

Component Units of the State of Alabama

Annual Comprehensive Financial Report

For the Fiscal Year Ended September 30, 2022





The Retirement Systems of Alabama

ANNUAL COMPREHENSIVE FINANCIAL REPORT

For the Fiscal Year Ended September 30, 2022

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

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

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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 20, 2023

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, 2022. The Retirement Systems of Alabama includes the Teachers' Retirement System (TRS), the Employees' Retirement System (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's Annual Comprehensive 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 employees of counties, cities, towns, and public or quasi-public organizations. The JRF was established pursuant to the *Code of Alabama 1975, Title 12, Chapters 17 & 18* (Act 1163 of the Legislature of 1973) to provide benefits to qualified justices, judges, circuit clerks, and district attorneys. Additional information regarding the administration and history of each system, including laws establishing each plan and services provided, can be found in the Notes to the Combined Financial Statements in the Financial Section of this report.

Financial Information

Accounting Method - As required by U. S. Generally Accepted Accounting Principles (U.S. 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 which 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 2022 and 2021. Also, an analysis of significant variances between fiscal years 2022 and 2021 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 that the member is expected to receive throughout retirement.

At September 30, 2021, the date of the most recent actuarial valuation, the number of participants in the TRS was 294,880, ERS participants totaled 186,138, and JRF participants totaled 860. The following table compares the funded status of each as of September 30, 2021 and 2020:

Funded Status			
System	9/30/2021	9/30/2020	% Increase/ (Decrease)
TRS	70.2%	70.7%	-0.5%
ERS	67.7%	68.2%	-0.5%
JRF	66.8%	66.1%	0.7%

The funded statuses of both the TRS and ERS decreased primarily due to the changes in assumptions as a result of the experience study for the five-year period ended September 30, 2020. These changes contributed significantly to an increase in the unfunded actuarial accrued liability at September 30, 2021, compared to the liability at September 30, 2020. However, the decreases were partially offset by gains due to investment earnings greater than expected. The funded status of the JRF increased because salary increases were lower than expected and investment earnings were higher than expected which offset the increase in its unfunded actuarial accrued liability at September 30, 2021, compared to the liability at September 30, 2020.

Investment Activity

Total investments for the RSA decreased in fiscal year 2022, primarily due to decreases in fair value of investments. Total pension fund investments managed by the RSA decreased from \$46.0 billion at September 30, 2021, to \$38.4 billion at September 30, 2022, a decrease of 16.54%.

	Investments, at Fair Value		Interest & Dividend Income	
	9/30/2022	9/30/2021	9/30/2022	9/30/2021
TRS	\$25.2 billion	\$30.2 billion	\$629.2 million	\$576.5 million
ERS	\$12.9 billion	\$15.4 billion	\$330.0 million	\$302.8 million
JRF	\$292.4 million	\$360.5 million	\$7.2 million	\$6.7 million

	Net Change in Fair Value of Investments	
	9/30/2022	9/30/2021
TRS	(\$4.5 billion)	\$5.2 billion
ERS	(\$2.3 billion)	\$2.6 billion
JRF	(\$59.1 million)	\$57.0 million

Total returns were -13.18%, -13.02%, and -14.87% for the TRS, ERS, and JRF, respectively. As we highlighted in this letter last year, inflation was making a resurgence and the Federal Reserve was beginning to unwind their balance sheet. Fast forward a quarter into calendar 2022 and the Federal Reserve went full tilt with both quantitative tightening as well as hiking the Fed Funds Rate. The main impact to equities was a massive compression in what the multiple market participants were willing to pay to own stocks. Stocks didn't suffer alone, as core fixed income returns were some of the worst in decades. In short, there were very few asset classes within which to hide last year. We expect that volatility will remain elevated as the markets are hyper-focused on the glide path of inflation and interest rates. For the first time in several years, we are finding relatively attractive investments in fixed income, and thus are increasing the weighting within the portfolios. There is an abundance of negative sentiment in the market which gives us some confidence that maybe the worst part is behind us. 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 the investment policy statements, is included in the Investment Section of this report. The Schedule of Broker Commissions Paid can be found on page 122 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 the 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 CPAs and Advisors LLC, Certified Public Accountants, issued an unmodified ("clean") opinion on the RSA's financial statements for the fiscal year ended September 30, 2022. The independent auditors' report is located at the front of the Financial Section of this report.

Highlights and Initiatives

The RSA's Robert Trent Jones Golf Trail announced record rounds played in 2021. There were over 600,000 rounds played which was a 25% increase over 2020! This was the most rounds played since the Trail opened in 1992. Additionally, several properties owned by the RSA were recognized and honored during the fiscal year. At the 8th Annual World Golf Ceremony, Prattville's Capitol Hill on the Robert Trent Jones Golf Trail was awarded Alabama's Best Golf Course for 2021, and the Renaissance Ross Bridge Golf Resort & Spa was selected as Alabama's Best Golf Hotel for 2021. Capitol Hill was also a Top 50 Nominee for North America's Best Golf Course.

The hotels owned by the RSA continue to be recognized and honored as well. The Grand Hotel Golf Resort & Spa ranked first out of 140 Autograph Collection properties. The Battlehouse Renaissance Mobile Hotel & Spa, the Renaissance Mobile Riverview Plaza Hotel & Spa, and the Renaissance Montgomery Hotel & Spa at the Convention Center all ranked in the Top 10 out of 87 Renaissance properties across North America.

Awards

The Government Finance Officers Association (GFOA) of the United States and Canada 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, 2021. 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 of Alabama received the Public Pension Coordinating Council's (PPCC) Recognition Award for Funding 2022. 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, 2021

Christopher P. Morrill

Executive Director/CEO



Public Pension Coordinating Council

***Recognition Award for Administration
2022***

Presented to

The Retirement Systems of Alabama

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

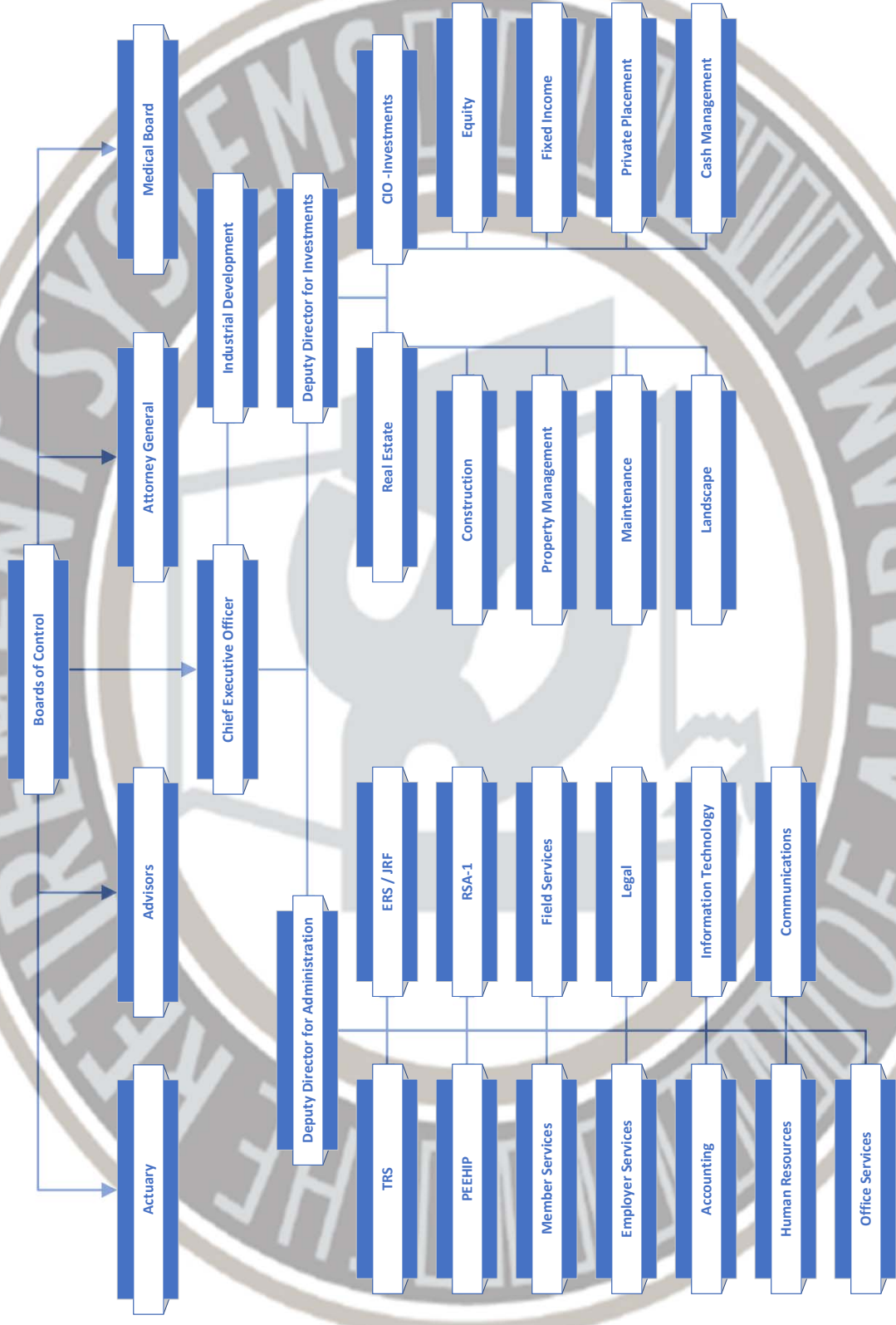
Presented by the Public Pension Coordinating Council, a confederation of

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 cursive script that reads "Alan H. Winkle".

Alan H. Winkle
Program Administrator

The Retirement Systems of Alabama Organizational Chart



Teachers' Retirement System Board of Control

Ex Officio Members

Dr. Eric Mackey, State Superintendent of Education

Honorable Young Boozer, State Treasurer

Mr. Bill Poole, State Finance Director

Elected Members

Chair, Mr. Luther P. Hallmark, Superintendent Position

Vice Chair, Mr. John R. Whaley, Teacher Position No. 2

Ms. Peggy Mobley, Retired Position No. 1

Ms. Anita Gibson, Retired Position No. 2

Mr. Thomas E. Jones, Principal Position

Dr. Susan Williams Brown, Postsecondary Position

Dr. William A. Walsh, Higher Education Position No. 1

Ms. Kelli D. Shomaker, Higher Education Position No. 2

Ms. Amanda Miller, Teacher Position No. 1

Ms. Mary Beth Tate, Teacher Position No. 3

Mrs. Susan Lockridge, Support Personnel Position No. 1

Ms. Amy Knight Fowler, Support Personnel Position No. 2

Employees' Retirement System Board of Control**

Ex Officio Members

Chair, Honorable Kay Ivey, Governor

Honorable Young Boozer, State Treasurer

Mr. Bill Poole, State Finance Director

Mrs. Jackie B. Graham, State Personnel 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 No. 1

Mrs. Lindsey Ward, Active State Employee Position No. 2

Mr. David J. Harer, Active City Employee Position

Mrs. Lisa Statum, Active Local Employee Position No. 2

Mr. Michael Gillespie, Active or Retired Local Employee Position

Mr. Ricky Harcrow, Active County Employee Position

Appointed Members

Lt. David Colston

Ms. Tammy Rolling

Mr. Edward N. Austin

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

RETIREMENT SYSTEMS OF ALABAMA

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.

Employer Services, Margaret B. Sellars, B.S.

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

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

Investment Staff

Private Placements Portfolio Manager, Rachel Daniels, MACC, CFA, 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, Allan Carr, M.B.A., CFA

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

Assistant Director of Equities, Hunter Bronson, M.S., 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, Shaun Wasso, M.B.A.

Cash Management/Operations, Lauren I. Bright, B.A.

Advisors

Independent Certified Public Accountants, Carr, Riggs & Ingram CPAs and Advisors 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





Carr, Riggs & Ingram, LLC
7550 Halcyon Summit Drive
Montgomery, AL 36117

334.271.6678
334.271.6697 (fax)
CRIcpa.com

INDEPENDENT AUDITORS' REPORT

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

Opinion

We have audited the accompanying combined financial statements of the Retirement Systems of Alabama (consisting of the Teachers' Retirement System of Alabama, the Employees' Retirement System of Alabama, and the Judicial Retirement Fund (the RSA), a component unit of the State of Alabama) as of and for the year ended September 30, 2022, 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.

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, 2022, and the respective changes in fiduciary net position and, where applicable, cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the Retirement Systems of Alabama, and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the combined financial statements in accordance with accounting principles generally accepted in the United States of America, and for 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.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Retirement Systems of Alabama's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the combined financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a

guarantee that an audit conducted in accordance with generally accepted auditing standards will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with generally accepted auditing standards, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit 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 Retirement Systems of Alabama's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Retirement Systems of Alabama's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, schedule of changes in the net pension liability and related ratios, schedules of employer pension contributions, schedule of investment returns, schedules of proportionate share of the net pension liability, schedules of pension contributions, schedules of proportionate share of the net OPEB liability and schedules of net OPEB contributions for the RSA be presented to supplement the basic financial statements. Such information is the responsibility of management and, 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 Information

Our audit was conducted for the purpose of forming opinion on the combined financial statements that collectively comprise the Retirement Systems of Alabama's basic financial statements. The schedule of administrative expenses, schedule of investment expenses, and schedule of professional/consultant fees are

presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The 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.

Other Information

Management is responsible for the other information included in the annual report. The other information comprises the introductory section, investment section, actuarial section, and statistical section, but does not include the basic financial statements and our auditors' report thereon. Our opinion on the basic financial statements do not cover the other information, and we do not express an opinion or any form of assurance thereon.

In connection with our audit of the basic financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

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, 2021, 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 31, 2022. In our opinion, the summarized comparative information presented herein as of and for the year ended September 30, 2021, is consistent, in all material respects, with the audited financial statements from which it has been derived.

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

January 20, 2023
Montgomery, Alabama



The Retirement Systems of Alabama (RSA or Systems) 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 the RSA as of and for the fiscal year ended September 30, 2022. 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 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 financial 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.

The Combining Statement of Fiduciary Net Position includes all assets, deferred outflows of resources, liabilities, and deferred inflows of resources of the RSA and provides a snapshot of the financial position of the 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.

The Combining Statement of Changes in Fiduciary Net Position reports all additions and deductions of the RSA for the fiscal year. Additions primarily consist of employee contributions, employer contributions, and investment income. Deductions primarily consist 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 disclosures regarding 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 for cash and investments, concentration of investments, securities lending, funded status, net pension liability, net other postemployment benefits (OPEB) liability, contributions required and made, and additional actuarial information relevant to the most recent 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 Employer Pension Contributions to the TRS and the JRF, Schedule of Investment Returns, Schedules of Proportionate Share of the Net Pension Liability, Schedules of Pension Contributions for TRS, ERS, and JRF Employees, Schedules of Proportionate Share of the Net OPEB Liability, and Schedules of OPEB 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, 2022 and 2021

(Dollar Amounts in Thousands)

	2022	2021	Variance	% Increase/ (Decrease)
<i>Assets & Deferred Outflows of Resources</i>				
Cash	\$ 119,111	\$ 101,360	\$ 17,751	17.51
Receivables	305,839	280,319	25,520	9.10
Investment Sales Receivable	20,112	187,906	(167,794)	(89.30)
Investments, at Fair Value	38,399,402	45,887,933	(7,488,531)	(16.32)
Invested Securities Lending Collateral	1,415,158	1,521,152	(105,994)	(6.97)
Property and Equipment, Net	127,997	139,401	(11,404)	(8.18)
Total Assets	<u>40,387,619</u>	<u>48,118,071</u>	<u>(7,730,452)</u>	
Deferred Outflows of Resources	12,195	14,072	(1,877)	(13.34)
Total Assets & Deferred Outflows of Resources	<u>40,399,814</u>	<u>48,132,143</u>	<u>(7,732,329)</u>	(16.06)
<i>Liabilities & Deferred Inflows of Resources</i>				
Accounts Payable and Other Liabilities	15,779	13,558	2,221	16.38
Investment Purchases Payable	23,040	116,078	(93,038)	(80.15)
Net Other Postemployment Benefits Liability	8,131	9,468	(1,337)	(14.12)
Net Pension Liability	35,788	46,796	(11,008)	(23.52)
Securities Lending Collateral	1,415,158	1,521,152	(105,994)	(6.97)
Total Liabilities	<u>1,497,896</u>	<u>1,707,052</u>	<u>(209,156)</u>	(12.25)
Deferred Inflows of Resources	24,339	18,356	5,983	32.59
Total Liabilities & Deferred Inflows of Resources	<u>1,522,235</u>	<u>1,725,408</u>	<u>(203,173)</u>	(11.78)
Net Position Restricted for Pension Benefits	<u>\$ 38,877,579</u>	<u>\$ 46,406,735</u>	<u>\$ (7,529,156)</u>	(16.22)

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, 2022 and 2021
(Dollar Amounts in Thousands)**

	<u>2022</u>	<u>2021</u>	<u>Variance</u>	<u>% Increase/ (Decrease)</u>
<i>(Reductions)/Additions</i>				
Employee Contributions	\$ 861,586	\$ 805,755	\$ 55,831	6.93
Employer Contributions	1,512,818	1,409,063	103,755	7.36
New Units	2,679	-	2,679	100.00
Investment (Loss)/Income	(5,874,166)	8,652,518	(14,526,684)	(167.89)
Transfers Between Systems	15,958	10,667	5,291	49.60
Transfers from an				
Internal Service Fund	-	628	(628)	(100.00)
Marketing & Advertising Revenue	500	-	500	100.00
Direct Appropriation from the				
Education Trust Fund	58,400	-	58,400	100.00
Total (Reductions)/Additions	<u>(3,422,225)</u>	<u>10,878,631</u>	<u>(14,300,856)</u>	<u>(131.46)</u>
<i>Deductions</i>				
Retirement Allowance Payments	3,919,590	3,714,376	205,214	5.52
Return of Contributions, Unit				
Withdrawals & Death Benefits	128,078	117,932	10,146	8.60
Transfers Between Systems	15,958	10,667	5,291	49.60
Administrative Expenses	30,694	31,753	(1,059)	(3.34)
Depreciation	12,611	12,653	(42)	(0.33)
Total Deductions	<u>4,106,931</u>	<u>3,887,381</u>	<u>219,550</u>	<u>5.65</u>
<i>Net (Decrease)/Increase in Fiduciary Net Position</i>	(7,529,156)	6,991,250	(14,520,406)	(207.69)
<i>Net Position Restricted for Pension Benefits</i>				
Beginning of Year	46,406,735	39,415,485	6,991,250	17.74
End of Year	<u>\$ 38,877,579</u>	<u>\$ 46,406,735</u>	<u>\$ (7,529,156)</u>	<u>(16.22)</u>

**Comparison of Individual Fiduciary Net Position
As of September 30, 2022 and 2021
(Dollar Amounts in Thousands)**

	<u>2022</u>	<u>2021</u>	<u>Variance</u>	<u>% Increase/ (Decrease)</u>
TRS	\$ 25,580,871	\$ 30,561,930	\$ (4,981,059)	(16.30)
ERS	12,999,159	15,479,476	(2,480,317)	(16.02)
JRF	297,549	365,329	(67,780)	(18.55)
Total	<u>\$ 38,877,579</u>	<u>\$ 46,406,735</u>	<u>\$ (7,529,156)</u>	<u>(16.22)</u>

RETIREMENT SYSTEMS OF ALABAMA

Financial Section

Management's Discussion and Analysis (Continued)

Financial Analysis

- Primarily all cash on hand at September 30, 2022, 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, 2022.
- Investment sales receivable and investment purchases payable occur as a result of trade date accounting. The decrease in the receivable and payable for fiscal year 2022 was due to the value of securities traded in the current fiscal year and settling in the following fiscal year being less 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:

	<u>TRS</u>	<u>ERS</u>	<u>JRF</u>
Equity	70.36%	69.73%	67.93%
Fixed	18.88%	19.58%	29.71%
Real Estate	10.76%	10.69%	2.36%
Total	<u><u>100.00%</u></u>	<u><u>100.00%</u></u>	<u><u>100.00%</u></u>

- Employer contributions increased as a result of salary increases for fiscal year 2022 due to cost-of-living adjustments. The employer contribution rates for fiscal year 2022 are in the table below. ERS local participating employer contribution rates differ for each employer.

