u>	<u>1,186,529</u>	<u>1,296,460</u>	<u>1,427,858</u>
Total Additions	<u>1,726,146</u>	<u>766,676</u>	<u>1,803,726</u>	<u>1,858,925</u>	<u>1,962,248</u>
Deductions					
Retirement Allowance Payments	1,038,517	1,018,515	948,478	895,475	848,464
Return of Contributions and Death Benefits	45,768	51,024	47,937	44,837	40,746
Unit Withdrawals	-	-	-	-	-
Transfers to Teachers' Retirement System	3,590	4,015	3,549	3,345	2,016
Transfers to Judicial Retirement Fund	78	44	83	242	164
Administrative Expenses	11,002	11,136	9,612	9,767	10,616
Depreciation	2,021	2,046	2,055	2,015	1,981
Total Deductions	<u>1,100,976</u>	<u>1,086,780</u>	<u>1,011,714</u>	<u>955,681</u>	<u>903,987</u>
Net Increase/(Decrease)	<u>625,170</u>	<u>(320,104)</u>	<u>792,012</u>	<u>903,244</u>	<u>1,058,261</u>
Net Position Restricted for Pension Benefits					
Beginning of Year - as previously reported	10,551,904	10,883,952	10,091,940	9,188,696	8,130,435
Adjustment for Application of GASB 68	-	(11,944)	-	-	-
Adjustment for Application of GASB 75	-	-	-	-	-
Beginning of Year - as adjusted	<u>10,551,904</u>	<u>10,872,008</u>	<u>10,091,940</u>	<u>9,188,696</u>	<u>8,130,435</u>
End of Year	<u>\$ 11,177,074</u>	<u>\$ 10,551,904</u>	<u>\$ 10,883,952</u>	<u>#####</u>	<u>\$ 9,188,696</u>

RETIREMENT SYSTEMS OF ALABAMA

Statistical Section

Judicial Retirement Fund

Ten-Year History of Additions, Reductions, and Changes in Net Position

(Amounts in Thousands)

	2021	2020	2019	2018	2017
Additions					
Contributions					
Employee	\$ 4,153	\$ 4,025	\$ 3,912	\$ 3,756	\$ 3,711
Employer	18,260	18,099	18,022	17,180	17,373
Transfers from Teachers' Retirement System	-	-	-	9	-
Transfers from Employees' Retirement System	118	159	189	102	261
Total Contributions	22,531	22,283	22,123	21,047	21,345
Investment Income					
From Investing Activities					
Net Increase/(Decrease) in Fair Value of Investments	56,970	16,173	3,476	20,071	25,639
Interest and Dividends	6,689	6,928	7,463	7,471	6,910
Total Investment Income from Investing Activities	63,659	23,101	10,939	27,542	32,549
Less: Investment Expenses, Net	-	-	-	-	-
Net Investment Income from Investing Activities	63,659	23,101	10,939	27,542	32,549
From Securities Lending Activities					
Securities Lending Income	106	128	327	248	270
Less Securities Lending Expenses:					
Borrower Rebates	1	41	218	134	90
Management Fees	33	29	32	34	44
Total Securities Lending Expenses	34	70	250	168	134
Net Income from Securities Lending Activities	72	58	77	80	136
Total Investment Income	63,731	23,159	11,016	27,622	32,685
Total Additions	86,262	45,442	33,139	48,669	54,030
Deductions					
Retirement Allowance Payments	39,089	38,812	36,909	33,419	32,807
Return of Contributions and Death Benefits	28	256	646	130	353
Transfers to Employees' Retirement System	-	-	-	-	-
Administrative Expenses	374	357	357	328	334
Total Deductions	39,491	39,425	37,912	33,877	33,494
Net Increase/(Decrease)	46,771	6,017	(4,773)	14,792	20,536
Net Position Restricted for Pension Benefits					
Beginning of Year - as previously reported	318,558	312,541	317,314	302,578	282,042
Adjustment for Application of GASB 68	-	-	-	-	-
Adjustment for Application of GASB 75	-	-	-	(56)	-
Beginning of Year - as adjusted	318,558	312,541	317,314	302,522	282,042
End of Year	\$ 365,329	\$ 318,558	\$ 312,541	\$ 317,314	\$ 302,578

	2016	2015	2014	2013	2012
Additions					
Contributions					
Employee	\$ 3,645	\$ 3,639	\$ 3,681	\$ 3,677	\$ 3,517
Employer	17,529	15,077	15,790	13,903	10,747
Transfers from Teachers' Retirement System	-	-	-	-	-
Transfers from Employees' Retirement System	78	44	83	242	164
Total Contributions	<u>21,252</u>	<u>18,760</u>	<u>19,554</u>	<u>17,822</u>	<u>14,428</u>
Investment Income					
<i>From Investing Activities</i>					
Net Increase/(Decrease) in Fair Value of Investments	21,302	(7,695)	24,197	25,207	32,112
Interest and Dividends	6,865	6,698	7,030	6,912	6,748
Total Investment Income from Investing Activities	<u>28,167</u>	<u>(997)</u>	<u>31,227</u>	<u>32,119</u>	<u>38,860</u>
Less: Investment Expenses, Net	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Net Investment Income from Investing Activities	<u>28,167</u>	<u>(997)</u>	<u>31,227</u>	<u>32,119</u>	<u>38,860</u>
<i>From Securities Lending Activities</i>					
Securities Lending Income	258	195	167	184	215
Less Securities Lending Expenses:					
Borrower Rebates	58	7	1	10	12
Management Fees	46	47	49	48	52
Total Securities Lending Expenses	<u>104</u>	<u>54</u>	<u>50</u>	<u>58</u>	<u>64</u>
Net Income from Securities Lending Activities	<u>154</u>	<u>141</u>	<u>117</u>	<u>126</u>	<u>151</u>
Total Investment Income	<u>28,321</u>	<u>(856)</u>	<u>31,344</u>	<u>32,245</u>	<u>39,011</u>
Total Additions	<u>49,573</u>	<u>17,904</u>	<u>50,898</u>	<u>50,067</u>	<u>53,439</u>
Deductions					
Retirement Allowance Payments	30,893	30,348	29,826	29,112	27,183
Return of Contributions and Death Benefits	115	100	54	196	253
Transfers to Employees' Retirement System	-	55	1	-	-
Administrative Expenses	<u>397</u>	<u>356</u>	<u>281</u>	<u>280</u>	<u>257</u>
Total Deductions	<u>31,405</u>	<u>30,859</u>	<u>30,162</u>	<u>29,588</u>	<u>27,693</u>
Net Increase/(Decrease)	<u>18,168</u>	<u>(12,955)</u>	<u>20,736</u>	<u>20,479</u>	<u>25,746</u>
Net Position Restricted for Pension Benefits					
Beginning of Year - as previously reported	263,874	277,096	256,360	235,881	210,135
Adjustment for Application of GASB 68	-	(267)	-	-	-
Adjustment for Application of GASB 75	-	-	-	-	-
Beginning of Year - as adjusted	<u>263,874</u>	<u>276,829</u>	<u>256,360</u>	<u>235,881</u>	<u>210,135</u>
End of Year	<u>\$ 282,042</u>	<u>\$ 263,874</u>	<u>\$ 277,096</u>	<u>\$ 256,360</u>	<u>\$ 235,881</u>