	<u>Tier 1</u>	<u>Tier 2</u>
TRS	12.43%	11.32%
ERS - State Employees	14.83%	14.44%
ERS - State Police	52.22%	42.86%
JRF - Groups 1 & 2	42.10%	-
JRF - Group 3 - Judges' & Clerks' Plan	37.47%	-
JRF - District Attorneys' Plan	19.77%	-

- During fiscal year 2022, returns on investments of the TRS, ERS, and JRF were -13.18%, -13.02%, and -14.87%, respectively. The returns were calculated by State Street Bank.
- During fiscal year 2022, investment income decreased by 167.89% primarily due to a large decrease in the unrealized gains and losses and decreases in net securities lending income. Net securities lending income decreased by 26.33% for the RSA which was primarily driven by a decrease in demand. At September 30, 2022, cash loan balances decreased approximately 6% and non-cash loan balances decreased approximately 1% from their balances at September 30, 2021. 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 1%.
- Retirement allowance payments increased as a result of 7,785 members who retired during fiscal year 2022.
- 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 the actuarial valuation.
- Act 395 of the Legislature of 2022 made a supplemental appropriation for the fiscal year ending September 30, 2022, to the TRS for \$58.4 million for the longevity bonus for each eligible recipient as defined by Act 2022-178.

Funding Status

The Governmental Accounting Standards Board (GASB) issued Statement No. 67, *Financial Reporting for Pension Plans*, which requires the methodology for determining the net pension liability from the accounting perspective to be disclosed in the Notes to the Combined Financial Statements.

At September 30, 2022, TRS and JRF employers' total pension liability was \$41.1 billion and \$504.8 million, respectively. The plan fiduciary net position of TRS and JRF employers was \$25.6 billion and \$297.5 million, respectively, resulting in a net pension liability of \$15.5 billion and \$207.3 million, respectively. The plan fiduciary net position as a percentage of the total pension liability for TRS and JRF employers was 62.21% and 58.94%, 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 \$38.9 billion at September 30, 2022, was available to meet future benefit payments.
- At September 30, 2021, the date of the most recent actuarial valuation, the funding level (actuarial value of assets as a percentage of actuarial accrued liabilities) was 70.2% for the TRS, 67.7% for the ERS, and 66.8% for the JRF.



RETIREMENT SYSTEMS OF ALABAMA

Financial Section

Combining Statement of Fiduciary Net Position

September 30, 2022 with comparative figures for 2021

(Dollar Amounts in Thousands)

	2022			Total
	Teachers' Retirement System	Employees' Retirement System	Judicial Retirement Fund	
Assets				
Cash (Note 4)	\$ 76,353	\$ 38,943	\$ 3,815	\$ 119,111
Receivables				
Employee Contributions	53,159	14,769	183	68,111
Employer Contributions	91,103	29,410	756	121,269
Transfers Receivable from the Teachers' Retirement System	-	998	-	998
Transfers Receivable from the Employees' Retirement System	1,468	-	-	1,468
Investment Sales Receivable	13,819	6,111	182	20,112
Dividends and Interest	74,312	38,055	993	113,360
Miscellaneous Receivable	121	512	-	633
Total Receivables	<u>233,982</u>	<u>89,855</u>	<u>2,114</u>	<u>325,951</u>
Investments, at Fair Value (Note 5)				
Domestic Equity	14,437,073	7,292,918	158,117	21,888,108
Domestic Fixed Income	3,374,491	1,719,690	71,062	5,165,243
International Equities	3,322,273	1,679,190	40,495	5,041,958
Real Estate	2,714,552	1,375,316	6,905	4,096,773
Short-Term	1,391,695	799,842	15,783	2,207,320
Total Investments	<u>25,240,084</u>	<u>12,866,956</u>	<u>292,362</u>	<u>38,399,402</u>
Invested Securities Lending Collateral (Note 5)	910,512	499,408	5,238	1,415,158
Property and Equipment less				
Accumulated Depreciation (Note 8)	88,363	39,634	-	127,997
Total Assets	<u>26,549,294</u>	<u>13,534,796</u>	<u>303,529</u>	<u>40,387,619</u>
Deferred Outflows of Resources - Pensions	6,747	3,073	95	9,915
Deferred Outflows of Resources - Other Postemployment Benefits	1,633	643	4	2,280
Total Assets and Deferred Outflows of Resources	<u>26,557,674</u>	<u>13,538,512</u>	<u>303,628</u>	<u>40,399,814</u>
Liabilities				
Accounts Payable and Other Liabilities	8,991	4,213	109	13,313
Transfers Payable to the Teachers' Retirement System	-	1,468	-	1,468
Transfers Payable to the Employees' Retirement System	998	-	-	998
Investment Purchases Payable	15,560	7,211	269	23,040
Net Other Postemployment Benefits Liability (Note 9)	5,018	3,087	26	8,131
Net Pension Liability (Note 10)	19,723	15,723	342	35,788
Securities Lending Collateral (Note 5)	910,512	499,408	5,238	1,415,158
Total Liabilities	<u>960,802</u>	<u>531,110</u>	<u>5,984</u>	<u>1,497,896</u>
Deferred Inflows of Resources - Pensions	7,810	2,631	51	10,492
Deferred Inflows of Resources - Other Postemployment Benefits	8,191	5,612	44	13,847
Total Liabilities and Deferred Inflows of Resources	<u>976,803</u>	<u>539,353</u>	<u>6,079</u>	<u>1,522,235</u>
Net Position Restricted for Pension Benefits (Note 3)	<u>\$ 25,580,871</u>	<u>\$ 12,999,159</u>	<u>\$ 297,549</u>	<u>\$ 38,877,579</u>

See accompanying Notes to the Combined Financial Statements.

	2021			
	Teachers' Retirement System	Employees' Retirement System	Judicial Retirement Fund	Total
Assets				
Cash	\$ 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 the Teachers' Retirement System	-	123	-	123
Transfers Receivable from the 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	<u>347,406</u>	<u>119,110</u>	<u>1,709</u>	<u>468,225</u>
Investments, at Fair Value				
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	<u>30,172,515</u>	<u>15,354,928</u>	<u>360,490</u>	<u>45,887,933</u>
Invested Securities Lending Collateral	1,095,386	421,801	3,965	1,521,152
Property and Equipment less				
Accumulated Depreciation	96,318	43,083	-	139,401
Total Assets	<u>31,776,769</u>	<u>15,971,551</u>	<u>369,751</u>	<u>48,118,071</u>
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	<u>31,786,962</u>	<u>15,975,356</u>	<u>369,825</u>	<u>48,132,143</u>
Liabilities				
Accounts Payable and Other Liabilities	8,685	4,135	85	12,905
Transfers Payable to the Teachers' Retirement System	-	530	-	530
Transfers Payable to the Employees' Retirement System	123	-	-	123
Investment Purchases Payable	75,509	40,569	-	116,078
Net Other Postemployment Benefits Liability	5,705	3,732	31	9,468
Net Pension Liability	28,764	17,674	358	46,796
Securities Lending Collateral	1,095,386	421,801	3,965	1,521,152
Total Liabilities	<u>1,214,172</u>	<u>488,441</u>	<u>4,439</u>	<u>1,707,052</u>
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	<u>1,225,032</u>	<u>495,880</u>	<u>4,496</u>	<u>1,725,408</u>
Net Position Restricted for Pension Benefits	<u>\$ 30,561,930</u>	<u>\$ 15,479,476</u>	<u>\$ 365,329</u>	<u>\$ 46,406,735</u>

RETIREMENT SYSTEMS OF ALABAMA

Financial Section

Combining Statement of Changes in Fiduciary Net Position

For the Fiscal Year Ended September 30, 2022 with comparative figures for 2021

(Dollar Amounts in Thousands)

	2022			Total
	Teachers' Retirement System	Employees' Retirement System	Judicial Retirement Fund	
Additions/(Reductions)				
Contributions				
Employee	\$ 553,615	\$ 303,507	\$ 4,464	\$ 861,586
Employer	932,332	559,869	20,617	1,512,818
New Units	-	2,679	-	2,679
Transfers from the Teachers' Retirement System	-	6,213	-	6,213
Transfers from the Employees' Retirement System	9,517	-	228	9,745
Marketing & Advertising Revenue	335	165	-	500
Direct Appropriation from the Education Trust Fund	58,400	-	-	58,400
Total Contributions	<u>1,554,199</u>	<u>872,433</u>	<u>25,309</u>	<u>2,451,941</u>
Investment Income (Note 5)				
From Investing Activities				
Net Decrease in Fair Value of Investments	(4,500,179)	(2,274,633)	(59,058)	(6,833,870)
Interest and Dividends	629,210	329,975	7,229	966,414
Total Investment Loss from Investing Activities	<u>(3,870,969)</u>	<u>(1,944,658)</u>	<u>(51,829)</u>	<u>(5,867,456)</u>
Less: Investment Expenses, Net	11,573	3,544	-	15,117
Net Investment Loss from Investing Activities	<u>(3,882,542)</u>	<u>(1,948,202)</u>	<u>(51,829)</u>	<u>(5,882,573)</u>
From Securities Lending Activities				
Securities Lending Income	12,606	6,284	94	18,984
Less Securities Lending Expenses:				
Borrower Rebates	4,585	2,367	23	6,975
Management Fees	2,406	1,175	21	3,602
Total Securities Lending Expenses	<u>6,991</u>	<u>3,542</u>	<u>44</u>	<u>10,577</u>
Net Income from Securities Lending Activities	<u>5,615</u>	<u>2,742</u>	<u>50</u>	<u>8,407</u>
Total Net Investment Loss	<u>(3,876,927)</u>	<u>(1,945,460)</u>	<u>(51,779)</u>	<u>(5,874,166)</u>
Total Reductions	<u>(2,322,728)</u>	<u>(1,073,027)</u>	<u>(26,470)</u>	<u>(3,422,225)</u>
Deductions				
Retirement Allowance Payments	2,555,391	1,323,657	40,542	3,919,590
Return of Contributions and Death Benefits	68,722	58,978	325	128,025
Unit Withdrawals	-	53	-	53
Transfers to the Teachers' Retirement System	-	9,517	-	9,517
Transfers to the Employees' Retirement System	6,213	-	-	6,213
Transfers to the Judicial Retirement Fund	-	228	-	228
Administrative Expenses	18,945	11,306	443	30,694
Depreciation (Note 8)	9,060	3,551	-	12,611
Total Deductions	<u>2,658,331</u>	<u>1,407,290</u>	<u>41,310</u>	<u>4,106,931</u>
Net Decrease in Fiduciary Net Position	(4,981,059)	(2,480,317)	(67,780)	(7,529,156)
Net Position Restricted for Pension Benefits (Note 3)				
Beginning of Year	30,561,930	15,479,476	365,329	46,406,735
End of Year	<u>\$ 25,580,871</u>	<u>\$ 12,999,159</u>	<u>\$ 297,549</u>	<u>\$ 38,877,579</u>

See accompanying Notes to the Combined Financial Statements.

	2021			Total
	Teachers' Retirement System	Employees' Retirement System	Judicial Retirement Fund	
Additions				
Contributions				
Employee	\$ 519,627	\$ 281,975	\$ 4,153	\$ 805,755
Employer	874,401	516,402	18,260	1,409,063
Transfers from the Teachers' Retirement System	-	4,421	-	4,421
Transfers from the Employees' Retirement System	6,128	-	118	6,246
Transfers from an Internal Service Fund	377	251	-	628
Total Contributions	<u>1,400,533</u>	<u>803,049</u>	<u>22,531</u>	<u>2,226,113</u>
Investment Income	74,312			
<i>From Investing Activities</i>				
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	<u>5,731,564</u>	<u>2,861,078</u>	<u>63,659</u>	<u>8,656,301</u>
Less: Investment Expenses, Net	11,191	4,003	-	15,194
Net Investment Income from Investing Activities	<u>5,720,373</u>	<u>2,857,075</u>	<u>63,659</u>	<u>8,641,107</u>
<i>From Securities Lending Activities</i>				
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	<u>3,553</u>	<u>1,812</u>	<u>34</u>	<u>5,399</u>
Net Income from Securities Lending Activities	<u>7,466</u>	<u>3,873</u>	<u>72</u>	<u>11,411</u>
Total Net Investment Income	<u>5,727,839</u>	<u>2,860,948</u>	<u>63,731</u>	<u>8,652,518</u>
Total Additions	<u>7,128,372</u>	<u>3,663,997</u>	<u>86,262</u>	<u>10,878,631</u>
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 the Teachers' Retirement System	-	6,128	-	6,128
Transfers to the Employees' Retirement System	4,421	-	-	4,421
Transfers to the Judicial Retirement Fund	-	118	-	118
Administrative Expenses	20,402	10,977	374	31,753
Depreciation	9,133	3,520	-	12,653
Total Deductions	<u>2,512,831</u>	<u>1,335,059</u>	<u>39,491</u>	<u>3,887,381</u>
Net Increase in Fiduciary Net Position	4,615,541	2,328,938	46,771	6,991,250
Net Position Restricted for Pension Benefits				
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>

RETIREMENT SYSTEMS OF ALABAMA

Financial Section

Notes to the Combined Financial Statements For the Fiscal Year Ended September 30, 2022

(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 Position No. 1.
 - b. Teacher Position No. 2.
 - c. Teacher Position No. 3.
 - d. Educational Support Personnel Position No. 1.
 - e. Educational Support Personnel Position No. 2.
 - f. Retired Position No. 1.
 - g. Retired Position No. 2.
 - h. Superintendents' Position.
 - i. Principals' Position.
 - j. Postsecondary Position.
 - k. Higher Education Position No. 1.
 - l. Higher Education Position No. 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 qualified employees of counties, cities, towns, and public or 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 15 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) Eight 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. One vested active employee of a municipality or city participating in the ERS pursuant to the *Code of Alabama 1975, Section 36-27-6*.

- d. One vested active employee of a county participating in the ERS pursuant to the *Code of Alabama 1975, Section 36-27-6*.
- e. One vested active employee or retired member of an employer participating in the ERS pursuant to the *Code of Alabama 1975, Section 36-27-6*.
- f. One vested active employee of an employer other than a municipality, city, or county 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 12-17-227* (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, 2022, the number of participating units in each system was as follows:

	<u>TRS</u>	<u>ERS</u>	<u>JRF</u>
Cities	-	305	-
Counties	-	66	67
Other Public Entities	-	514	-
Universities	13	-	-
Postsecondary			
Institutions	25	-	-
City and County			
Boards of Education	139	-	-
State Agencies & Other	40	1	1
Total	<u>217</u>	<u>886</u>	<u>68</u>

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At September 30, 2021, the date of the most recent actuarial valuation, membership consisted of:

	TRS	ERS	JRF
Retirees and beneficiaries currently receiving benefits:			
General	103,071	24,727	452
State Police	-	963	-
Employees of Local Employers	-	29,725	-
Terminated employees entitled to benefits but not yet receiving benefits:			
General	26,329	6,446	13
State Police	-	61	-
Employees of Local Employers	-	18,545	-
Non-vested inactive members who have not contributed for more than 5 years	31,446	21,100	27
Active Employees:			
General	134,034	27,535	368
State Police	-	798	-
Employees of Local Employers	-	56,238	-
Total	294,880	186,138	860

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 (after age 52 for State Police) with 10 years or more of creditable service or with 25 years of creditable 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 creditable service (regardless of age), depending on the particular employer'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 creditable service. State Police are allowed 2.875% for each year of creditable 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 (after age 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 creditable service up to 80% of their average final compensation. Tier 2 State Police are allowed 2.375% for each year of creditable State Police service up to 80% of their average final compensation in computing the formula method. Acts 222 and 351 of the Legislature of 2022 for TRS and ERS, respectively, provide that any Tier 2 member who withdraws from service after the completion of at least 30 years of creditable service is entitled to an annual retirement benefit

Act 132 of the Legislature of 2019 provided that local employers participating in the ERS pursuant to the *Code of Alabama 1975, Section 36-27-6* could elect to provide their Tier 2 members with the same retirement benefits provided to their Tier 1 members. Any local participating employer who elects to provide its Tier 2 members with the same retirement benefits provided to its Tier 1 members may do so by adoption of a resolution within 24 months of the effective date of Act 2019-132. The effective date of Act 2019-132 was May 8, 2019, giving local participating employers until May 8, 2021, to make such election. Act 348 of the Legislature of 2022 removed the date limitation

on a participating local employer for electing to provide to its Tier 2 members the same retirement benefits as provided to Tier 1 members. Act 2019-132 also provided that the ERS Board of Control could deny a local participating employer's election based on a review by RSA Staff of the local participating employer's historical compliance with ERS requirements as well as the financial stability of the local participating employer. Any local participating employer whose election is denied may petition the ERS Board of Control for a reconsideration within the 24-month period from the effective date of Act 2019-132. Once a local participating employer elects to provide its Tier 2 members with the same retirement benefits provided to its Tier 1 members, its election is irrevocable and becomes effective at the beginning of the fiscal year following the date that the ERS receives a local participating employer's resolution. Any local participating employer electing to provide its Tier 2 members with the same retirement benefits provided to its Tier 1 members who has not increased its Tier 1 members' contribution rates as provided in Act 676 of the Legislature of 2011 is required to develop a plan to gradually increase its members' contribution rates. The plan must be submitted to the ERS prior to a local participating employer submitting a resolution electing to provide its Tier 2 members with the same retirement benefits provided to its Tier 1 members. Beginning in the month that a local participating employer's election becomes effective, its Tier 2 members (except Tier 2 members who are certified law enforcement, correctional officers, and firefighters) will contribute 7.50% of earnable compensation to the ERS. Tier 2 certified law enforcement, correctional officers, and firefighters will contribute 8.50% of earnable compensation to the ERS. Act 2019-132 was amended by Act 348 of the Legislature of 2022 by removing the date limitation for any local participating employer to submit its resolution electing to provide its Tier 2 members with the same retirement benefits provided to its Tier 1 members.

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 creditable 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 creditable service (regardless of age). The service retirement benefit for justices and judges is 75% of the salary for the judicial position from which the member is retiring on the date that the justice or judge retires.