RETIREMENT SYSTEMS OF ALABAMA

Statistical Section

Teachers' Retirement System

Retired Members by Type of Benefit as of September 30, 2020

Amount of Monthly Benefit	Number of Retirants	Type of Retirement ¹			Option Selected ²				
		A	B	C	Maximum	Opt-1	Opt-2	Opt-3	Opt-4
\$ 1 - 250	1,454	858	456	140	252	301	474	427	-
251 - 500	8,819	6,474	923	1,422	2,492	3,297	1,926	1,099	5
501 - 750	9,204	7,319	742	1,143	2,368	3,646	2,011	1,176	3
751 - 1,000	8,188	6,662	685	841	1,927	3,224	1,830	1,203	4
1,001 - 1,250	7,043	5,816	574	653	1,365	2,643	1,908	1,124	3
1,251 - 1,500	6,218	5,180	496	542	1,199	2,223	1,831	963	2
1,501 - 1,750	7,300	6,451	380	469	1,279	2,920	2,098	1,000	3
1,751 - 2,000	9,062	8,465	295	302	1,537	3,964	2,250	1,307	4
2,001 - 2,250	9,494	9,067	236	191	1,414	4,217	2,590	1,270	3
2,251 - 2,500	7,974	7,681	196	97	1,192	3,633	2,113	1,034	2
2,501 - 2,750	5,945	5,741	143	61	855	2,644	1,660	786	-
2,751 - 3,000	4,445	4,300	107	38	644	1,856	1,295	648	2
3,001 - 3,250	3,360	3,238	97	25	454	1,389	1,020	493	4
3,251 - 3,500	2,515	2,417	90	8	337	999	817	361	1
3,501 - 3,750	1,958	1,887	62	9	254	774	646	280	4
3,751 - 4,000	1,505	1,458	38	9	214	590	462	236	3
4,001 - 4,250	1,276	1,232	42	2	171	526	376	201	2
4,251 - 4,500	933	902	29	2	111	358	316	145	3
4,501 - 4,750	722	703	19	-	98	250	251	122	1
4,751 - 5,000	609	596	13	-	78	219	217	94	1
Over 5,000	2,842	2,749	89	4	324	857	1,161	486	14
Totals	100,866	89,196	5,712	5,958	18,565	40,530	27,252	14,455	64

¹ Type of Retirement

A - Service
B - Survivor Benefit
C - Disability

² 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, 2020

Amount of Monthly Benefit	Number of Retirants	Type of Retirement ¹			Option Selected ²				
		A	B	C	Maximum	Opt-1	Opt-2	Opt-3	Opt-4
\$ 1 - 250	380	172	199	9	43	25	65	185	62
251 - 500	3,619	2,430	851	338	891	875	882	771	200
501 - 750	5,281	3,718	790	773	1,503	1,558	1,132	850	238
751 - 1,000	5,123	3,701	585	837	1,445	1,614	926	841	297
1,001 - 1,250	5,745	4,565	488	692	1,265	1,975	1,202	892	411
1,251 - 1,500	5,137	4,249	385	503	1,089	1,846	1,131	771	300
1,501 - 1,750	4,789	4,156	283	350	938	1,785	1,061	781	224
1,751 - 2,000	4,468	4,059	171	238	810	1,724	935	750	249
2,001 - 2,250	3,880	3,583	136	161	688	1,338	934	671	249
2,251 - 2,500	3,254	3,017	108	129	572	1,196	793	537	156
2,501 - 2,750	2,588	2,433	70	85	424	984	634	440	106
2,751 - 3,000	2,035	1,933	56	46	336	779	497	367	56
3,001 - 3,250	1,786	1,702	55	29	286	701	451	307	41
3,251 - 3,500	1,287	1,232	38	17	198	501	327	231	30
3,501 - 3,750	1,037	1,011	17	9	169	408	246	191	23
3,751 - 4,000	756	732	16	8	132	307	168	134	15
4,001 - 4,250	648	635	8	5	85	256	165	127	15
4,251 - 4,500	479	461	10	8	73	180	125	93	8
4,501 - 4,750	380	371	8	1	63	141	101	66	9
4,751 - 5,000	341	332	7	2	55	116	93	73	4
Over 5,000	1,354	1,327	19	8	210	498	344	280	22
Totals	54,367	45,819	4,300	4,248	11,275	18,807	12,212	9,358	2,715

¹ Type of Retirement

A - Service
B - Survivor Benefit
C - Disability

² 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, 2020

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	13	-	13	-	13	-
1,501 - 1,750	6	1	5	-	5	1
1,751 - 2,000	5	-	5	-	5	-
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	3	-	3	-	3	-
3,001 - 3,250	7	2	2	3	3	4
3,251 - 3,500	15	4	11	-	11	4
3,501 - 3,750	18	1	17	-	17	1
3,751 - 4,000	34	1	33	-	34	-
4,001 - 4,250	3	3	-	-	-	3
4,251 - 4,500	5	4	1	-	2	3
4,501 - 4,750	9	8	-	1	1	8
4,751 - 5,000	11	7	4	-	4	7
Over 5,000	312	304	4	4	55	257
Totals	456	335	112	9	167	289

† 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
2020					
Average monthly benefit	\$ 1,060	\$ 1,408	\$ 2,068	\$ 2,649	\$ 3,665
Average final average salary	\$ 51,082	\$ 50,019	\$ 56,716	\$ 62,502	\$ 68,785
Number of active retirants	812	682	821	1,418	899
2019					
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
2018					
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
2017					
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
2016					
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
2015					
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
2014					
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
2013					
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
2012					
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
2011					
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

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
2020					
Average monthly benefit	\$ 842	\$ 1,283	\$ 2,058	\$ 2,712	\$ 3,742
Average final average salary	\$ 44,040	\$ 46,227	\$ 55,166	\$ 61,800	\$ 70,016
Number of active retirants*	475	397	392	754	494
2019					
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
2018					
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
2017					
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
2016					
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
2015					
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
2014					
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
2013					
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
2012					
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
2011					
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

*Does not include 2,100 retirants that transferred in from the City of Montgomery on or after October 1, 2019.

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+
2020					
Average monthly benefit	\$ 6,896	\$ 7,518	\$ 9,714	\$ 9,767	\$ -
Average final average salary	\$ 110,342	\$ 120,292	\$ 155,422	\$ 156,272	\$ -
Number of active retirants	2	3	3	2	-
2019					
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
2018					
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	-
2017					
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
2016					
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	-
2015					
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
2014					
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	-
2013					
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
2012					
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	-
2011					
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

RETIREMENT SYSTEMS OF ALABAMA

Statistical Section

Employees' Retirement System

Local Participating Employers

Abbeville Water Works & Sewer Board
Abbeville, City of
Adamsville, City of
Addison, Town of
Alabama 9-1-1 Board
Alabama Cooperative Extension System
Alabama Elk River Development Agency
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 State Docks Department
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 Housing Authority
Bayou La Batre Utilities Board
Bayou La Batre, City of
Bear Creek Development Authority
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
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
Camp Hill, Town 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 Alabama Youth Services
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
Coffeeville, 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

RETIREMENT SYSTEMS OF ALABAMA

Statistical Section

Employees' Retirement System

Local Participating Employers

Covington County E-911 Board
Covington County Water Authority
Cowarts, Town of
Crenshaw County Commission
Crenshaw County Emergency Communications District
Creola, City of
Crossville Water Works Board
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
CWM 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 Legislative Office
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
Etowah County Solid Waste Disposal Authority
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
 Foley, City of
 Forestdale Fire District
 Fort Deposit Water Works & Sewer Board
 Fort Deposit, Town of
 Fort Payne Housing Authority
 Fort Payne Improvement Authority
 Fort Payne Water Works Board
 Fort Payne, City of
 Fosters-Ralph Water Authority
 Franklin County Commission
 Franklin County Soil & Water Conservation
 District
 Franklin County Water Service Authority
 Frisco City, Town of
 Fultondale Gas Board
 Fultondale, Town of
 Fyffe, Town of
 Gadsden Water Works & Sewer Board
 Gadsden, City of
 Gantt, Town of
 Garden Town, Town of
 Gardendale, City of
 Geneva County Commission
 Geneva County E-911
 Geneva Water Works & Sewer Board
 Geneva, City of
 Georgiana Housing Authority
 Georgiana, City of
 Geraldine, Town of
 Gilbertown Utilities Board
 Gilbertown, Town of
 Glencoe Water & Sewer Board
 Glencoe, City of
 Goodwater Water Works and Sewer Board
 Good Hope, City of
 Goodwater, City of
 Gordo, City of
 Governmental Utility Services Corporation of
 Moody
 Governmental Utility Services Corporation of
 the City of Bessemer
 Grant, Town of
 Graysville Public Library
 Graysville, City of
 Greater Etowah Mental Retardation 310 Board
 Greene County Ambulance Service
 Greene County Commission
 Greene County E-911 Communication District
 Greene County Hospital & Nursing Home
 Greene County Housing Authority