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 creditable service as an assistant or deputy district attorney is eligible for service retirement with 25 years of creditable service, 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 creditable service up to 75% of their average final compensation. Group 3 members who are circuit clerks or district attorneys are allowed 3% of their average final compensation (highest 5 of the last 10 years) for each year of creditable service up to 80% of their average final compensation.

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Covered members of the TRS and ERS (except State Police and certified law enforcement, correctional officers, and firefighters) were required by statute to contribute 5% of earnable compensation to the TRS and ERS 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 to the TRS and ERS. 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 to the TRS and ERS. JRF members and certified law enforcement, correctional officers, and firefighters of the TRS and ERS were required by statute to contribute 6% of earnable compensation to the TRS, ERS, and JRF 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 to the TRS, ERS, and JRF. 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 to the TRS, ERS, and JRF. State Police members of the ERS are required by statute to contribute 10% of earnable compensation to the ERS. ERS local participating employers are not required by statute to increase contribution rates for their members.

Tier 2 covered members of the TRS (except State Police and certified law enforcement, correctional officers, and firefighters) were required by statute to contribute 6% of earnable compensation to the TRS through September 30, 2021. Tier 2 certified law enforcement, correctional officers, and firefighters of the TRS were required by statute to contribute 7% of earnable compensation to the TRS through September 30, 2021. Act 537 of the Legislature of 2021 allows the conversion of sick leave into creditable service to TRS Tier 2 members. Effective October 1, 2021, the Tier 2 covered TRS members' (except certified law enforcement, correctional officers, and firefighters) contribution rate required by statute increased to 6.2% of earnable compensation to the TRS. Tier 2 TRS certified law enforcement, correctional officers, and firefighters' contribution rate to the TRS increased as required by statute to 7.2% of earnable compensation.

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

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

2) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A. Basis of Accounting

The financial statements for the TRS, ERS, and JRF 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 Annual Comprehensive 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. The 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 the type of investment 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 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 financial statements should be read in conjunction with the RSA's prior year financial report from which the prior year financial 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 disclosures in the financial statements. Actual results may differ from these estimates.

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(Dollar Amounts in Thousands)

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 represents a consumption of net assets 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 net assets 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.

G. New Accounting Pronouncements

GASB Statement No. 98, *The Annual Comprehensive Financial Report*, established the term Annual Comprehensive Financial Report and its acronym, ACFR. The 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 requirements of this Statement are effective for fiscal years ending after December 15, 2021. The Systems implemented this new Statement early, beginning with fiscal year ended September 30, 2021.

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 the member's earnings is transferred from the Pension Accumulation account to the Annuity Savings account. When a TRS, ERS, or JRF member retires or when a survivor allowance becomes payable, the member's accumulated contributions and accumulated interest is credited to the Pension Accumulation account, and all monthly benefit payments are paid from this account.

C. Preretirement Death Benefit

The Preretirement Death Benefit (PRDB) was established as of October 1, 1983, pursuant to the *Code of Alabama 1975, Title 36, Chapter 27B* (Act 616 of the Legislature of 1983). The PRDB account is credited with contributions made by TRS, ERS, and JRF Group 3 members' employers and investment income on such funds. The preretirement death benefit (in the form of group term life insurance) is paid in addition to the return of member contributions upon the death of an active TRS, ERS, or 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 allocated 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 creditable service (exclusive of sick leave), are at least 55 years of age, and are eligible for retirement. See the actuarial section for additional information.

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

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G. Reserves

The reserves of the RSA included in the Net Position Restricted for Pension Benefits in the accompanying Combining Statement of Fiduciary Net Position are funded to the full extent required by statute. The reserve balances as of September 30, 2022, are as follows:

	<u>TRS</u>	<u>ERS</u>	<u>JRF</u>
Annuity Savings	\$ 6,865,652	\$ 3,406,262	\$ 51,509
Pension Accumulation	18,462,855	9,488,913	242,483
Deferred Retirement Option Plan	87,475	43,899	-
Preretirement Death Benefit	50,658	16,604	207
Term Life Insurance	1,541	-	-
Plant Fund	88,363	39,634	-
Expense	24,327	3,847	3,350
Net Position at 9/30/2022	<u>\$ 25,580,871</u>	<u>\$ 12,999,159</u>	<u>\$ 297,549</u>

4) CASH

Cash consists of deposits held by the State Treasurer in the respective retirement system's 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, 2022, was held for administrative expenses.

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 the *Code of Alabama 1975*. 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 -12.99%, -12.85%, and -14.64%, 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.

(Dollar Amounts in Thousands)

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 the 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, 2022, the TRS owned debt and equity securities of Morgan Stanley and equity securities of New Water Street Corporation which represented approximately 5.36% and 5.12% of the TRS investments, respectively.

The following tables provide information as of September 30, 2022, concerning the fair value of investments, interest rate risk, and foreign currency risk (dollar amounts in thousands):

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	\$ 598,760	\$ -	\$ -	\$ -	\$ 598,760	\$ 598,760
Commercial Paper	792,935	-	-	-	792,935	792,935
U.S. Agency	24,934	78,952	35,730	1,957	141,573	153,210
U.S. Government Guaranteed	71,198	589,019	150,905	189,307	1,000,429	1,105,231
Corporate Bonds	98,751	574,665	258,004	368,634	1,300,054	1,426,142
Private Placements	43,342	5,424	210,767	100,840	360,373	372,466
GNMAs	2	1,046	-	140,295	141,343	166,738
CMOs	-	4,807	21,106	404,806	430,719	500,456
Total Domestic Fixed Maturity	<u>\$ 1,629,922</u>	<u>\$ 1,253,913</u>	<u>\$ 676,512</u>	<u>\$ 1,205,839</u>	<u>4,766,186</u>	<u>5,115,938</u>
<i>Equities</i>						
Preferred					21,901	24,441
Domestic					12,945,709	9,095,679
Private					1,469,463	1,221,014
International						
Australian Dollar					168,700	112,322
Swiss Franc					288,431	132,310
Danish Krone					74,960	26,426
Euro					735,201	730,115
Pound Sterling					401,231	501,553
Hong Kong Dollar					74,481	50,371
New Israeli Shekel					12,990	15,353
Japanese Yen					598,982	499,533
Norwegian Krone					19,262	12,578
New Zealand Dollar					1,856	2,218
Swedish Krona					73,174	50,844
Singapore Dollar					33,278	25,812
US Dollar					839,727	1,019,527
Total International Equities					3,322,273	3,178,962
Total Equities					17,759,346	13,520,096
Real Estate						
Real Estate - Buildings					2,419,565	1,923,642
Real Estate - Equity					294,987	301,811
Total Real Estate					2,714,552	2,225,453
Total Investments					\$ 25,240,084	\$ 20,861,487

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For the Fiscal Year Ended September 30, 2022

(Dollar Amounts in Thousands)

Type of Investment	ERS 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	\$ 284,960	\$ -	\$ -	\$ -	\$ 284,960	\$ 284,960
Commercial Paper	514,882	-	-	-	514,882	514,882
U.S. Agency	13,036	39,502	20,150	1,010	73,698	80,008
U.S. Government Guaranteed	36,293	296,692	81,032	94,530	508,547	561,761
Corporate Bonds	49,095	297,092	139,448	180,713	666,348	723,838
Private Placements	21,347	2,671	101,842	50,653	176,513	191,186
GNMAs	-	363	-	71,456	71,819	84,795
CMOs	-	2,224	10,180	210,361	222,765	258,865
Total Domestic Fixed Maturity	<u>\$919,613</u>	<u>\$638,544</u>	<u>\$352,652</u>	<u>\$608,723</u>	<u>2,519,532</u>	<u>2,700,295</u>
<i>Equities</i>						
Preferred					9,957	11,112
Domestic					6,432,514	4,497,948
Private					850,447	721,464
International						
Australian Dollar					82,037	57,910
Swiss Franc					140,114	71,263
Danish Krone					36,439	14,427
Euro					357,640	361,743
Pound Sterling					195,066	242,087
Hong Kong Dollar					36,168	26,621
New Israeli Shekel					6,316	7,281
Japanese Yen					290,761	250,931
Norwegian Krone					9,361	6,396
New Zealand Dollar					902	1,083
Swedish Krona					35,578	26,398
Singapore Dollar					16,174	12,809
US Dollar					472,634	581,985
Total International Equities					1,679,190	1,660,934
Total Equities					<u>8,972,108</u>	<u>6,891,458</u>
Real Estate						
Real Estate - Buildings					1,173,050	958,649
Real Estate - Equity					202,266	206,945
Total Real Estate					1,375,316	1,165,594
Total Investments					<u>\$ 12,866,956</u>	<u>\$ 10,757,347</u>

Type of Investment	JRF				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	\$ 7,265	\$ -	\$ -	\$ -	\$ 7,265	\$ 7,265
Commercial Paper	8,518	-	-	-	8,518	8,518
U.S. Agency	668	1,869	760	48	3,345	3,612
U.S. Government Guaranteed	954	14,403	3,215	4,119	22,691	25,068
Corporate Bonds	3,428	13,426	4,568	8,479	29,901	32,973
Private Placements	-	-	199	997	1,196	1,143
GNMAs	-	-	-	3,091	3,091	3,644
CMOs	-	123	697	10,018	10,838	12,636
Total Domestic Fixed Maturity	<u>\$20,833</u>	<u>\$29,821</u>	<u>\$9,439</u>	<u>\$26,752</u>	<u>86,845</u>	<u>94,859</u>
<i>Equities</i>						
Preferred					544	607
Domestic					157,500	79,433
Private					73	71
International						
Australian Dollar					2,225	2,071
Swiss Franc					3,744	2,266
Danish Krone					993	427
Euro					9,642	10,361
Pound Sterling					5,256	6,981
Hong Kong Dollar					994	778
New Israeli Shekel					170	201
Japanese Yen					7,953	7,008
Norwegian Krone					254	223
New Zealand Dollar					24	23
Swedish Krona					960	834
Singapore Dollar					426	359
US Dollar					7,854	9,282
Total International Equities					40,495	40,814
Total Equities					198,612	120,925
Real Estate						
Real Estate - Buildings					4,182	1,067
Real Estate - Equity					2,723	2,786
Total Real Estate					6,905	3,853
Total Investments					\$ 292,362	\$ 219,637

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Notes to the Combined Financial Statements
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(Dollar Amounts in Thousands)

The following tables provide information as of September 30, 2022, concerning credit risk:

TRS

Moody's Ratings	Cost	Fair Value	Fair Value as a Percentage of Total Fair Value of Fixed Maturities
Aaa	\$ 180,566	\$ 168,075	3.53
Aa2	6,566	4,927	0.10
Aa3	14,764	13,755	0.29
P-1	10,055	10,055	0.21
P-2	782,880	782,880	16.43
A1	124,723	115,719	2.43
A2	111,205	103,988	2.18
A3	206,231	191,850	4.03
Baa1	327,778	292,200	6.13
Baa2	401,201	356,664	7.48
Baa3	123,886	115,311	2.42
Ba1	21,162	20,622	0.43
Ba2	20,786	20,234	0.42
Ba3	4,369	4,075	0.08
NR	1,007,341	993,340	20.84
Total Moody's Rated Fixed Maturities	3,343,513	3,193,695	67.00
U.S. Agency Mortgage-Backed Securities	500,456	430,719	9.04
U.S. Government Guaranteed	1,271,969	1,141,772	23.96
Total Fixed Maturities	\$ 5,115,938	\$ 4,766,186	100.00

Standard & Poor's Ratings	Cost	Fair Value	Fair Value as a Percentage of Total Fair Value of Fixed Maturities
AAA	\$ 14,887	\$ 13,525	0.28
AA+	163,900	152,898	3.21
AA	10,465	10,308	0.22
AA-	27,055	24,234	0.51
A-1	15,084	15,084	0.32
A-2	777,851	777,851	16.32
A+	41,321	37,220	0.78
A	60,096	57,344	1.20
A-	281,675	262,441	5.51
BBB+	391,669	354,801	7.44
BBB	435,131	383,273	8.04
BBB-	71,934	67,994	1.43
BB+	27,064	26,361	0.55
BB	6,844	6,104	0.13
BB-	11,695	11,706	0.24
NR	1,006,842	992,551	20.82
Total S&P Rated Fixed Maturities	3,343,513	3,193,695	67.00
U.S. Agency Mortgage-Backed Securities	500,456	430,719	9.04
U.S. Government Guaranteed	1,271,969	1,141,772	23.96
Total Fixed Maturities	\$ 5,115,938	\$ 4,766,186	100.00

ERS

Moody's Ratings	Cost	Fair Value	Fair Value as a Percentage of Total Fair Value of Fixed Maturities
Aaa	\$ 93,914	\$ 87,220	3.46
Aa2	2,978	2,235	0.09
Aa3	7,540	7,024	0.28
P-1	29,917	29,917	1.19
P-2	484,965	484,965	19.25
A1	66,333	61,573	2.44
A2	57,221	53,319	2.12
A3	100,862	94,286	3.74
Baa1	169,128	149,811	5.95
Baa2	211,093	187,281	7.43
Baa3	62,107	57,880	2.30
Ba1	10,693	10,469	0.42
Ba2	10,575	10,293	0.41
Ba3	2,004	1,870	0.07
NR	485,544	478,258	18.98
Total Moody's Rated Fixed Maturities	1,794,874	1,716,401	68.13
U.S. Agency Mortgage-Backed Securities	258,865	222,765	8.84
U.S. Government Guaranteed	646,556	580,366	23.03
Total Fixed Maturities	\$ 2,700,295	\$ 2,519,532	100.00

Standard & Poor's Ratings	Cost	Fair Value	Fair Value as a Percentage of Total Fair Value of Fixed Maturities
AAA	\$ 6,896	\$ 6,258	0.25
AA+	86,210	80,212	3.18
AA	4,999	4,912	0.19
AA-	13,110	11,772	0.47
A-2	514,882	514,882	20.44
A+	20,600	18,522	0.74
A	28,754	27,373	1.09
A-	150,280	139,680	5.54
BBB+	200,422	180,653	7.17
BBB	225,066	198,528	7.88
BBB-	34,348	32,510	1.29
BB+	13,849	13,530	0.54
BB	3,397	3,034	0.12
BB-	5,838	5,844	0.23
NR	486,223	478,691	19.00
Total S&P Rated Fixed Maturities	1,794,874	1,716,401	68.13
U.S. Agency Mortgage-Backed Securities	258,865	222,765	8.84
U.S. Government Guaranteed	646,556	580,366	23.03
Total Fixed Maturities	\$ 2,700,295	\$ 2,519,532	100.00

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(Dollar Amounts in Thousands)

JRF

Moody's Ratings	Cost	Fair Value	Fair Value as a Percentage of Total Fair Value of Fixed Maturities
Aaa	\$ 4,460	\$ 4,165	4.80
Aa2	157	118	0.14
Aa3	438	411	0.47
P-2	8,518	8,518	9.81
A1	2,457	2,294	2.64
A2	1,753	1,648	1.90
A3	4,627	4,275	4.92
Baa1	7,119	6,256	7.20
Baa2	9,388	8,365	9.63
Baa3	2,850	2,565	2.95
Ba1	1,287	1,207	1.39
Ba2	543	529	0.61
Ba3	725	679	0.78
NR	9,189	9,195	10.59
Total Moody's Rated Fixed Maturities	53,511	50,225	57.83
U.S. Agency Mortgage-Backed Securities	12,636	10,838	12.48
U.S. Government Guaranteed	28,712	25,782	29.69
Total Fixed Maturities	\$ 94,859	\$ 86,845	100.00

Standard & Poor's Ratings	Cost	Fair Value	Fair Value as a Percentage of Total Fair Value of Fixed Maturities
AAA	\$ 436	\$ 396	0.46
AA+	3,985	3,732	4.30
AA	270	266	0.31
AA-	730	660	0.76
A-2	8,518	8,518	9.80
A+	670	609	0.70
A	1,225	1,161	1.34
A-	5,721	5,294	6.10
BBB+	9,693	8,660	9.97
BBB	9,077	7,952	9.16
BBB-	1,511	1,414	1.63
BB+	1,467	1,383	1.59
BB	176	156	0.18
BB-	890	852	0.98
NR	9,142	9,172	10.55
Total S&P Rated Fixed Maturities	53,511	50,225	57.83
U.S. Agency Mortgage-Backed Securities	12,636	10,838	12.48
U.S. Government Guaranteed	28,712	25,782	29.69
Total Fixed Maturities	\$ 94,859	\$ 86,845	100.00

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 the lack of observable pricing inputs and are valued using annual appraisals based on a combination of market data and projected cash flows.

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The following tables provide information as of September 30, 2022, concerning fair value measurement:

	9/30/2022	Fair Value Measurements Using:		
		Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
TRS				
Domestic Fixed Maturity				
Money Market Funds	\$ 598,760	\$ -	\$ 598,760	\$ -
Commercial Paper	792,935	-	792,935	-
U.S. Agency	141,573	-	141,573	-
U.S. Government Guaranteed	1,000,429	-	1,000,429	-
Corporate Bonds	1,300,054	-	1,283,754	16,300
Private Placements	360,373	-	-	360,373
GNMAs	141,343	-	141,343	-
CMOs	430,719	-	430,719	-
Total Domestic Fixed Maturity	4,766,186	-	4,389,513	376,673
Equities				
Preferred	21,901	21,901	-	-
Domestic	12,945,709	11,571,668	1,374,041	-
Private	1,469,463	108,948	40,244	1,320,271
International	3,322,273	3,028,054	294,219	-
Total Equities	17,759,346	14,730,571	1,708,504	1,320,271
Real Estate				
Real Estate - Buildings	2,419,565	-	-	2,419,565
Real Estate - Equity	294,987	294,987	-	-
Total Real Estate	2,714,552	294,987	-	2,419,565
Total Investments	25,240,084	15,025,558	6,098,017	4,116,509
Securities Lending Collateral	910,512	-	910,512	-
Total Fair Value	\$ 26,150,596	\$ 15,025,558	\$ 7,008,529	\$ 4,116,509

	ERS			
	9/30/2022	Fair Value Measurements Using:		
		Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
<i>Domestic Fixed Maturity</i>				
Money Market Funds	\$ 284,960	\$ -	\$ 284,960	\$ -
Commercial Paper	514,882	-	514,882	-
U.S. Agency	73,698	-	73,698	-
U.S. Government Guaranteed	508,547	-	508,547	-
Corporate Bonds	666,348	-	658,048	8,300
Private Placements	176,513	-	-	176,513
GNMAs	71,819	-	71,819	-
CMOs	222,765	-	222,765	-
Total Domestic Fixed Maturity	<u>2,519,532</u>	<u>-</u>	<u>2,334,719</u>	<u>184,813</u>
<i>Equities</i>				
Preferred	9,957	9,957	-	-
Domestic	6,432,514	5,858,080	574,434	-
Private	850,447	61,288	19,822	769,337
International	1,679,190	1,523,013	156,177	-
Total Equities	<u>8,972,108</u>	<u>7,452,338</u>	<u>750,433</u>	<u>769,337</u>
<i>Real Estate</i>				
Real Estate - Buildings	1,173,050	-	-	1,173,050
Real Estate - Equity	202,266	202,266	-	-
Total Real Estate	<u>1,375,316</u>	<u>202,266</u>	<u>-</u>	<u>1,173,050</u>
Total Investments	<u>12,866,956</u>	<u>7,654,604</u>	<u>3,085,152</u>	<u>2,127,200</u>
Securities Lending Collateral	499,408	-	499,408	-
Total Fair Value	<u>\$ 13,366,364</u>	<u>\$ 7,654,604</u>	<u>\$ 3,584,560</u>	<u>\$ 2,127,200</u>

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Notes to the Combined Financial Statements
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(Dollar Amounts in Thousands)

	JRF	Fair Value Measurements Using:		
		Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
	9/30/2022			
<i>Domestic Fixed Maturity</i>				
Money Market Funds	\$ 7,265	\$ -	\$ 7,265	\$ -
Commercial Paper	8,518	-	8,518	-
U.S. Agency	3,345	-	3,345	-
U.S. Government Guaranteed	22,691	-	22,691	-
Corporate Bonds	29,901	-	29,501	400
Private Placements	1,196	-	-	1,196
GNMAs	3,091	-	3,091	-
CMOs	10,838	-	10,838	-
Total Domestic Fixed Maturity	86,845	-	85,249	1,596
<i>Equities</i>				
Preferred	544	544	-	-
Domestic	157,500	144,253	13,247	-
Private	73	-	-	73
International	40,495	38,256	2,239	-
Total Equities	198,612	183,053	15,486	73
<i>Real Estate</i>				
Real Estate - Buildings	4,182	-	-	4,182
Real Estate - Equity	2,723	2,723	-	-
Total Real Estate	6,905	2,723	-	4,182
Total Investments	292,362	185,776	100,735	5,851
Securities Lending Collateral	5,238	-	5,238	-
Total Fair Value	\$ 297,600	\$ 185,776	\$ 105,973	\$ 5,851

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 Compass Fund (Compass Fund). The fund was previously named State Street Quality D Short-Term Investment Fund (QDF) which was separated into two pools, a liquidity pool and a duration pool. The duration pool closed in early June 2022 while the liquidity pool remained and changed its name to the State Street Compass Fund.