Greene County Industrial Development
 Authority
 Greene County Racing Commission
 Greenhill Water & Fire Protection Authority
 Greensboro Housing Authority
 Greensboro, City of
 Greenville Housing Authority
 Greenville Water Works & Sewer Board
 Greenville, City of
 Grove Hill, City of
 Guin Housing Authority
 Guin Water Works & Sewer Board
 Guin, City of
 Gulf Shores Utilities Board
 Gulf Shores, City of
 Guntersville Electric Board
 Guntersville Housing Authority
 Guntersville Water Works & Sewer Board
 Guntersville, City of
 Gurley, Town of
 Hackleburg Housing Authority
 Hackleburg Water Board
 Hackleburg, Town of
 Hackneyville Water & Fire Protection Authority
 Hale County Commission
 Hale County Emergency Medical Service
 Hale County Soil & Water Conservation District
 Haleyville, City of
 Hamilton Housing Authority
 Hamilton, City of
 Hammondville, Town of
 Hanceville Water Works & Sewer Board
 Hanceville, City of
 Harpersville, Town of
 Hartford, City of
 Hartselle Utilities Board
 Hartselle, City of
 Hartselle, Housing Authority of the City of
 Harvest-Monrovia Water, Sewer & Fire
 Protection Authority
 Hayden, Town of
 Hayneville, City of
 Headland Housing Authority
 Headland, City of
 Heflin Water Works & Sewer Board
 Heflin, City of
 Helena Utilities Board
 Helena, City of
 Henagar, City of
 Henry County Commission
 Henry County Water Authority
 Highland Water Authority
 Historic Blakeley Authority
 Hillsboro, Town of
 Hodges, Town of
 Hokes Bluff Water Board

RETIREMENT SYSTEMS OF ALABAMA

Statistical Section

Employees' Retirement System

Local Participating Employers

Hokes Bluff, Town of	Lamar County Communications District
Holly Pond, Town of	Lamar County Gas District
Hollywood, Town of	Lanett, City of
Homewood, City of	Lauderdale County Commission
Hoover, City of	Lauderdale County Community Corrections Authority
Horseshoe Bend Regional Library	Lauderdale County Regional Library System
Houston County Commission	Lawrence County Commission
Houston County Soil Conservation District	Lee County Commission
Houston County Water Authority	Leeds Housing Authority
Houston-Love Memorial Library	Leeds Water Works Board
Hueytown, City of	Leeds, City of
Huguley Water, Sewer & Fire Protection Authority	Lee-Russell Council of Governments
Huntsville Electric Utilities System	Leesburg, Town of
Huntsville Gas Utilities System	Leighton Water & Sewer Board
Huntsville Solid Waste Disposal Authority	Leighton, Town of
Huntsville Waterworks Utilities System	Level Plains, Town of
Huntsville, City of	Limestone County Commission
Huntsville/Madison County Convention & Visitors Bureau	Limestone County Water & Sewer Authority
Huntsville-Madison County Airport Authority	Lincoln, City of
Huntsville-Madison County Marina & Port Authority	Linden, City of
Huntsville-Madison County Mental Health Center Board	Lineville Housing Authority
Ider, Town of	Lineville Waterworks & Sewer Board
Indian Pines Recreational Authority	Lineville, City of
International Motorsports Hall of Fame	Littleville, Town of
Irondale, City of	Livingston Housing Authority
J. Paul Jones Hospital	Livingston, City of
Jackson County Commission	Loachapoka Water Authority
Jackson County Economic Development Authority	Locust Fork, Town of
Jackson County Emergency Management Communications District	Lowndes County Commission
Jackson County Legislative Delegation Office	Loxley, City of
Jackson County Soil & Water Conservation District	Luverne Housing Authority
Jackson County Water Authority	Luverne, City of
Jackson, City of	Lynn, Town of
Jackson's Gap Water Authority	Macon County Commission
Jackson's Gap, Town of	Macon County Racing Commission
Jacksonville Housing Authority	Madison County 310 Board
Jacksonville Water Works, Gas & Sewer Board	Madison County Commission
Jacksonville, City of	Madison County Communications District
Jasper Waterworks & Sewer Board	Madison County Legislative Office
Jasper, City of	Madison Water & Wastewater Board
Jefferson County Department of Health	Madison, City of
Jefferson County Housing Authority	Magnolia Springs, Town of
Jefferson-Blount-St. Clair Mental Health Authority	Malvern, Town of
Jemison, Town of	Maplesville Waterworks & Gas Board
Joppa, Hulaco & Ryan Water Authority	Maplesville, City of
Kennedy, City of	Marengo County Commission
Killen, City of	Marengo County Emergency Communications District
Kinsey, Town of	Marengo Nursing Home
LaFayette, City of	Margaret, Town of
Lamar County Commission	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 County Legislative Office
 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
 Mentone, Town of
 Middle Alabama Area Agency on Aging
 Midfield Library Board
 Midfield, City of
 Midway, 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 Law Enforcement & Firefighters' Pension Fund
 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