The following describes the guidelines for the Compass Fund. The Compass Fund's Investment Manager (State Street Bank) shall maintain the dollar-weighted average maturity of the Compass Fund in a manner that the Investment Manager believes is appropriate to the objective of the Compass Fund; 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 Compass Fund not to exceed 75 calendar days, and (iii) the Investment Manager shall endeavor to maintain a dollar-weighted average maturity to final of the Compass Fund 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 Compass Fund 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.

As of September 30, 2022, the average term of the loans secured by the Compass Fund was 16 days for the TRS, 20 days for the ERS, and 37 days for the JRF. Cash collateral investments in the Compass Fund 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, 2022, the fair value of the securities on loan was \$2,079,353, \$1,154,712, and \$26,741 for the TRS, ERS, and JRF, respectively (dollar amounts in thousands). The fair value of the collateral pledged by the borrowers was \$2,191,984, \$1,213,621, and \$28,103 for the TRS, ERS, and JRF, respectively (dollar amounts in thousands). 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, 2022. 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.

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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, 2022, concerning securities lent:

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	\$ 68,629	\$ 80,594	\$ 1,163	\$ 150,386
Domestic Equity	518,207	243,167	1,291	762,665
International Equity - JPY	241,490	132,673	1,753	375,916
International Equity - USD	48,043	23,832	843	72,718
Total Lent for Cash Collateral	<u>876,369</u>	<u>480,266</u>	<u>5,050</u>	<u>1,361,685</u>
<i>For Non-Cash Collateral</i>				
Domestic Fixed Maturities	533,913	360,138	17,273	911,324
Domestic Equity	526,991	243,397	2,593	772,981
International Equity	142,080	70,911	1,825	214,816
Total Lent for Non-Cash Collateral	<u>1,202,984</u>	<u>674,446</u>	<u>21,691</u>	<u>1,899,121</u>
Total Securities Lent	<u>\$2,079,353</u>	<u>\$1,154,712</u>	<u>\$26,741</u>	<u>\$3,260,806</u>
Type of Collateral Received				
<i>Cash Collateral</i>				
Invested in State Street Compass Fund - JPY	\$ 255,817	\$ 140,770	\$ 1,855	\$ 398,442
Invested in State Street Compass Fund - USD	654,695	358,638	3,383	1,016,716
Total Cash Collateral Denominated in USD	<u>910,512</u>	<u>499,408</u>	<u>5,238</u>	<u>1,415,158</u>
<i>Non-Cash Collateral</i>				
Domestic Fixed Securities				
AUD	246	555	-	801
EUR	717	1,622	-	2,339
GBP	3,938	8,900	-	12,838
USD	187,304	156,913	2,271	346,488
Domestic Equity Securities				
USD	567,374	263,524	2,838	833,736
International Fixed Maturities & Equity				
EUR	21,380	12,481	894	34,755
DKK	-	-	1,067	1,067
SEK	-	-	434	434
USD	500,513	270,218	15,361	786,092
Total Non-Cash Collateral	<u>1,281,472</u>	<u>714,213</u>	<u>22,865</u>	<u>2,018,550</u>
Total Collateral Received	<u>\$2,191,984</u>	<u>\$1,213,621</u>	<u>\$28,103</u>	<u>\$3,433,708</u>

F. Mortgage-backed Securities

As of September 30, 2022, the TRS, ERS, and JRF had investments in mortgage-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, 2022, as reported in the System's Combining Statement of Fiduciary Net Position and Combining Statement of Changes in Fiduciary Net Position (dollar amounts in thousands):

Investment Derivative Instruments					
Changes in Fair Value			Fair Value as of September 30, 2022		
	Classification	Amount	Classification	Amount	Notional
TRS					
Domestic Options Written	Investment Income	\$(107,666)	Domestic Equity	\$(123,448)	\$ (894,876)
Domestic Options Purchased	Investment Income	200,314	Domestic Equity	168,072	939,500
Total Domestic Options		92,648		44,624	44,624
International Options Written	Investment Income	3	International Equity	-	-
Grand Total TRS Options		\$ 92,651		\$ 44,624	\$ 44,624
ERS					
Domestic Options Written	Investment Income	\$ (53,164)	Domestic Equity	\$ (60,902)	\$ (441,624)
Domestic Options Purchased	Investment Income	98,843	Domestic Equity	82,927	463,649
Total Domestic Options		45,679		22,025	22,025
International Options Written	Investment Income	2	International Equity	-	-
Grand Total ERS Options		\$ 45,681		\$ 22,025	\$ 22,025
JRF					
Domestic Options Written	Investment Income	\$ (2,109)	Domestic Equity	\$ (2,441)	\$ (17,638)
Domestic Options Purchased	Investment Income	3,939	Domestic Equity	3,320	18,517
Total Domestic Options		1,830		879	879
International Options Written	Investment Income	-	International Equity	-	-
Grand Total JRF Options		\$ 1,830		\$ 879	\$ 879
Total					
Domestic Options Written	Investment Income	\$(162,939)	Domestic Equity	\$(186,791)	\$(1,354,138)
Domestic Options Purchased	Investment Income	303,096	Domestic Equity	254,319	1,421,666
Total Domestic Options		140,157		67,528	67,528
International Options Written	Investment Income	5	International Equity	-	-
Grand Total Options		\$ 140,162		\$ 67,528	\$ 67,528

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(Dollar Amounts in Thousands)

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, 2022, were as follows:

	<u>TRS</u>	<u>ERS</u>	<u>JRF</u>
Total Pension Liability	\$ 41,121,664	\$ 21,656,947	\$ 504,805
Less: Plan Net Position (see Note 3G)	(25,580,871)	(12,999,159)	(297,549)
Net Pension Liability	<u>\$ 15,540,793</u>	<u>\$ 8,657,788</u>	<u>\$ 207,256</u>
 Plan Net Position as a Percentage of the Total Pension Liability	 62.21%	 60.02%	 58.94%

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, 2021, and rolled forward in accordance with GASB Statement No. 67 to the measurement date of September 30, 2022, using the following actuarial assumptions, applied to all periods included in the measurement:

	<u>TRS</u>	<u>ERS</u>	<u>JRF</u>
Inflation	2.50%	2.50%	2.50%
Projected Salary Increases	3.25% - 5.00%	3.25% - 7.75%	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 2022.

The actuarial assumptions used in the actuarial valuation as of September 30, 2021, 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 accepted and approved these changes in September 2021 which became effective at the beginning of fiscal year 2021.

The assumed investment rates of return used to prepare the actuarial valuations as of September 30, 2021, 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, 2021. The new assumed investment rates of return were used to measure the total pension liability as of September 30, 2022.

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 Below-Median Tables, projected generationally using the MP-2020 scale, which is adjusted by 66-2/3% beginning with year 2019:

Group	Membership Table	Set Forward (+)/ Setback (-)	Adjustment to Rates
Non-FLC Service Retirees	General Healthy Below Median	Male: +2 Female: +2	Male: 90% ages < 65, 96% ages > or = 65 Female: 96% all ages
FLC/State Police Service Retirees	Public Safety Healthy Below Median	Male: +1 Female: None	None
Beneficiaries	Contingent Survivor Below Median	Male: +2 Female: +2	None
Non-FLC Disabled Retirees	General Disability	Male: +7 Female: +3	None
FLC/State Police Disabled Retirees	Public Safety Disability	Male: +7 Female: None	None

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The total pension liability related to the cost-sharing retirement plans is based on the actuarial valuation as of September 30, 2021. The expected total pension liability is determined as of September 30, 2022, using standard roll-forward techniques as shown in the following table:

	TRS		
	Expected	Actual	Actual
			Before Plan
		Changes	Changes
Total Pension Liability as of 9/30/2021 (a)	\$ 39,982,250	\$ 40,077,560	\$ 40,133,579
Expected Rate of Return (b)	7.45%	7.45%	7.45%
Entry Age Normal Cost* for 10/1/2021 - 9/30/2022 (c)	\$ 717,506	\$ 717,506	\$ 726,439
Actual Benefit Payments (including refunds) for 10/1/2021 - 9/30/2022 (d)	\$ 2,630,326	\$ 2,630,326	\$ 2,630,326
Total Pension Liability as of 9/30/2022 [(a) x (1 + (b))] + (c) - [(d) x (1 + 0.5 x (b))]	\$ 40,950,128	\$ 41,052,539	\$ 41,121,664
Difference between Expected and Actual Before Plan Changes - Experience (Gain)/Loss		\$ 102,411	
Difference between Actual Before and After Plan Changes - Benefit Change (Gain)/Loss			\$ 69,125
		ERS	
	Expected	Actual	Actual
		Before Plan	After Plan
		Changes	Changes
Total Pension Liability as of 9/30/2021 (a)	\$ 21,063,964	\$ 21,106,297	\$ 21,124,945
Expected Rate of Return (b)	7.45%	7.45%	7.45%
Entry Age Normal Cost* for 10/1/2021 - 9/30/2022 (c)	\$ 400,919	\$ 400,919	\$ 402,495
Actual Benefit Payments (including refunds) for 10/1/2021 - 9/30/2022 (d)	\$ 1,392,433	\$ 1,392,433	\$ 1,392,433
Total Pension Liability as of 9/30/2022 [(a) x (1 + (b))] + (c) - [(d) x (1 + 0.5 x (b))]	\$ 21,589,847	\$ 21,635,334	\$ 21,656,947
Difference between Expected and Actual Experience (Gain)/Loss		\$ 45,487	
Difference between Actual Before and After Plan Changes - Benefit Change (Gain)/Loss			\$ 21,613
		JRF	
	Expected	Actual	
Total Pension Liability as of 9/30/2021 (a)	\$ 503,881	\$ 499,916	
Expected Rate of Return (b)	7.40%	7.40%	
Entry Age Normal Cost* for 10/1/2021 - 9/30/2022 (c)	\$ 10,275	\$ 10,275	
Actual Benefit Payments (including refunds) for 10/1/2021 - 9/30/2022 (d)	\$ 40,867	\$ 40,867	
Total Pension Liability as of 9/30/2022 [(a) x (1 + (b))] + (c) - [(d) x (1 + 0.5 x (b))]	\$ 509,064	\$ 504,805	
Difference between Expected and Actual Experience (Gain)/Loss		\$ (4,259)	

*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 & 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	\$ 20,109,121	\$ 15,540,793	\$ 11,692,816
ERS	\$ 10,468,835	\$ 8,657,788	\$ 6,628,370

	Current		
	1% Decrease (6.40%)	Discount Rate (7.40%)	1% Increase (8.40%)
JRF	\$ 253,048	\$ 207,256	\$ 167,639

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(Dollar Amounts in Thousands)

7) CONTRIBUTIONS REQUIRED AND MADE

The actuary has computed, as of the date of the most recent 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, ERS, and JRF Group 3 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 2022 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, 2020. 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 accepted and approved these changes in September 2021 which became effective at the beginning of fiscal year 2021.

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, 2022:

	TRS	ERS
Land	\$ 5,085	\$ 2,535
Building and Improvements	107,896	53,948
Software	42,889	14,264
Furniture and Equipment	11,603	2,536
Total Property and Equipment	167,473	73,283
Less: Accumulated Depreciation	(79,110)	(33,649)
Net Property and Equipment	\$ 88,363	\$ 39,634

Software represents the capitalizable amount of software and professional services related to RSA's pension administration system. RSA entered into a contract with Deloitte Consulting, LLP, for an initial term of 3 years beginning October 24, 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 allocated 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 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 that the financial statements were issued.

The SEIF - Retired Trust is a single employer defined benefit health care plan, also known as an other postemployment benefits (OPEB) trust, established in 2007 under the provisions of the Alabama Retiree Health Care Funding Act of 2007 (Act 16 of the Legislature of 2007) 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 Fund (SEIF) 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 State Employees' Insurance Board's (SEIB) 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 Annual Comprehensive Financial Report.

The State Employees' Health Insurance Plan (SEHIP) 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. Separate group dental, vision, and cancer contracts are also offered for eligible participants who elect coverage.

At September 30, 2021, the membership covered by the benefit terms consisted of:

Active Members	31,217
Inactive Members	<u>24,521</u>
Total	<u>55,738</u>

The SEHIP provides that the employers contribute monthly for the medical 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, 2022, the TRS reported a liability of \$5,018 for its proportionate share of the net OPEB liability (dollar amount in thousands). The net OPEB liability was measured as of September 30, 2021, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of September 30, 2020. 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, 2021, the TRS's proportion was 0.588564%, which was an increase of 0.014088% from its proportion measured as of September 30, 2020.

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For the year ended September 30, 2022, the TRS recognized OPEB expense of (\$726). At September 30, 2022, 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	\$ -	\$ 4,785
Changes of Assumptions	407	3,299
Net Difference between Projected & Actual		
Earnings on OPEB Plan Investments	-	107
Changes in Proportion & Differences between Employer		
Contributions & Proportionate Share of Contributions	895	-
Employer Contributions Subsequent to the Measurement Date	331	-
Total	\$ 1,633	\$ 8,191

The TRS will recognize \$331 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, 2023. 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:	
2023	(\$2,598)
2024	(\$2,357)
2025	(\$1,473)
2026	(\$403)
2027	(\$58)
Thereafter	\$0

At September 30, 2021, the ERS reported a liability of \$3,087 for its proportionate share of the net OPEB liability. The net OPEB liability was measured as of September 30, 2021, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of September 30, 2020. 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, 2021, the ERS's proportion was 0.362047%, which was a decrease of 0.013772% from its proportion measured as of September 30, 2020.

For the year ended September 30, 2022, the ERS recognized OPEB expense of (\$944). At September 30, 2022, 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	\$ -	\$ 2,944
Changes of Assumptions	250	2,029
Net Difference between Projected & Actual		
Earnings on OPEB Plan Investments	-	66
Changes in Proportion & Differences between Employer		
Contributions & Proportionate Share of Contributions	200	573
Employer Contributions Subsequent to the Measurement Date	193	-
Total	\$ 643	\$ 5,612

The ERS will recognize \$193 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, 2023 (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:	
2023	(\$1,926)
2024	(\$1,662)
2025	(\$1,086)
2026	(\$381)
2027	(\$107)
Thereafter	\$0

At September 30, 2022, the JRF reported a liability of \$26 for its proportionate share of the net OPEB liability (dollar amount in thousands). The net OPEB liability was measured as of September 30, 2021, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of September 30, 2020. 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, 2021, the JRF's proportion was 0.003106%, which was an increase of 0.000013% from its proportion measured as of September 30, 2020.

For the year ended September 30, 2022, the JRF recognized OPEB expense of (\$5) (dollar amount in thousands). At September 30, 2022, 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	\$ -	\$ 25
Changes of Assumptions	2	17
Net Difference between Projected & Actual		
Earnings on OPEB Plan Investments	-	1
Changes in Proportion & Differences between Employer		
Contributions & Proportionate Share of Contributions	-	1
Employer Contributions Subsequent to the Measurement Date	2	-
Total	\$ 4	\$ 44

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, 2023 (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:	
2023	(\$16)
2024	(\$14)
2025	(\$9)
2026	(\$2)
2027	(\$1)
Thereafter	\$0

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The total OPEB liability was determined by an actuarial valuation as of September 30, 2020, using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.50%
Salary Increases*	3.25% - 6.00% for State and Local Employees 4.00% - 7.75% for State Police 2.75% - 3.50% for Judges 3.25% - 5.00% for Teachers
Long-Term Investment Rate of Return**	7.25%
Municipal Bond Index Rate at Measurement Date	2.29%
Municipal Bond Index Rate at Prior Measurement Date	2.25%
Projected Year for Fiduciary Net Position to be Depleted	Not Applicable
Single Equivalent Interest Rate at Measurement Date	7.25%
Single Equivalent Interest Rate at Prior Measurement Date	7.50%
Healthcare Cost Trend Rate	
Pre-Medicare Eligible	6.50%
Medicare Eligible	***
Ultimate Trend Rate	
Pre-Medicare Eligible	4.50%
Medicare Eligible	4.50%
Year of Ultimate Trend Rate	2028 for Pre-Medicare Eligible 2025 for Medicare Eligible
Dental Trend Rate	4.50%

*Includes 2.75% 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 are based on the Pub-2010 Public Mortality Plans Mortality Tables, adjusted generationally based on scale MP-2020, with an adjustment of 66-2/3% to the table beginning in year 2019. The mortality tables are adjusted forward and/or back depending on the plan and group covered, as shown in the table below. Note that the Judicial Retirement Fund uses the same mortality tables as the Teachers' Retirement System of Alabama.

Retiree Group	Membership Table	Set Forward (+)/ Set Back (-)	Adjustment to Rates
Judges & Teachers	Teacher Below Median	Male: +2 Female: +2	Male: 108% ages < 63, 96% ages > 67; Phasing down 63 - 67 Female: 112% ages < 69, 98% ages >74; Phasing down 69 - 74
Non-FLC	General Below Median	Male: +2 Female: +2	Male: 90% ages < 65, 96% > or = 65 Female: 96% all ages
FLC/ State Police	Public Safety Below Median	Male: +1 Female: None	None

Disabled Group	Membership Table	Set Forward (+)/ Set Back (-)	Adjustment to Rates
Judges & Teachers	Teacher Disability	Male: +8 Female: +3	None
Non-FLC	General Disability	Male: +7 Female: +3	None
FLC/ State Police	Public Safety Disability	Male: +7 Female: None	None

Beneficiaries' Group	Membership Table	Set Forward (+)/ Set Back (-)	Adjustment to Rates
Judges & Teachers	Teacher Contingent Survivor Below Median	Male: +2 Female: None	None
Non-FLC/ FLC/ State Police	Contingent Survivor Below Median	Male: +2 Female: +2	None

The decremental assumptions and methods used in the valuation were selected based on the actuarial experience studies prepared as of September 30, 2020, submitted to and adopted by the State Employees' Insurance Board on September 13, 2021, and September 14, 2021.

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, 2020 valuation were based on a review of recent plan experience done concurrently with the September 30, 2020 valuation.

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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	<u>100.00%</u>	

*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 7.25% at September 30, 2021. The discount rate used to measure the total OPEB liability at the prior measurement date was 7.50%. 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, 2021, were 2.26%, 2.19%, and 2.43%, respectively, which resulted in an average Municipal Bond Index Rate of 2.29%. Projected future benefit payments for all current plan members were projected through 2119.

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:

	1% Decrease (5.50% decreasing to 3.50% for Pre-Medicare and Known decreasing to 3.75% for Medicare Eligible)	Current Healthcare Trend Rate (6.50% decreasing to 4.50% for Pre-Medicare and Known decreasing to 4.50% for Medicare Eligible)	1% Increase (7.50% decreasing to 5.50% for Pre-Medicare and Known decreasing to 5.50% for Medicare Eligible)
TRS	\$ 3,999	\$ 5,018	\$ 6,257
ERS	\$ 2,460	\$ 3,087	\$ 3,849
JRF	\$ 21	\$ 26	\$ 33

The following table presents the proportionate share of the net OPEB liability for the TRS, ERS, and JRF calculated using the discount rate of 7.25%, 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 (6.25%)	Current Discount Rate (7.25%)	1% Increase (8.25%)
TRS	\$ 5,835	\$ 5,018	\$ 4,336
ERS	\$ 3,589	\$ 3,087	\$ 2,667
JRF	\$ 31	\$ 26	\$ 23

10) PENSION PLAN FOR RSA EMPLOYEES

A portion of the RSA’s employees participates in the TRS pension plan, which is a cost-sharing plan, and a portion of the RSA’s 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 TRS is administered by the RSA which issues an Annual Comprehensive 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 creditable 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 creditable 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 formula method. 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 creditable service up to 80% of their average final compensation. Act 222 of the Legislature of 2022 for TRS provides that any Tier 2 member who withdraws from service after the completion of at least 30 years of creditable service is entitled to an annual retirement benefit

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, creditable service, employment status, and eligibility for retirement.

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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. 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 on or after October 1, 2019. A TRS 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.

Covered members of the TRS were required by statute to contribute 5% of earnable compensation to the TRS 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 to the TRS. Effective October 1, 2012, covered members of the TRS are required by statute to contribute 7.50% of earnable compensation to the TRS. Certified law enforcement, correctional officers, and firefighters of the TRS were required by statute to contribute 6% of earnable compensation to the TRS 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 to the TRS. 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 to the TRS. Tier 2 covered members of the TRS are required by statute to contribute 6% of earnable compensation to the TRS. Tier 2 certified law enforcement, correctional officers, and firefighters of the TRS are required by statute to contribute 7% of earnable compensation to the TRS. Act 537 of the Legislature of 2021 allows the conversion of sick leave into creditable service to TRS Tier 2 members. Effective October 1, 2021, the Tier 2 covered TRS members' (except certified law enforcement, correctional officers, and firefighters) contribution rate required by statute increased to 6.2% of earnable compensation to the TRS. Tier 2 TRS certified law enforcement, correctional officers, and firefighters' contribution rate to the TRS increased as required by statute to 7.2% of earnable compensation.

Participating employers' contractually required contribution rate for the fiscal year ended September 30, 2022, was 12.43% of annual pay for Tier 1 members and 11.32% 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 \$2,256 for the fiscal year ended September 30, 2022.

At September 30, 2022, in accordance with GASB Statement No. 68, the TRS reported a net pension liability of \$19,723 for its proportionate share of the TRS pension plan's total net pension liability as determined under GASB Statement No. 67. 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, 2020, using actuarial assumptions based on the results of an investigation of the economic and demographic experience for the TRS based upon participant data as of September 30, 2020, and rolled forward to TRS's measurement date of September 30, 2021. 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, 2021, the TRS's proportion was 0.209365%, which was a decrease of 0.023168% from its proportion measured as of September 30, 2020.

For the year ended September 30, 2022, the TRS recognized pension expense of \$1,901. At September 30, 2022, the TRS reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Differences between Expected & Actual Experience	\$ 913	\$ 1,149
Changes of Assumptions	2,070	-
Net Difference between Projected & Actual		
Earnings on Pension Plan Investments	-	4,656
Changes in Proportion & Differences between Employer		
Contributions & Proportionate Share of Contributions	1,508	2,005
Employer Contributions Subsequent to the Measurement Date	2,256	-
Total	<u><u>\$ 6,747</u></u>	<u><u>\$ 7,810</u></u>

The TRS will recognize \$2,256 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, 2023 (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:	
2023	(\$167)
2024	(\$324)
2025	(\$1,048)
2026	(\$1,780)
2027	\$0
Thereafter	\$0

The total pension liability was determined by an actuarial valuation as of September 30, 2020, using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.50%
Projected Salary Increases	3.25% - 5.00%
Investment Rate of Return*	7.45%

*Net of pension plan investment expense

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 based upon participant data as of September 30, 2020. This investigation resulted in changes to the actuarial assumptions. The TRS Board of Control accepted and approved these changes in September 2021 which became effective at the beginning of fiscal year 2021.

The assumed investment rate of return used to prepare the actuarial valuation as of September 30, 2020, was 7.45%. The Board of Control accepted and approved the new assumed investment rate of return in September 2021 which became effective at the beginning of fiscal year 2021. The new assumed investment rate of return was used to measure the total pension liability as of September 30, 2021, the measurement date.

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Mortality rates for the TRS are 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

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 most recent 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	15.00%	2.80%
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%	9.00%
Real Estate	10.00%	6.50%
Cash	5.00%	2.50%
Total	<u>100.00%</u>	

*Includes assumed rate of inflation of 2.00%.

The discount rate used to measure the total pension liability was 7.45%. 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 7.45%, 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:

	1% Decrease (6.45%)	Current Discount Rate (7.45%)	1% Increase (8.45%)
TRS's Proportionate Share of Collective Net Pension Liability	\$ 29,030	\$ 19,723	\$ 11,884

Detailed information about the pension plan's fiduciary net position is available in the separately issued RSA Annual Comprehensive Financial Report for the fiscal year ended September 30, 2021. 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 August 19, 2022, 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, 2021, 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 qualified employees of counties, cities, towns, and public or 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 15 trustees. Note 1 of this report outlines the composition of the ERS Board of Control. The ERS is administered by the RSA which issues an Annual Comprehensive 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 (after age 52 for State Police) with 10 years or more of creditable service or with 25 years of creditable 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 creditable service (regardless of age), depending on the particular employer'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 creditable service. State Police are allowed 2.875% for each year of creditable 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 formula method. 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 creditable service up to 80% of their average final compensation. State Police are allowed 2.375% for each year of creditable State Police service up to 80% of their average final compensation in computing the formula method. Act 351 of the Legislature of 2022 ERS provides that any Tier 2 member who withdraws from service after the completion of at least 30 years of creditable service is entitled to an annual retirement benefit

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, creditable service,

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employment status, and eligibility for retirement.

Act 132 of the Legislature of 2019 provided that local employers participating in the ERS pursuant to the *Code of Alabama 1975, Section 36-27-6* could elect to provide their Tier 2 members with the same retirement benefits provided to their Tier 1 members. Any local participating employer who elects to provide its Tier 2 members with the same retirement benefits provided to its Tier 1 members may do so by adoption of a resolution within 24 months of the effective date of Act 2019-132. The effective date of Act 2019-132 was May 8, 2019, giving local participating employers until May 8, 2021, to make such election. Act 2019-132 also provided that the ERS Board of Control could deny a local participating employer's election based on a review by RSA Staff of the local participating employer's historical compliance with ERS requirements as well as the financial stability of the local participating employer. Any local participating employer whose election is denied may petition the ERS Board of Control for a reconsideration within the 24-month period from the effective date of Act 2019-132. Once a local participating employer elects to provide its Tier 2 members with the same retirement benefits provided to its Tier 1 members, its election is irrevocable and becomes effective at the beginning of the fiscal year following the date that the ERS receives a local participating employer's resolution. Any local participating employer electing to provide its Tier 2 members with the same retirement benefits provided to its Tier 1 members who has not increased its Tier 1 members' contribution rates as provided in Act 676 of the Legislature of 2011 is required to develop a plan to gradually increase its members' contribution rates. The plan must be submitted to the ERS prior to a local participating employer submitting a resolution electing to provide its Tier 2 members with the same retirement benefits provided to its Tier 1 members. Beginning in the month that a local participating employer's election becomes effective, its Tier 2 members (except Tier 2 members who are certified law enforcement, correctional officers, and firefighters) will contribute 7.50% of earnable compensation to the ERS. Tier 2 certified law enforcement, correctional officers, and firefighters will contribute 8.50% of earnable compensation to the ERS. Act 2019-132 was amended by Act 348 of the Legislature of 2022. Act 2022-348 amended Act 2019-132 by removing the date limitation for any local participating employer to submit its resolution electing to provide its Tier 2 members with the same retirement benefits provided to its Tier 1 members. Act 2022-348 also amended Act 2019-132 by removing the date limitation for a local participating employer to petition the ERS Board of Control for a reconsideration if the ERS Board of Control denied its election to provide its Tier 2 members with the same retirement benefits provided to its Tier 1 members.

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 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 ERS on or after October 1, 2019. An 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.

As of September 30, 2021, ERS membership included approximately 104,510 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 were required by statute to contribute 5% of earnable compensation to the ERS 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 to the ERS. Effective October 1, 2012, covered members of the ERS are required by statute to contribute 7.50% of earnable compensation to the ERS. Certified law enforcement, correctional officers, and firefighters of the ERS were required by statute to contribute 6% of earnable compensation to the ERS 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 to the ERS. 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 to the ERS. State Police members of the ERS are required by statute to contribute 10% of earnable compensation to the ERS. ERS local participating employers are not required by statute to increase contribution rates for their members. Tier 2 covered members of the ERS are required by statute to contribute 6% of earnable compensation to the ERS. Tier 2 certified law enforcement,

correctional officers, and firefighters of the ERS are required by statute to contribute 7% of earnable compensation to the ERS. Tier 2 State Police members of the ERS are required by statute to contribute 10% of earnable compensation to the ERS. 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 members' (except certified law enforcement, correctional officers, and firefighters) contribution rates increased from 5% to 7.50% of earnable compensation and Tier 1 certified law enforcement, correctional officers, and firefighters' contribution rates increased from 6% to 8.50% of earnable compensation.

The participating employer contribution rate for the ERS State Employees contractually required contribution rate for the year ended September 30, 2022, was 14.83% of annual pay for Tier 1 members and 14.44% 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 \$1,229 and from JRF were \$36 for the fiscal year ended September 30, 2022.

At September 30, 2022, in accordance with GASB Statement No. 68, the ERS reported a net pension liability of \$15,723 and the JRF reported a net pension liability of \$342 for their respective proportionate shares of the total net pension liability of the ERS State Employees' retirement plan (dollar amounts in thousands). The ERS pension plan's total net pension liability was measured as of September 30, 2021, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of September 30, 2020, using actuarial assumptions based on the results of an investigation of the economic and demographic experience for the ERS based upon participant data as of September 30, 2020, and rolled forward to the ERS and JRF's measurement date of September 30, 2021. 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 employers. At September 30, 2021, ERS's proportion was 0.561926%, which was a decrease of 0.006614% from its proportion measured as of September 30, 2020. At September 30, 2021, the JRF's proportion was 0.012222%, which was an increase of 0.000717% from its proportion measured as of September 30, 2020.

For the fiscal year ended September 30, 2022, the ERS recognized pension expense of \$1,403 (dollar amount in thousands). At September 30, 2022, 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	\$ 639	\$ -
Changes of Assumptions	1,151	-
Net Difference between Projected & Actual		
Earnings on Pension Plan Investments	-	2,343
Changes in Proportion & Differences between Employer		
Contributions & Proportionate Share of Contributions	54	288
Employer Contributions Subsequent to the Measurement Date	1,229	-
Total	\$ 3,073	\$ 2,631

The ERS will recognize \$1,229 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, 2023 (dollar amount in thousands). Other amounts reported as deferred outflows of resources and

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deferred inflows of resources related to pensions will be recognized in pension expense as follows (dollar amounts in thousands):

Fiscal Year Ended	
September 30:	
2023	\$204
2024	\$175
2025	(\$375)
2026	(\$791)
2027	\$0
Thereafter	\$0

For the fiscal year ended September 30, 2022, the JRF recognized pension expense of \$45. At September 30, 2022, the JRF reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between Expected & Actual Experience	\$ 14	\$ -
Changes of Assumptions	25	-
Net Difference between Projected & Actual Earnings on Pension Plan Investments	-	51
Changes in Proportion & Differences between Employer Contributions & Proportionate Share of Contributions	20	-
Employer Contributions Subsequent to the Measurement Date	36	-
Total	\$ 95	\$ 51

The JRF will recognize \$36 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, 2023. 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:	
2023	\$16
2024	\$13
2025	(\$4)
2026	(\$17)
2027	\$0
Thereafter	\$0

The total pension liability was determined by an actuarial valuation as of September 30, 2020, using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.50%
Projected Salary Increases	3.25% - 6.00%
Investment Rate of Return*	7.45%

*Net of pension plan investment expense.

Mortality rates for the ERS were based on the Pub-2010 Public Mortality Plans Mortality Tables with the following adjustments 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:

Group	Membership Table	Set Forward (+)/ Setback (-)	Adjustment to Rates
Non-FLC Service Retirees	Generally Healthy Below Median	Male: +2 Female: +2	Male: 90% ages < 65, 96% ages > or = 65 Female: 96% all ages
FLC/State Police Service Retirees	Public Safety Healthy Below Median	Male: +1 Female: None	None
Beneficiaries	Contingent Survivor Below Median	Male: +2 Female: +2	None
Non-FLC Disabled Retirees	General Disability	Male: +7 Female: +3	None
FLC/State Police Disabled Retirees	Public Safety Disability	Male: +7 Female: None	None

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 ERS based upon participant data as of September 30, 2020. This investigation resulted in changes to the actuarial assumptions. The Board of Control accepted and approved these changes in September 2021 which became effective at the beginning of fiscal year 2021.

The assumed investment rate of return used to prepare the actuarial valuations as of September 30, 2020, was 7.45% for the ERS. The Board of Control accepted and approved the new assumed investment rate of return in September 2021 which became effective September 30, 2020. The new assumed investment rate of return was used to measure the total pension liability as of September 30, 2021.

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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	15.00%	2.80%
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%	9.00%
Real Estate	10.00%	6.50%
Cash	5.00%	1.50%
Total	<u>100.00%</u>	

*Includes assumed rate of inflation of 2.00%.

The discount rate used to measure the total pension liability was 7.45%. 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 7.45%, 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:

	1% Decrease (6.45%)	Current Discount Rate (7.45%)	1% Increase (8.45%)
ERS's Proportionate Share of Collective Net Pension Liability	\$ 20,765	\$ 15,723	\$ 11,439
JRF's Proportionate Share of Collective Net Pension Liability	\$ 452	\$ 342	\$ 249

Detailed information about the pension plan's fiduciary net position is available in the separately issued RSA Annual Comprehensive Financial Report for the fiscal year ended September 30, 2021. The supporting actuarial information is included in the GASB Statement No. 68 Report for the ERS prepared as of September 30, 2021. The auditor's report dated August 19, 2022, 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) DIRECT APPROPRIATION FROM THE EDUCATION TRUST FUND

Act 178 of the Legislature of 2022 provided for a funded one-time longevity bonus payment in addition to the retirement benefits of certain retirees and beneficiaries of the TRS. The longevity bonus was payable to each retiree whose effective date of retirement for purposes of receiving retirement benefits from the TRS was prior to March 1, 2022, and any retiree or beneficiary who was receiving or was entitled to receive a monthly retirement allowance from the TRS on March 30, 2022. Each eligible recipient received a payment of \$2 (dollar amount not in thousands) per month for each year of creditable service attained by the retiree. The longevity bonus was paid to all eligible recipients in April 2022. Act 395 of the Legislature of 2022 made a supplemental appropriation for the fiscal year ending September 30, 2022, to the TRS for \$58,400,000 (dollar amount not in thousands) for the longevity bonus for each eligible recipient as defined by Act 2022-178.

12) 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 \$34,749,781 (dollar amount not in thousands) during fiscal year 2022.

RETIREMENT SYSTEMS OF ALABAMA

Financial Section

Required Supplementary Information
For the Fiscal Year Ended September 30, 2022

TRS
SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY & RELATED RATIOS
For the Fiscal Years Ended September 30
(Dollar Amounts in Thousands)

	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total Pension Liability									
Service Cost*	\$ 717,506	\$ 660,269	\$ 677,424	\$ 645,409	\$ 637,532	\$ 617,120	\$ 627,938	\$ 660,390	\$ 602,605
Interest	2,880,698	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	69,125	-	-	-	-	-	-	-	-
Difference Between Expected & Actual Experience	102,411	(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	(2,564,392)	(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	(65,934)	(58,806)	(58,679)	(55,596)	(53,526)	(53,526)	(57,566)	(55,898)	(56,145)
Net Change in Total Pension Liability	1,139,414	1,666,211	1,639,689	798,336	1,398,078	717,633	1,548,857	875,000	901,387
Total Pension Liability - Beginning	39,982,250	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)	\$ 41,121,664	\$ 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	\$ 932,332	\$ 874,401	\$ 862,475	\$ 869,336	\$ 802,598	\$ 782,702	\$ 751,909	\$ 737,677	\$ 716,753
Contributions - Member	563,132	525,755	515,003	522,909	493,466	489,638	475,980	477,918	480,849
Other	58,735	-	-	-	13,445	-	-	172,982	-
Net Investment Income/(Loss)	(3,876,927)	5,728,217	1,374,958	614,427	2,264,234	2,636,098	2,199,396	261,461	2,468,499
Benefit Payments	(2,564,392)	(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	(65,934)	(58,806)	(58,679)	(55,596)	(53,526)	(53,526)	(57,566)	(55,898)	(56,145)
Administrative Expenses	(28,005)	(29,536)	(31,111)	(28,095)	(22,290)	(22,402)	(19,582)	(19,331)	-
Net Change in Plan Fiduciary Net Position	(4,981,059)	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	30,561,930	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)	\$ 25,580,871	\$ 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)	\$ 15,540,793	\$ 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 Covered Payroll**	62.21%	76.44%	67.72%	69.85%	72.29%	71.50%	67.93%	67.51%	71.01%
Net Pension Liability as a Percentage of Covered Payroll	209.43%	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.