RETIREMENT SYSTEMS OF ALABAMA

Statistical Section

Employees' Retirement System

Local Participating Employers

Opp, City of	Randolph County Commission
Orange Beach Water, Sewer & Fire Protection Authority	Randolph County E9-1-1
Orange Beach, Town of	Red Bay Housing Authority
Owassa/Brownville Water Authority	Red Bay Water Works & Gas Board
Owens Cross Roads Water Authority	Red Bay, City of
Owens Cross Roads, City of	Red Mountain Greenway & Recreational Area Commission
Oxford Emergency Medical Services	Reform Housing Authority
Oxford, City of	Reform, City of
Ozark Utilities Board	Regional Housing Authority of Lawrence, Cullman & Morgan Counties
Ozark, City of	Rehobeth, City of
Ozark-Dale County E-911	Remlap-Pine Mountain Water Authority
Parrish Water Works & Sewer Board	Repton, Town of
Parrish, Town of	Riverbend Center for Mental Health
Pelham, City of	Riverside, Town of
Pell City Housing Authority	Roanoke Utility Board
Pell City, City of	Roanoke, City of
Pennington Utilities Board	Robertsdale, City of
Pennington, City of	Rockford Utilities Board
Perdido Bay Water, Sewer and Fire Protection District	Rockford, Town of
Perry County Commission	Rocky Ridge Fire District
Perry County E-911	Rogersville Water Works & Sewer Board
Phenix City Utilities	Rogersville, Town of
Phenix City, City of	Russell County Commission
Phil Campbell Housing Authority	Russell County Emergency Communications District
Phil Campbell Water Works & Sewer Board	Russell County Soil & Water Conservation District
Phil Campbell, Town of	Russell County Water Authority
Pickens County Commission	Russellville Electric Board
Pickens County E-911 Board	Russellville Gas Board
Pickens County Water Authority	Russellville Housing Authority
Piedmont Housing Authority	Russellville Water & Sewer Board
Piedmont, City of	Russellville, City of
Pike County Commission	Rutledge, Town of
Pike County Communications District	Samson, City of
Pike County Soil & Water Conservation District	Saraland Water Service
Pike County Water Authority	Saraland, City of
Pike Road Volunteer Fire Protection Authority	Sardis City Water Board
Pike Road, Town of	Sardis, City of
Pine Bluff Water Authority	Satsuma Water Works Board
Pine Hill, Town of	Satsuma, City of
Pine Level Water Authority	Scottsboro Electric Power Board
Pinson, City of	Scottsboro Housing Authority
Pisgah, Town of	Scottsboro Public Library
Pleasant Grove, City of	Scottsboro Public Park & Recreation Board
Prattville Housing Authority	Scottsboro Waterworks, Sewer & Gas Board
Prattville Water Works Board	Scottsboro, City of
Prattville, City of	Section Waterworks Board
Priceville, Town of	Section, Town of
Prichard Housing Authority	Selma Housing Authority
Pryor Field Airport Authority	Selma Water & Sewer Board
Quint-Mar Water Authority	Selma, City of
Ragland Water Works Board	Semmes, City of
Ragland, Town of	Sheffield Utilities Board
Rainbow City Utilities Board	Sheffield, City of
Rainbow City, City of	Shelby County Commission
Rainsville, City of	

Shelby County Community Corrections
Shelby County Emergency Management
Communications District
Shelby County Legislative Office
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
Silas, Town of
Silverhill, Town of
Skyline, Town of
Slocumb Waterworks & Sewer Board
Slocumb, 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
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
St. Stephens Historical Commission
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, 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 County Soil & Water Conservation 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

RETIREMENT SYSTEMS OF ALABAMA

Statistical Section

Employees' Retirement System

Local Participating Employers

Tuscaloosa, City of	Wilton, Town of
Tuscumbia, City of	Winfield Water Works & Sewer Board
Tuskegee Utilities Board	Winfield, City of
Tuskegee, City of	Winston County Commission
Union Grove Utilities Board	Winston County E9-1-1 Communications
Union Springs Utilities Board	District
Union Springs, City of	Woodland, Town of
Uniontown Housing Authority	Woodstock, Town of
Uniontown Utilities Board	York Housing Authority
Uniontown, Town of	York, City 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	
Walker County Soil & Water Conservation District	
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	