ERS
SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY & RELATED RATIOS
For the Fiscal Years Ended September 30
(Dollar Amounts in Thousands)

	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total Pension Liability									
Service Cost*	\$ 400,919	\$ 348,684	\$ 329,995	\$ 315,841	\$ 307,064	\$ 325,138	\$ 308,840	\$ 346,440	\$ 298,985
Interest	1,517,397	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	21,613	39,193	71,320	-	-	-	-	-	-
Difference Between Expected & Actual Experience	45,487	96,894	243,909	24,803	(79,478)	(64,111)	101	(35,546)	-
Changes of Assumptions	-	726,196	-	-	87,608	-	544,310	-	-
Benefit Payments	(1,331,069)	(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	(61,364)	(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	592,983	1,356,999	1,353,074	492,004	471,148	430,359	998,713	436,376	465,426
Total Pension Liability - Beginning	21,063,964	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)	\$ 21,656,947	\$ 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	\$ 562,109	\$ 516,402	\$ 519,806	\$ 467,553	\$ 426,340	\$ 426,369	\$ 435,243	\$ 411,087	\$ 379,163
Contributions - Member	310,159	286,396	270,947	254,440	241,741	233,901	238,017	229,254	226,015
Contributions - New Unit	-	-	344,352	-	-	-	-	-	-
Other	165	-	-	-	(7,481)	-	-	68,897	-
Net Investment Income/(Loss)	(1,945,460)	2,861,199	724,025	320,585	1,098,412	1,402,009	1,052,886	126,335	1,183,377
Benefit Payments	(1,331,069)	(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	(61,364)	(52,064)	(45,303)	(55,478)	(44,890)	(46,374)	(44,660)	(49,865)	(49,767)
Administrative Expenses	(14,857)	(14,496)	(16,539)	(15,829)	(13,763)	(14,502)	(13,023)	(13,182)	-
Net Change in Plan Fiduciary Net Position	(2,480,317)	2,328,938	582,065	(151,879)	597,881	945,397	625,170	(251,206)	790,143
Plan Fiduciary Net Position - Beginning	15,479,476	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)	\$ 12,999,159	\$ 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)	\$ 8,657,788	\$ 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	60.02%	73.49%	66.73%	68.48%	71.22%	69.71%	65.90%	66.11%	69.58%
Covered Payroll**	\$ 4,185,892	\$ 4,124,367	\$ 4,003,430	\$ 3,789,556	\$ 3,692,241	\$ 3,680,078	\$ 3,592,658	\$ 3,556,282	\$ 3,511,115
Net Pension Liability as a									
Percentage of Covered Payroll	206.83%	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, 2022

JRF

SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY & RELATED RATIOS

For the Fiscal Years Ended September 30

(Dollar Amounts in Thousands)

	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total Pension Liability									
Service Cost*	\$ 10,275	\$ 9,825	\$ 9,512	\$ 9,574	\$ 9,811	\$ 9,815	\$ 9,807	\$ 9,644	\$ 9,481
Interest	35,775	35,316	33,960	33,910	34,112	33,668	32,695	32,385	31,521
Benefit Changes	-	-	-	-	-	-	-	-	-
Difference Between Expected & Actual Experience	(4,259)	746	13,351	(4,518)	(9,134)	(4,399)	(2,487)	(7,391)	-
Changes of Assumptions	-	15,905	-	-	3,873	-	17,792	-	-
Benefit Payments	(40,542)	(39,089)	(38,812)	(36,909)	(33,419)	(32,807)	(30,902)	(30,356)	(29,838)
Refunds of Contributions	(325)	(28)	(256)	(646)	(130)	(353)	(106)	(147)	(46)
Net Change in Total Pension Liability	924	22,675	17,755	1,411	5,113	5,924	26,799	4,135	11,118
Total Pension Liability - Beginning	503,881	481,206	463,451	462,040	456,927	451,003	424,204	420,069	408,951
Total Pension Liability - Ending (A)	\$ 504,805	\$ 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	\$ 20,617	\$ 18,260	\$ 18,099	\$ 18,022	\$ 17,180	\$ 17,373	\$ 17,529	\$ 15,077	\$ 15,250
Contributions - Member	4,692	4,272	4,184	4,101	3,867	3,972	3,723	3,683	3,764
Net Investment Income/(Loss)	(51,779)	63,732	23,159	11,016	27,622	32,685	28,322	(856)	31,343
Benefit Payments	(40,542)	(39,089)	(38,812)	(36,909)	(33,419)	(32,807)	(30,902)	(30,356)	(29,838)
Refunds of Contributions	(325)	(28)	(256)	(646)	(130)	(353)	(106)	(147)	(46)
Administrative Expenses	(443)	(376)	(357)	(357)	(328)	(334)	(398)	(356)	-
Other	-	-	-	-	(56)	-	-	1,854	-
Net Change in Plan Fiduciary Net Position	(67,780)	46,771	6,017	(4,773)	14,736	20,536	18,168	(11,101)	20,473
Plan Fiduciary Net Position - Beginning	365,329	318,558	312,541	317,314	302,578	282,042	263,874	274,975	254,502
Plan Fiduciary Net Position - Ending (B)	\$ 297,549	\$ 365,329	\$ 318,558	\$ 312,541	\$ 317,314	\$ 302,578	\$ 282,042	\$ 263,874	\$ 274,975
Net Pension Liability - Ending (A - B)	\$ 207,256	\$ 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 Covered Payroll**	58.94%	72.50%	66.20%	67.44%	68.68%	66.22%	62.54%	62.20%	65.46%
Net Pension Liability as a Percentage of Covered Payroll	421.18%	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**
2022	\$ 932,332	\$ 932,332	\$ -	\$ 7,750,058	12.03
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

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***
2022	\$ 20,617	\$ 20,617	\$ -	\$ 51,802	39.80
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

§ There are no nonemployer contributing entities in TRS.

*Estimated based on employer contribution rate and 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
2022	-12.99%	-12.85%	-14.64%
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%

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
9/30/2021	9/30/2022	0.21	\$ 19,723	\$ 9,975	197.72	76.44
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
9/30/2021	9/30/2022	0.56	\$ 15,723	\$ 5,821	270.11	67.37
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
9/30/2021	9/30/2022	0.01	\$ 342	\$ 189	180.95	67.37
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, 2022**

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

SCHEDULES OF PENSION CONTRIBUTIONS

For the Fiscal Years Ended September 30

(Dollar Amounts in Thousands)

TEACHERS' RETIREMENT SYSTEM

	<u>2022</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>
Contractually Required Contributions	\$ 2,256	\$ 2,072	\$ 1,946	\$ 1,883	\$ 1,725	\$ 1,444	\$ 1,453	\$ 1,271
Contributions in relation to the								
Contractually Required Contributions	(2,256)	(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>	<u>\$ -</u>
Covered Payroll	\$ 10,858	\$ 9,975	\$ 9,440	\$ 8,748	\$ 7,663	\$ 7,235	\$ 6,739	\$ 6,593
Contributions as a Percentage of								
Covered Payroll	20.78%	20.77%	20.61%	21.52%	22.51%	19.96%	21.56%	19.28%

EMPLOYEES' RETIREMENT SYSTEM

	<u>2022</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>
Contractually Required Contributions	\$ 1,229	\$ 1,245	\$ 1,302	\$ 1,209	\$ 1,059	\$ 1,014	\$ 1,133	\$ 896
Contributions in relation to the								
Contractually Required Contributions	(1,229)	(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>	<u>\$ -</u>
Covered Payroll	\$ 6,229	\$ 5,821	\$ 6,350	\$ 5,848	\$ 5,197	\$ 5,113	\$ 4,904	\$ 4,695
Contributions as a Percentage of								
Covered Payroll	19.73%	21.39%	20.50%	20.67%	20.38%	19.83%	23.10%	19.08%

JUDICIAL RETIREMENT FUND

	<u>2022</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>
Contractually Required Contributions	\$ 36	\$ 27	\$ 26	\$ 23	\$ 21	\$ 19	\$ 21	\$ 17
Contributions in relation to the								
Contractually Required Contributions	(36)	(27)	(26)	(23)	(21)	(19)	(21)	(17)
Contribution Deficiency/(Excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Covered Payroll	\$ 274	\$ 189	\$ 189	\$ 176	\$ 157	\$ 152	\$ 144	\$ 136
Contributions as a Percentage of								
Covered Payroll	13.14%	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
9/30/2021	9/30/2022	0.59	\$ 5,018	\$ 9,975	50.31	22.49
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
9/30/2021	9/30/2022	0.36	\$ 3,087	\$ 5,821	53.03	22.49
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
9/30/2021	9/30/2022	0.00	\$ 26	\$ 189	13.76	22.49
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, 2022

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>2022</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>
Contractually Required Contributions	\$ 331	\$ 347	\$ 313	\$ 428	\$ 454
Contributions in relation to the					
Contractually Required Contributions	<u>(331)</u>	<u>(347)</u>	<u>(313)</u>	<u>(428)</u>	<u>(454)</u>
Contribution Deficiency/(Excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Covered Payroll	\$ 10,858	\$ 9,975	\$ 9,440	\$ 8,748	\$ 7,663
Contributions as a Percentage of					
Covered Payroll	3.05%	3.48%	3.32%	4.89%	5.92%

EMPLOYEES' RETIREMENT SYSTEM

	<u>2022</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>
Contractually Required Contributions	\$ 193	\$ 214	\$ 205	\$ 290	\$ 306
Contributions in relation to the					
Contractually Required Contributions	<u>(193)</u>	<u>(214)</u>	<u>(205)</u>	<u>(290)</u>	<u>(306)</u>
Contribution Deficiency/(Excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Covered Payroll	\$ 6,229	\$ 5,821	\$ 6,350	\$ 5,848	\$ 5,197
Contributions as a Percentage of					
Covered Payroll	3.10%	3.68%	3.23%	4.96%	5.89%

JUDICIAL RETIREMENT FUND

	<u>2022</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>
Contractually Required Contributions	\$ 2	\$ 2	\$ 2	\$ 2	\$ 2
Contributions in relation to the					
Contractually Required Contributions	<u>(2)</u>	<u>(2)</u>	<u>(2)</u>	<u>(2)</u>	<u>(2)</u>
Contribution Deficiency/(Excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Covered Payroll	\$ 274	\$ 189	\$ 189	\$ 176	\$ 157
Contributions as a Percentage of					
Covered Payroll	0.73%	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.

Financial Section

Notes to the Required Supplementary Information
For the Fiscal Year Ended September 30, 2022

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 2022 are in the table below. ERS local participating employer contribution rates differ for each employer.

	<u>Tier 1</u>	<u>Tier 2</u>
TRS	12.43%	11.32%
ERS - State Employees	14.83%	14.44%
ERS - State Police	52.22%	42.86%
JRF - Groups 1 & 2	42.10%	-
JRF - Group 3 - Judges & Clerks	37.47%	-
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, 2019, three years prior to the end of the fiscal year in which contributions are reported. The following actuarial methods and assumptions were used to determine the most recent contribution rate reported in that schedule.

	<u>TRS</u>	<u>ERS</u>	<u>JRF</u>
Actuarial Cost Method	Entry Age Normal	Entry Age Normal	Entry Age Normal
Asset Valuation Method	5-year smoothed market	5-year smoothed market	5-year smoothed market
Amortization Method	Level percent closed	Level percent closed	Level percent closed
Remaining Amortization Period	27.8 years	Within 30 years - Varies by Employer	19.8 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.

RETIREMENT SYSTEMS OF ALABAMA

Financial Section

Notes to the Required Supplementary Information For the Fiscal Year Ended September 30, 2022

E. Changes to Benefit Terms

In 2022, the retirement benefits for TRS and ERS Tier 2 members were amended to allow TRS and ERS Tier 2 members to retire at any age with 30 years of creditable service, subject to a benefit reduction of 2% for every year that the member is below retirement age. Retirement age for TRS and ERS Tier 2 members (except State Police and certified law enforcement, correctional officers, and firefighters) is age 62. Retirement age for State Police members of the ERS and certified law enforcement, correctional officers, and firefighters is age 56.

In 2022, the TRS, ERS, and JRF Plans were amended to allow surviving spouses of retirement-eligible members who die in active service to receive an Option 2 monthly retirement benefits, provided that the spouse is the sole designated beneficiary on file for that member.

In 2021, the TRS Plan was amended to allow sick leave conversion for TRS Tier 2 members and to increase the member contribution rates for TRS Tier 2 members. Effective October 1, 2021, TRS Tier 2 members (except certified law enforcement, correctional officers, and firefighters) contribute 6.20% of earnable compensation to the TRS. TRS Tier members who are certified law enforcement, correctional officers, and firefighters contribute 7.20% of earnable compensation to the TRS.

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.

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

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. 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.

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 Below-Median 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.

RETIREMENT SYSTEMS OF ALABAMA

Financial Section

Notes to the Required Supplementary Information

For the Fiscal Year Ended September 30, 2022

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	Entry Age Normal
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.

RETIREMENT SYSTEMS OF ALABAMA

Financial Section

Notes to the Required Supplementary Information

For the Fiscal Year Ended September 30, 2022

C. Changes of Assumptions

Changes in the actuarial assumptions as a result of the experience study for the five-year period ended September 30, 2020, are summarized below:

Assumption	Description
Price Inflation	Lowered from 2.75% to 2.50%.
Investment Return (Net of Investment Expense)	Lowered from 7.50% to 7.25%.
Wage Inflation	Lowered from 3.00% to 2.75%.
Mortality Rates (Pre-Retirement, Post-Retirement Healthy, and Disabled)	Update to Pub-2010 Public Mortality Plans Mortality Tables. For future mortality improvement, generational mortality improvement with mortality improvement scale MP-2020, with an adjustment of 66-2/3% to the table beginning in year 2019.
Retirement Rates	Judges: Revised to more closely reflect experience. State and Local Regular Members: Decreased rates of retirement for members at most ages. State and Local FLC Members: Decreased rates of retirement for members at ages 56 and younger. Increased rates of retirement slightly for members ages 57 and older. State Police: Increased rates of retirement in some age categories. Decreased rates of retirement in some age categories. Teachers: Decreased rates of retirement at most ages and extended retirement rates to age 80.
Withdrawal Rates	Judges: Changed from an age-based table broken down by service bands to a pure service-based table. Increased rates of withdrawal for members with less than 10 years of service and decreased rates or withdrawal for members with 10 or more years of service. Non-Judges: Changed from an age-based table broken down by service bands to a pure service-based table. Used a liability weighted methodology in analyzing rates. Decreased rates of withdrawal at most service categories for non-Teachers.
Disability Rates	Lowered rates of disability retirement at most ages for State, Teachers, and Local Members. No change for Judges.
Salary Increases	No change to total assumed rates of salary increases for Judges and Teachers. Increased merit salary scale by 0.25% to offset the recommended decrease in the wage inflation assumption by 0.25%.

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, 2022

(Dollar Amounts in Thousands)

	Teachers' Retirement System	Employees' Retirement System	Judicial Retirement Fund	Totals
Personnel Services:				
Salaries	\$ 10,858	\$ 6,229	\$ 274	\$ 17,361
Employee Fringe Benefits	454	448	52	954
Total Personnel Services	<u>11,312</u>	<u>6,677</u>	<u>326</u>	<u>18,315</u>
Professional Services:				
Actuarial	142	539	69	750
Accounting and Auditing	100	77	21	198
Information Technology	2,020	757	10	2,787
Mailing Services	115	74	-	189
Legal Services	60	41	-	101
Personnel Services	140	-	-	140
Other Professional Services and Fees	269	125	-	394
Total Professional Services	<u>2,846</u>	<u>1,613</u>	<u>100</u>	<u>4,559</u>
Communications and Travel:				
Telecommunications	279	155	-	434
Postage	1,188	754	-	1,942
Travel	75	48	2	125
Total Communications and Travel	<u>1,542</u>	<u>957</u>	<u>2</u>	<u>2,501</u>
Rentals:				
Office Space	611	408	10	1,029
Equipment Leasing	6	2	-	8
Total Rentals	<u>617</u>	<u>410</u>	<u>10</u>	<u>1,037</u>
Miscellaneous:				
Supplies	1,878	1,205	5	3,088
Maintenance	750	444	-	1,194
Total Miscellaneous	<u>2,628</u>	<u>1,649</u>	<u>5</u>	<u>4,282</u>
Total Administrative Expenses	<u>\$ 18,945</u>	<u>\$ 11,306</u>	<u>\$ 443</u>	<u>\$ 30,694</u>

RETIREMENT SYSTEMS OF ALABAMA

Financial Section

Schedule of Investment Expenses

For the Fiscal Year Ended September 30, 2022

(Dollar Amounts in Thousands)

	Teachers' Retirement System	Employees' Retirement System	Judicial Retirement Fund	Totals
<i>Investment Activity</i>				
Investment Management Fees:				
Salaries and Benefits	\$ 9,387	\$ 2,361	\$ -	\$ 11,748
Dues, Subscriptions, and Supplies	1,537	1,022	-	2,559
Travel	6	5	-	11
Professional Services:				
Investment Advisor	60	30	-	90
Legal	199	132	-	331
Appraisal of Private Placements and Real Estate	394	226	-	620
Investment Activity Expenses before Reimbursement	11,583	3,776	-	15,359
Less: Reimbursement for Investment Management Fees	10	232	-	242
Total Investment Activity Expenses	11,573	3,544	-	15,117
<i>Securities Lending Activity</i>				
Securities Lending Borrower Rebates	4,585	2,367	23	6,975
Securities Lending Management Fees	2,406	1,175	21	3,602
Total Securities Lending Activity Expenses	6,991	3,542	44	10,577
Total Investment Expenses	\$ 18,564	\$ 7,086	\$ 44	\$ 25,694

RETIREMENT SYSTEMS OF ALABAMA

Financial Section

Schedule of Professional/Consultant Fees

For the Fiscal Year Ended September 30, 2022

(Dollar Amounts in Thousands)

Professional/Consultant	Nature of Service	Teachers' Retirement System	Employees' Retirement System	Judicial Retirement Fund	Totals
Cavanaugh Macdonald Consulting, LLC	Actuary	\$ 142	\$ 539	\$ 69	\$ 750
Carr, Riggs & Ingram, LLC	Auditor	83	42	14	139
A-LIGN	Auditor	17	35	7	59
Bradley Arant Boult Cummings, LLP	Legal	35	25	-	60
Buchalter	Legal	9	4	-	13
Ice Miller LLP	Legal	9	6	-	15
Jackson Walker LLP	Legal	13	9	-	22
Alabama Department of Finance	Mail	38	25	-	63
Walker360	Mail	77	49	-	126
State Personnel Department	Personnel	140	-	-	140
Fine Geddie & Associates, LLC	Consultant	75	-	-	75
The Segal Company	Consultant	129	86	-	215
Alabama Department of Finance	Comptroller's Accounting Services	62	32	10	104
Alabama Department of Finance	Information Technology	205	136	-	341
Deloitte Consulting, LLP	Information Technology	1,679	560	-	2,239
Stamp Idea Group	Information Technology	47	31	-	78
Packet Ninjas	Information Technology	17	11	-	28
Various	Other	69	23	-	92
Total Professional/Consultant Fees - Administrative Services		2,846	1,613	100	4,559
Maynard, Cooper, & Gale P.C.	Legal	199	132	-	331
Regions Bank	Investment Advisor	60	30	-	90
Pearson Realty Services, Inc.	Real Estate Appraiser	108	72	-	180
Houlihan Lokey	Investment Appraiser	286	154	-	440
Total Professional/Consultant Fees - Investment Services		653	388	-	1,041
Total Professional/Consultant Fees		\$ 3,499	\$ 2,001	\$ 100	\$ 5,600





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, 2022

Dear Members,

I am pleased to present the following report on investment activity for the fiscal year ended September 30, 2022. The report provides investment highlights in general as well as specific information on the Retirement Systems' investment activity for the fiscal year. Investments within this report are presented on the basis of fair value using a variety of sources such as appraisals, valuations of underlying companies and assets for limited partnerships, and through fair values obtained from the investment custodian. The custodian calculated rates of return are based on normal industry standards using a time-weighted rate of return methodology based upon these fair values.

Without question 2022 was an awful year to be long on most anything in the capital markets. Our expectation that the long bull run in the bond market had run its course proved to be correct. Unfortunately, stocks became highly correlated throughout the year with the rising rate environment as the Federal Reserve (the Fed) started aggressively hiking rates to try and cool inflation down. Although earnings for the most part held up well, the price multiple investors were willing to pay to own stocks declined as the language from the monetary policy makers changed. Looking back, it is almost always easy to see your mistakes and last year proved no different. Cash and pockets of real estate did well, but most everything in public markets on average was down double digits. I mention public markets because private market assets performed better, but there are lots of nuances that allow for that. Their day of reckoning is coming.

Following what has happened during calendar year 2022, there is obviously much angst and confusion as to what path lies ahead. We have a litany of issues on the horizon not limited to: a global recession that is highly likely; concerted monetary policy tightening; Russian/Ukrainian war that is ongoing; dislocations in the currency markets; and China becoming more aggressive. It is hard to see through all these issues, but I would argue that it is not unprecedented. On the positive side, corporate balance sheets are in good shape, as well as the overall banking system, especially in the U.S. We have already seen a big reset of the market multiple, so some of the heavy lifting has already happened. Inflation may have peaked, which provides a runway for the Fed to at least sound less hawkish. The market climbs a wall of worry, and the wall is high at this point. With sentiment as negative as it is, we don't believe now is the time to de-risk. On the contrary, we are finding many attractive investments in fixed income for the first time in many years. We expect that there will be more turbulence in the coming quarters, but with that comes opportunities. We will adjust the portfolio accordingly.

RSA Performance Summary

As of September 30, 2022, aggregate defined benefit assets under management totaled \$38.4 billion. During fiscal year 2022, annualized total returns of the TRS, ERS, and JRF were -13.18%, -13.02%, and -14.87%, respectively.

Equities

The new fiscal year started off much like the prior year with equities continuing to make new highs through December. As we moved into calendar 2022, the market began to roll over. As we spoke of in last year's annual report, a little inflation is not necessarily a bad thing for equities as earnings are reported in nominal terms, but way too much inflation is always bad. The Fed started changing their rhetoric early in 2022, dismissing the idea that inflation should prove to be a "transitory" issue. Supply chain bottlenecks, tight labor markets, and inflated assets finally tipped the Fed into tightening mode. By the end of the fiscal year, the Fed had instituted five rate hikes, with the last three being 75 basis points (bps) each. The main impact on equities has been one of multiple compression. Earnings have yet to be heavily impacted, but the market is implying that we are in for a sizeable recalculation for forward corporate earnings. On top of all these issues, the war in the Ukraine is still ongoing, and it's hard to forecast the many unknowns that will unfold as Putin's actions are a total wildcard. China is another variable to add to the mix. Xi Jinping was just reelected to another 5-year term, and his recent actions of suppression and a more aggressive stance towards Taiwan as well as the Western nations adds more geopolitical risk to the equation.

As for where we are now, most macro indicators are starting to show that inflation has peaked. We are now in the second month in a row of declining home prices, most commodity prices have softened significantly, and we are seeing faint signs that the jobs market has started to weaken. Sentiment is uber bearish at the moment, and investor positioning has markedly de-risked. The big question is can the Fed orchestrate a soft landing, or does the rapid pace

that they have been raising rates cause a recession. At this point we feel that it is probably a toss-up, but the markets have already had a drawdown that factors in a mild recession. We have been a net seller of equities the past several years as the asset class has been far and away the best performer. It didn't really matter the past 12 months as nearly all asset classes except cash suffered negative returns. We continued with our hedging strategy on a portion of our equity exposure, which did add value this year. Closing out the fiscal year in September yet again proved to be awful, as global equities were down roughly 9.5% for the month.

For the year, the RSA domestic equity portfolios returned -14.92%, -14.84%, and -15.21% for the TRS, ERS, and JRF funds, respectively. Both developed and emerging international equities performance lagged U.S. equities. Total international equity returns were -24.65% for the TRS, -24.78% for the ERS, and -24.48% for the JRF. The combined total returns for the overall equity portfolios were -17.09%, -17.09%, and -17.27% for the TRS, ERS, and JRF, respectively. Three-, five-, and ten-year annualized global equity returns were 5.37%, 6.24%, and 9.51% for the TRS, 5.35%, 6.28%, and 9.53% for the ERS, and 5.52%, 6.39%, and 9.64% for the JRF, respectively.

Fixed Income

At the beginning of the fiscal year, questions remained on how long the current inflation paradigm would reign, due to issues surrounding the supply chain, energy prices, and wage levels needed to meet the demands within the labor market. At the Federal Open Market Committee (FOMC) meeting in September, policymakers were forecasting an interest rate hike in 2022, a few more the following year, and a fed funds rate in the vicinity of 1.75% by the end of 2024. The lesson of this fiscal year must be the unpredictability of forecasts, geopolitical risks, and market forces in today's global landscape.

The first quarter of the fiscal year was somewhat muted in fixed income markets. While the Fed raised its inflation forecast after several stronger-than-expected Consumer Price Index (CPI) prints, it did not appear overly concerned regarding the potential longevity of the situation. So, while the yield curve began to flatten during this time, it was solely due to the increase in the front end as the 10-year treasury remained relatively stable. Ultimately, Chairman Jay Powell, finally recognizing the continuation of inflationary pressures, ceased to describe the phenomenon as "transitory" and accelerated its timeline on the withdrawal of asset purchases.

The Fed's hawkish pivot upended financial markets in the first week of the new calendar year, as rates shifted approximately 25bps higher. The December CPI report startled even the most hopeful of investors, reaching its highest level in the last 40 years. Volatility in risk assets erupted as the expected rate hikes for 2022 rapidly moved higher in a matter of a couple of weeks. The Treasury yield curve bear flattened while investment grade credit curves steepened, leading to massive losses in long-end corporate debt. The pain was just beginning as the January payroll report posted gains that exceeded estimates by nearly three times what the market had anticipated. Interest rate volatility soared as another hot inflation print was recorded. Russia's invasion of Ukraine only made matters worse, creating shockwaves throughout global markets. The Fed raised rates in March by 25bps and its bond purchasing program finally came to an end.

All major asset classes sold off in April, as another strong employment report pushed rate expectations higher. The potential for 50bp adjustments at its next three meetings became a real possibility. Equity markets were hammered, corporate bonds lost over 5%, and treasury yields climbed 50-60bps across the curve. The Committee raised the fed funds rate by 50bps in May and announced its plan to reduce its \$9 trillion balance sheet. Headline inflation breached 8.0% in short order, with core prices rising 6.3%. After another robust payroll number and a 1.0% month-over-month increase in the May CPI report, the FOMC raised short-term interest rates by 75bps at its June meeting.

The month of July provided a relief rally to all assets on the heels of better than expected results from corporate America. Expectations also began to build around the notion of peak inflation and more accommodative policy focused on growth. The Fed met at the end of July and raised rates by another 75bps, however the press conference was interpreted to be less hawkish. Long-end treasury yields dropped a fair amount, causing the 2s/10s curve to invert by approximately 25bps. Chairman Powell was decidedly hawkish at the Jackson Hole Economic Symposium at the end of August. In turn, treasury yields marched substantially higher across the curve, with yield curve inversion reaching

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a height of roughly 50bps. As the Chairman previously proclaimed that “restoring price stability will likely require maintaining a restrictive policy stance for some time”, he and other central bankers raised rates 75bps for a third time to finish out the fiscal year.

This year was one for the record books and unresolved issues remain. Central banks are being forced to raise rates to combat the worst inflationary environment in decades amid a rapidly declining global economy. Russia and China seem determined to exert their sphere of influence by any means necessary. The dollar, the world’s reserve currency, continues to strengthen as it symbolizes safety in times of economic stress and uncertainty. Labor markets appear tight and nominal wages continue to increase, yet the average worker seems to be falling behind as inflation has proven sticky. On a somewhat positive note, the \$17 trillion in negative-yielding sovereign debt has vanished. Fixed income is beginning to resemble an attractive investment opportunity once again after years of being a low-yielding alternative. Corporate credit seems poised to handle an economic downturn better than previous ones and mortgages are fairly attractive despite the lack of Fed involvement going forward. Even money-market instruments are providing ample yield for those sitting around awaiting the next opportunity to put capital to work. It is our belief that methodically adding to the fixed income portfolio during this time of higher interest rates and uncertainty, will prove to be beneficial over the long term.

For the fiscal year, the total annual returns for the public domestic fixed income portfolios were -13.06% for the TRS, -13.05% for the ERS, and -12.59% for the JRF. The five-year annualized returns were 0.43% for the TRS, 0.40% for the ERS, and 0.36% for the JRF. The ten-year annualized returns were 1.57% for the TRS, 1.56% for the ERS, and 1.49% for the JRF.

Sincerely,



Marc Green
Director of Investments

Investment Section

Teachers' Retirement System Investment Policy Statement For the Fiscal Year Ended September 30, 2022

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)).

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

Custodian

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

Investment Advisor

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

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

Investment Goals and Objectives

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

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.

Investment Section

Teachers' Retirement System Investment Policy Statement (Continued)

For the Fiscal Year Ended September 30, 2022

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 2000 plus 3%. -If a debt investment, the Bloomberg Capital Agency plus 3%.	
Real Estate	CPI+3% Public REIT portfolio 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

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Investment Section

Teachers' Retirement System Investment Policy Statement (Continued)

For the Fiscal Year Ended September 30, 2022

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

RETIREMENT SYSTEMS OF ALABAMA

Investment Section

Employees' Retirement System Investment Policy Statement For the Fiscal Year Ended September 30, 2022

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)).

RETIREMENT SYSTEMS OF ALABAMA

Investment Section

Employees' Retirement System Investment Policy Statement (Continued)

For the Fiscal Year Ended September 30, 2022

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.

RETIREMENT SYSTEMS OF ALABAMA

Investment Section

Employees' Retirement System Investment Policy Statement (Continued)

For the Fiscal Year Ended September 30, 2022

- 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, 2022

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.

RETIREMENT SYSTEMS OF ALABAMA

Investment Section

Employees' Retirement System Investment Policy Statement (Continued)

For the Fiscal Year Ended September 30, 2022

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
Cash	ML 90-Day T-Bill	
Alternative Investments	-If an equity investment, the Russell 2000 +3% -If a debt investment, the Bloomberg Capital Agency plus 3%.	
Real Estate	NCREIF NPI Public REIT portfolio follows S&P 500 Real Estate sector GICS level 3	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

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 Value Fund	S&P 600 SmallCap
LargeCap 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	Bloomberg Capital Agency
Asset Backed	Bloomberg Capital ABS Index
CMO	Bloomberg Capital MTGE
Corporate	Bloomberg Capital Corp
Municipal	N/A
Mortgage Pass-Through	Bloomberg Capital MTGE
Private Placement	N/A
US Treasury	Bloomberg Capital Treasury
Yankee - Agency	Bloomberg Capital Agency
Yankee – Other Yankee	Bloomberg Capital Corp

RETIREMENT SYSTEMS OF ALABAMA

Investment Section

Teachers' Retirement System

Schedule of Investment Performance

U.S. Equity	TIME-WEIGHTED RATES OF RETURN - GROSS OF FEE			
	1 Year	3 Years	5 Years	10 Years
TRC Core Fund	-13.24%	7.67%	8.98%	11.50%
TRC S&P 500 Fund	-14.73%	7.91%	9.01%	11.42%
TRC Mid Cap Index	-15.23%	6.06%	5.87%	10.09%
TRC S&P Small Cap Index	-18.39%	6.02%	5.37%	10.65%
TRC S&P Small Cap Value	-27.36%	n/a	n/a	n/a
TRC Midcap Active Fund (Ssf)	-17.27%	5.50%	6.56%	9.21%
TRC Large Cap Policy Fund	-7.37%	10.65%	9.74%	n/a
TRC Total Domestic Equity	-14.92%	7.36%	8.18%	11.07%
TRC Custom Domestic Equity Index	-15.79%	7.62%	8.29%	11.30%
<i>S&P 500</i>	<i>-15.47%</i>	<i>8.16%</i>	<i>9.24%</i>	<i>11.70%</i>
<i>S&P Mid Cap 400</i>	<i>-15.25%</i>	<i>6.01%</i>	<i>5.82%</i>	<i>10.04%</i>
<i>S&P Smallcap 600</i>	<i>-18.83%</i>	<i>5.48%</i>	<i>4.84%</i>	<i>10.09%</i>
International Equity				
TRC Emerging Markets Fund	-28.41%	-3.70%	-3.04%	0.61%
TRC International Equities	-22.69%	-0.61%	0.28%	4.50%
TRC International - Passive	-23.98%	-1.27%	-0.40%	3.95%
TRC International - Active	-40.74%	n/a	n/a	n/a
TRC Total International Equity	-24.65%	-1.61%	-0.61%	3.84%
TRC Custom International Equity Index	-26.09%	-1.98%	-1.10%	3.35%
<i>MSCI EAFE (Net)</i>	<i>-25.13%</i>	<i>-1.83%</i>	<i>-0.84%</i>	<i>3.67%</i>
<i>MSCI Emerging Markets</i>	<i>-28.11%</i>	<i>-2.07%</i>	<i>-1.81%</i>	<i>1.05%</i>
<i>STOXX Europe 600 Optimised Cyclical</i>	<i>-33.45%</i>	<i>-4.16%</i>	<i>-5.62%</i>	<i>0.32%</i>
TRC Total Global Equity	-17.09%	5.37%	6.24%	9.51%
TRC Custom Global Equity Index	-18.10%	5.50%	6.22%	9.58%
Fixed Income				
TRC Domestic Fixed Income	-13.06%	-2.06%	0.43%	1.57%
TRC Custom Domestic Fixed Index	-15.55%	-3.18%	-0.12%	1.15%
<i>Bloomberg Aggregate Bond</i>	<i>-14.60%</i>	<i>-3.26%</i>	<i>-0.27%</i>	<i>0.89%</i>
TRC Total Fixed Income	-13.06%	-2.06%	0.43%	1.57%
Alternative Investments				
TRC Private Placements	-4.14%	3.93%	4.20%	2.34%
TRC Preferred And Private Equity	-4.05%	5.97%	3.51%	15.05%
TRC Real Estate	2.29%	0.38%	0.96%	3.15%
TRC Public Real Estate	-15.81%	n/a	n/a	n/a
TRC Total Real Estate	-0.05%	0.41%	0.97%	3.16%
TRC Total Alternatives	-1.66%	2.32%	2.36%	4.84%
TRC Total Fixed Income Plus Alternatives	-6.34%	0.73%	1.74%	3.63%
Cash				
TRC Cash Account	0.82%	0.66%	1.22%	0.77%
TRC Short Term Investments	0.97%	0.94%	1.50%	1.05%
TRC Total Cash	0.94%	0.82%	1.39%	n/a
Total Plan				
TRC Total Plan	-13.18%	3.99%	4.78%	7.33%
TRC Total Plan Policy	-13.90%	4.91%	5.65%	7.49%

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

RETIREMENT SYSTEMS OF ALABAMA

Investment Section

Employees' Retirement System

Schedule of Investment Performance

U.S. Equity	TIME-WEIGHTED RATES OF RETURN - GROSS OF FEE			
	1 Year	3 Years	5 Years	10 Years
ERS Core Fund	-13.29%	7.64%	8.95%	11.50%
ERS S&P 500 Fund	-14.73%	7.91%	9.01%	11.41%
ERS Mid Cap Index	-15.23%	6.07%	5.87%	10.09%
ERS S&P Small Cap Index	-18.39%	6.02%	5.37%	10.65%
ERS Small Cap Value	-28.37%	n/a	n/a	n/a
ERS Midcap Active Fund (Ssf)	-17.27%	5.50%	6.56%	9.21%
ERS Large Cap Policy Fund	-7.37%	10.65%	9.73%	n/a
ERS Total Domestic Equity	-14.84%	7.38%	8.25%	11.08%
ERS Custom Domestic Equity Index	-15.73%	7.67%	8.38%	11.34%
<i>S&P 500</i>	<i>-15.47%</i>	<i>8.16%</i>	<i>9.24%</i>	<i>11.70%</i>
<i>S&P Mid Cap 400</i>	<i>-15.25%</i>	<i>6.01%</i>	<i>5.82%</i>	<i>10.04%</i>
<i>S&P Smallcap 600</i>	<i>-18.83%</i>	<i>5.48%</i>	<i>4.84%</i>	<i>10.09%</i>
International Equity				
ERS Emerging Markets Fund	-28.32%	-3.27%	-2.75%	0.76%
ERS International Equities	-22.69%	-0.75%	0.20%	4.45%
ERS International - Passive	-24.14%	-1.32%	-0.52%	3.87%
ERS International - Active	-40.74%	n/a	n/a	n/a
ERS Total International Equity	-24.78%	-1.64%	-0.72%	3.77%
ERS Custom International Equity Index	-26.17%	-1.96%	-1.14%	3.31%
<i>MSCI Eafe (Net)</i>	<i>-25.13%</i>	<i>-1.83%</i>	<i>-0.84%</i>	<i>3.67%</i>
<i>MSCI Emerging Markets</i>	<i>-28.11%</i>	<i>-2.07%</i>	<i>-1.81%</i>	<i>1.05%</i>
<i>STOXX Europe 600 Optimised Cyclical</i>	<i>-33.45%</i>	<i>-4.16%</i>	<i>-5.62%</i>	<i>0.32%</i>
ERS Total Global Equity	-17.09%	5.35%	6.28%	9.53%
ERS Custom Global Equity Index	-18.11%	5.51%	6.30%	9.65%
Fixed Income				
ERS Domestic Fixed Income	-13.05%	-2.08%	0.40%	1.56%
ERS Custom Domestic Fixed Index	-15.55%	-3.18%	-0.13%	1.15%
<i>Bloomberg Aggregate Bond</i>	<i>-14.60%</i>	<i>-3.26%</i>	<i>-0.27%</i>	<i>0.89%</i>
ERS Total Fixed Income	-13.05%	-2.08%	0.40%	1.56%
Alternative Investments				
ERS Private Placements	-4.16%	3.94%	4.18%	2.31%
ERS Preferred And Private Equity	-3.55%	6.40%	3.77%	15.96%
ERS Real Estate	2.31%	0.37%	0.95%	3.14%
ERS Public Real Estate	-15.81%	n/a	n/a	n/a
ERS Total Real Estate	-0.83%	0.41%	0.97%	3.15%
ERS Total Alternatives	-2.01%	2.64%	2.49%	5.43%
ERS Total Fixed Income Plus Alternatives	-6.42%	0.96%	1.83%	4.01%
Cash				
ERS Cash Account	0.82%	0.65%	1.23%	0.78%
ERS Short Term Investments	1.03%	0.97%	1.53%	1.07%
ERS Total Cash	0.98%	0.83%	1.39%	n/a
Total Plan				
ERS Total Plan	-13.02%	3.99%	4.79%	7.38%
ERS Total Plan Policy	-13.32%	5.27%	6.02%	7.87%