RETIREMENT SYSTEMS OF ALABAMA

Statistical Section

Employees' Retirement System

Ten-Year History of Largest Employers

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
1) Employer	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
# of Active Members	29,019	28,533	29,664	29,548	29,756	30,109	30,297	30,659	31,795	33,885
% of Total Active Members	33.95%	33.75%	34.27%	34.50%	35.08%	35.43%	35.40%	35.84%	36.85%	38.36%
2) Employer	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
# of Active Members	2,353	2,443	2,362	2,296	2,258	2,207	2,243	2,209	2,192	2,195
% of Total Active Members	2.75%	2.89%	2.73%	2.68%	2.66%	2.60%	2.62%	2.58%	2.54%	2.48%
3) Employer	Montgomery, City of	Mobile County	Mobile County	Mobile County	Mobile County	Mobile County	Mobile County	Mobile County	Mobile County	Mobile County
# of Active Members	2,206	1,539	1,596	1,610	1,604	1,587	1,578	1,625	1,657	1,672
% of Total Active Members	2.58%	1.82%	1.84%	1.88%	1.89%	1.87%	1.84%	1.90%	1.92%	1.89%
4) Employer	Mobile County	Mobile, City of	Mobile, City of	Mobile, City of	Mobile, City of	Mobile, City of	AlaPointe Health*	Mobile, City of	Mobile, City of	Mobile, City of
# of Active Members	1,514	1,058	1,104	1,150	1,195	1,250	1,341	1,282	1,254	1,310
% of Total Active Members	1.77%	1.25%	1.28%	1.34%	1.41%	1.47%	1.57%	1.50%	1.45%	1.48%
5) Employer	Madison County	Madison County	Madison County	Madison County	Madison County	Madison County	Mobile, City of	AlaPointe Health*	Madison County	Madison County
# of Active Members	1,048	1,044	1,083	1,107	1,145	1,152	1,254	1,236	1,154	1,162
% of Total Active Members	1.23%	1.24%	1.25%	1.29%	1.35%	1.36%	1.47%	1.44%	1.34%	1.32%
6) Employer	Dothan, City of	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
# of Active Members	1,022	1,035	1,032	1,018	999	995	1,152	1,174	1,002	957
% of Total Active Members	1.20%	1.22%	1.19%	1.19%	1.18%	1.17%	1.35%	1.37%	1.16%	1.08%
7) Employer	Mobile, City of	Auburn, City of	Auburn, City of	Montgomery County	Montgomery County	AlaPointe Health*	Dothan, City of	Dothan, City of	Dothan, City of	Helen Keller Hospital
# of Active Members	1,022	822	828	801	807	792	996	985	966	956
% of Total Active Members	1.20%	0.97%	0.96%	0.94%	0.95%	0.93%	1.16%	1.15%	1.12%	1.08%
8) Employer	Tuscaloosa, City of	Tuscaloosa, City of	Tuscaloosa, City of	Auburn, City of	Tuscaloosa, City of	Tuscaloosa, City of	Tuscaloosa, City of	Tuscaloosa, City of	AlaPointe Health*	Montgomery County
# of Active Members	768	770	759	786	774	777	790	775	911	794
% of Total Active Members	0.90%	0.91%	0.88%	0.92%	0.91%	0.91%	0.92%	0.91%	1.06%	0.90%
9) Employer	Auburn, City of	Montgomery County	Montgomery County	Tuscaloosa, City of	Auburn, City of	Montgomery County	Montgomery County	Montgomery County	Montgomery County	AlaPointe Health*
# of Active Members	759	751	757	783	752	766	769	767	771	762
% of Total Active Members	0.89%	0.89%	0.87%	0.91%	0.89%	0.90%	0.90%	0.90%	0.89%	0.86%
10) Employer	Montgomery County	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
# of Active Members	715	726	689	706	704	706	678	729	763	757
% of Total Active Members	0.84%	0.86%	0.80%	0.82%	0.83%	0.83%	0.79%	0.85%	0.88%	0.86%
Total # of Active Members	85,485	84,534	86,565	85,657	84,814	84,985	85,585	85,549	86,290	88,341

* Formerly Greater Mobile-Washington Co. Mental Health Board







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