Note: Calculations are prepared using the time-weighted rate of return methodology based upon fair 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	-14.85%	7.92%	9.03%	11.50%
JRF Mid Cap Index	-15.26%	6.06%	5.86%	10.08%
JRF S&P Small Cap Index	-18.39%	6.02%	5.37%	10.65%
JRF S&P Small Cap Value	-28.06%	n/a	n/a	n/a
JRF Large Cap Policy Fund	-7.38%	10.63%	9.70%	n/a
JRF Total Domestic Equity	-15.21%	7.59%	8.40%	11.26%
<i>JRF Custom Domestic Equity Index</i>	<i>-15.71%</i>	<i>7.80%</i>	<i>8.58%</i>	<i>11.40%</i>
<i>S&P 500</i>	<i>-15.47%</i>	<i>8.16%</i>	<i>9.24%</i>	<i>11.70%</i>
<i>S&P Mid Cap 400</i>	<i>-15.25%</i>	<i>6.01%</i>	<i>5.82%</i>	<i>10.04%</i>
<i>S&P Smallcap 600</i>	<i>-18.83%</i>	<i>5.48%</i>	<i>4.84%</i>	<i>10.09%</i>
International Equity				
JRF Emerging Markets Fund	-28.46%	-4.29%	-3.50%	0.36%
JRF International Equities	-22.64%	-0.60%	0.28%	4.50%
JRF International - Passive	-23.78%	-1.28%	-0.40%	3.94%
JRF International - Active	-40.82%	n/a	n/a	n/a
JRF Total International Equity	-24.48%	-1.64%	-0.61%	3.82%
<i>JRF Custom International Equity Index</i>	<i>-26.02%</i>	<i>-1.99%</i>	<i>-1.06%</i>	<i>3.36%</i>
<i>MSCI EAFE (Net)</i>	<i>-25.13%</i>	<i>-1.83%</i>	<i>-0.84%</i>	<i>3.67%</i>
<i>MSCI Emerging Markets</i>	<i>-28.11%</i>	<i>-2.07%</i>	<i>-1.81%</i>	<i>1.05%</i>
<i>STOXX Europe 600 Optimised Cyclicals</i>	<i>-33.45%</i>	<i>-4.16%</i>	<i>-5.62%</i>	<i>0.32%</i>
JRF Total Global Equity	-17.27%	5.52%	6.39%	9.64%
<i>JRF Custom Global Equity Index</i>	<i>-18.02%</i>	<i>5.62%</i>	<i>6.44%</i>	<i>9.66%</i>
Fixed Income				
JRF Domestic Fixed Income	-12.59%	-2.09%	0.36%	1.49%
JRF Custom Domestic Fixed Index	-15.56%	-3.22%	-0.16%	1.08%
<i>Bloomberg Aggregate Bond</i>	<i>-14.60%</i>	<i>-3.26%</i>	<i>-0.27%</i>	<i>0.89%</i>
JRF Total Fixed Income	-12.59%	-2.09%	0.36%	1.49%
Alternative Investments				
JRF Private Placements	-4.68%	3.48%	5.67%	-14.33%
JRF Preferred And Private Equity	-1.14%	6.32%	2.54%	n/a
JRF Real Estate	2.79%	2.01%	2.48%	4.97%
JRF Public Real Estate	-15.81%	n/a	n/a	n/a
JRF Total Real Estate	-5.45%	1.48%	2.16%	4.80%
JRF Total Alternatives	-5.36%	2.10%	2.93%	2.41%
JRF Total Fixed Income Plus Alternatives	-11.85%	-1.56%	0.68%	1.71%
Cash				
JRF Cash Account	0.82%	0.65%	1.22%	0.77%
JRF Short Term Investments	1.03%	0.99%	1.50%	1.05%
JRF Total Cash	0.94%	0.81%	1.36%	n/a
Total Plan				
JRF Total Plan	-14.87%	3.44%	4.67%	7.12%
<i>JRF Total Plan Policy</i>	<i>-15.75%</i>	<i>3.40%</i>	<i>4.71%</i>	<i>7.23%</i>

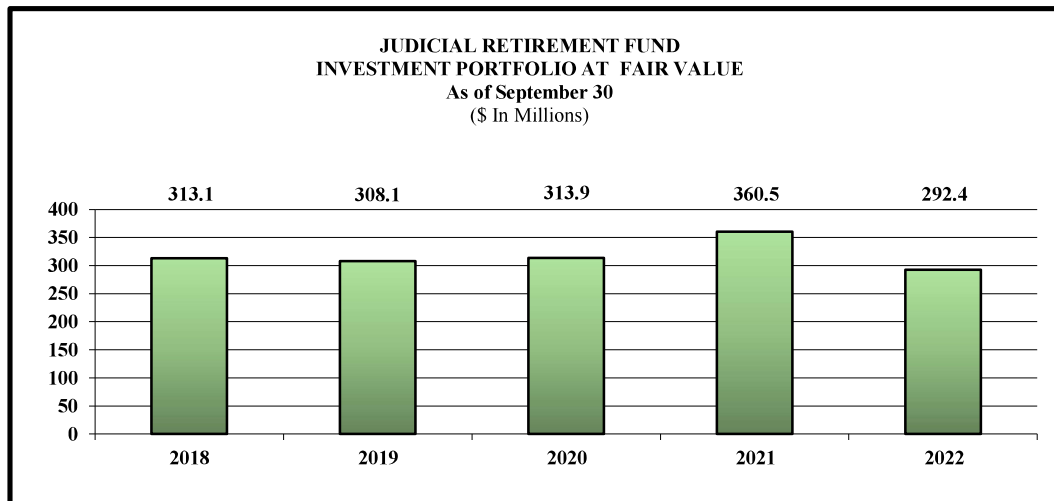
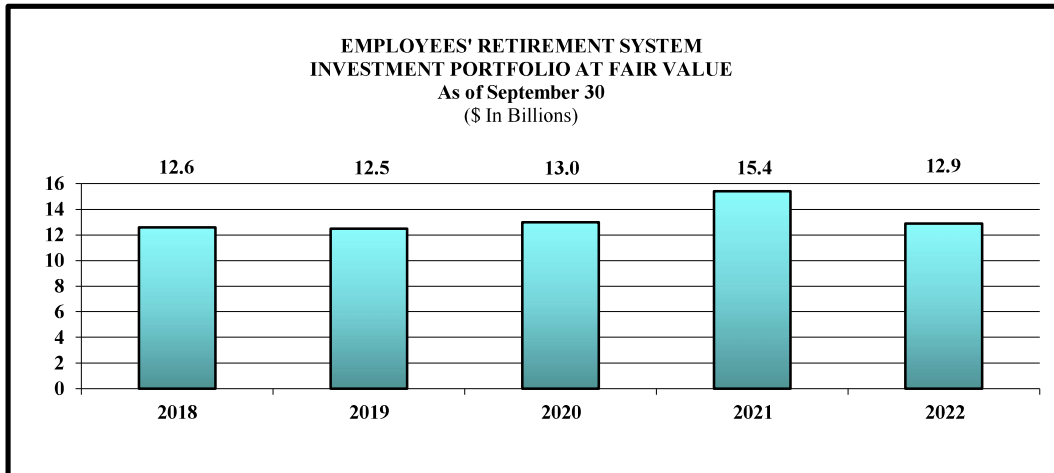
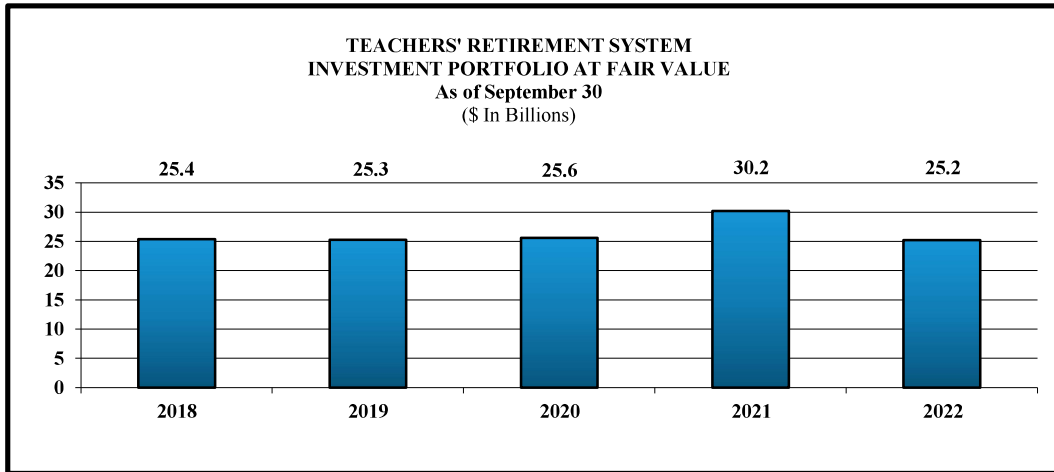
Note: Calculations are prepared using the time-weighted rate of return methodology based upon fair values.

RETIREMENT SYSTEMS OF ALABAMA

Investment Section

Investment Portfolio at Fair Value

Five-Year Comparison

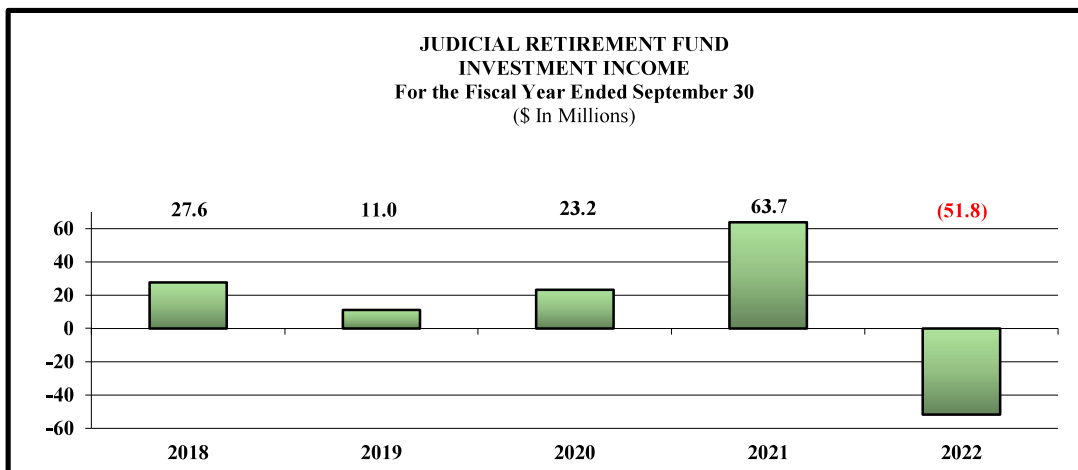
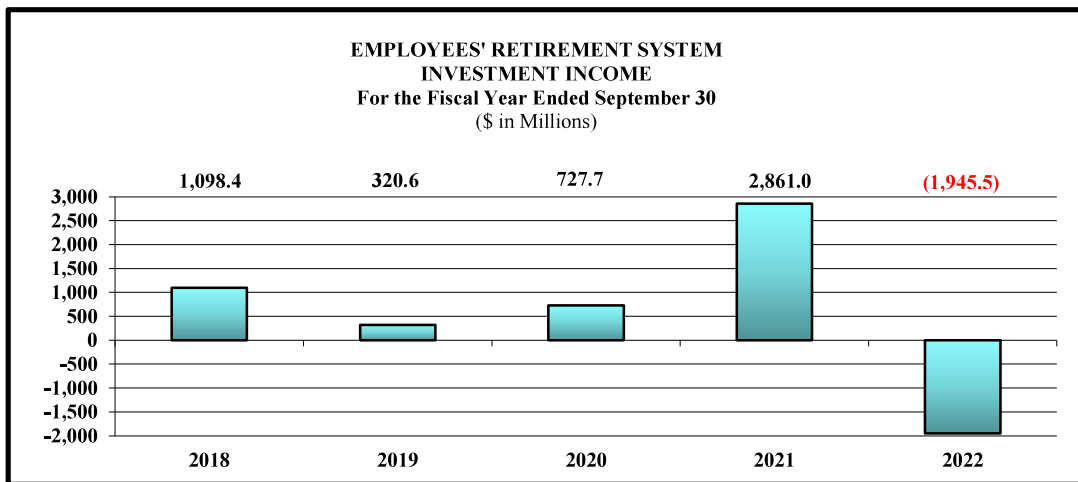
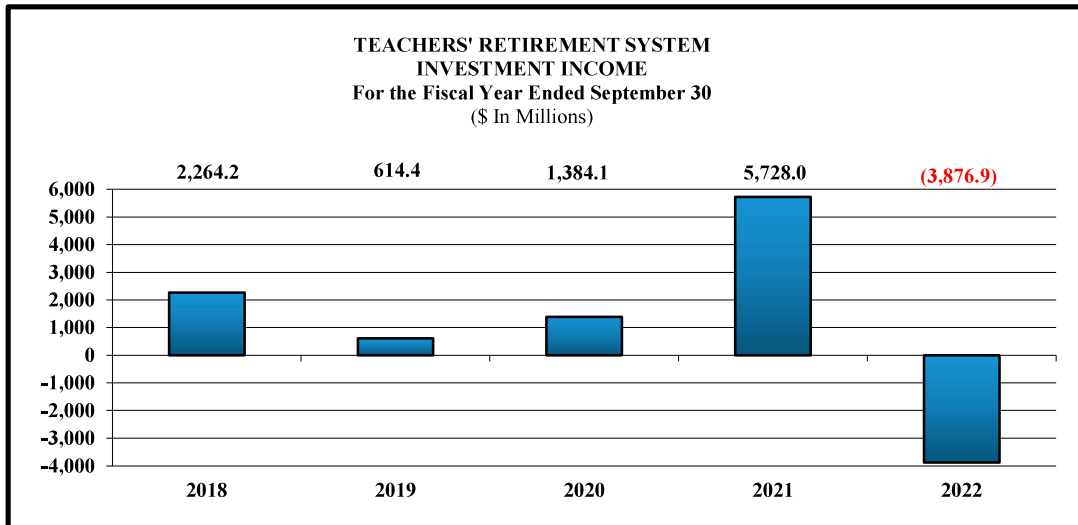


RETIREMENT SYSTEMS OF ALABAMA

Investment Section

Investment Income

Five-Year Comparison

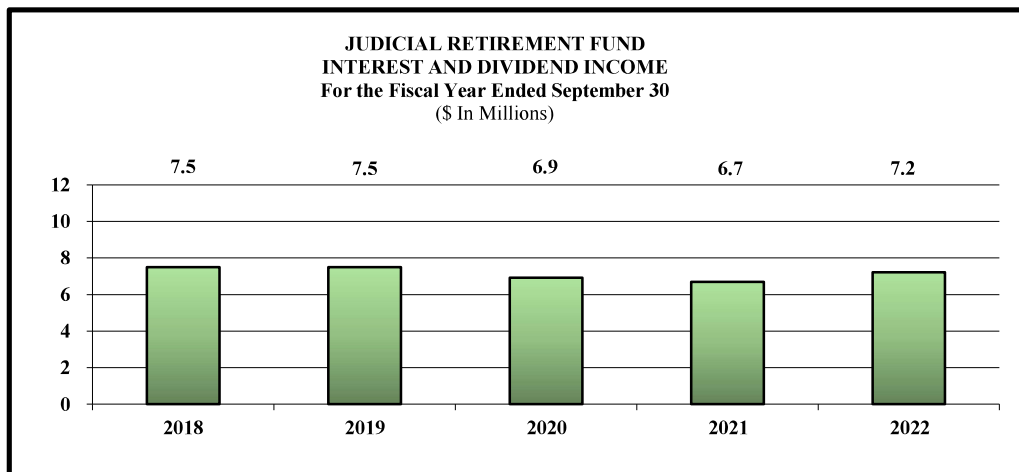
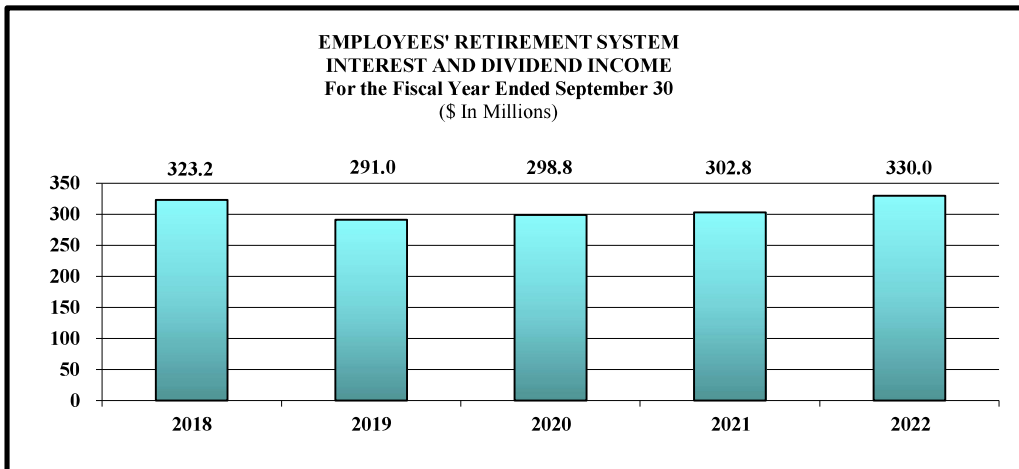
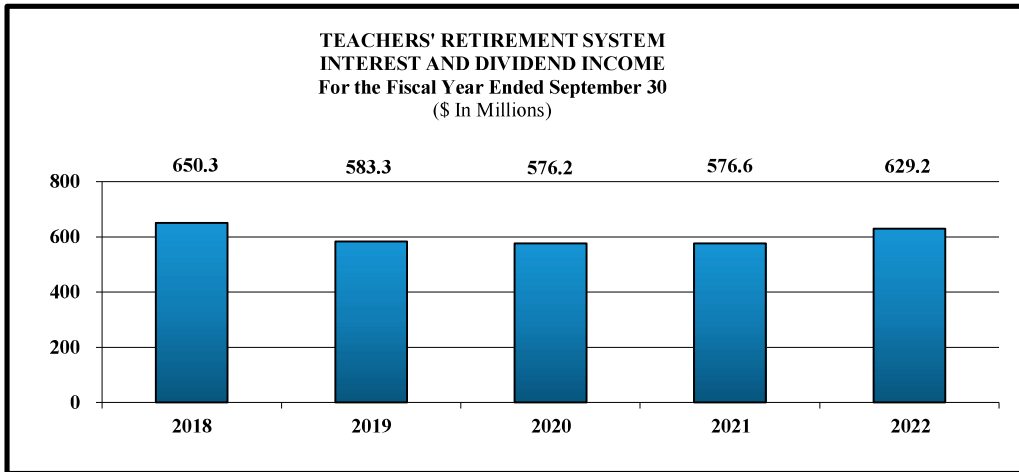


RETIREMENT SYSTEMS OF ALABAMA

Investment Section

Interest and Dividend Income

Five-Year Comparison

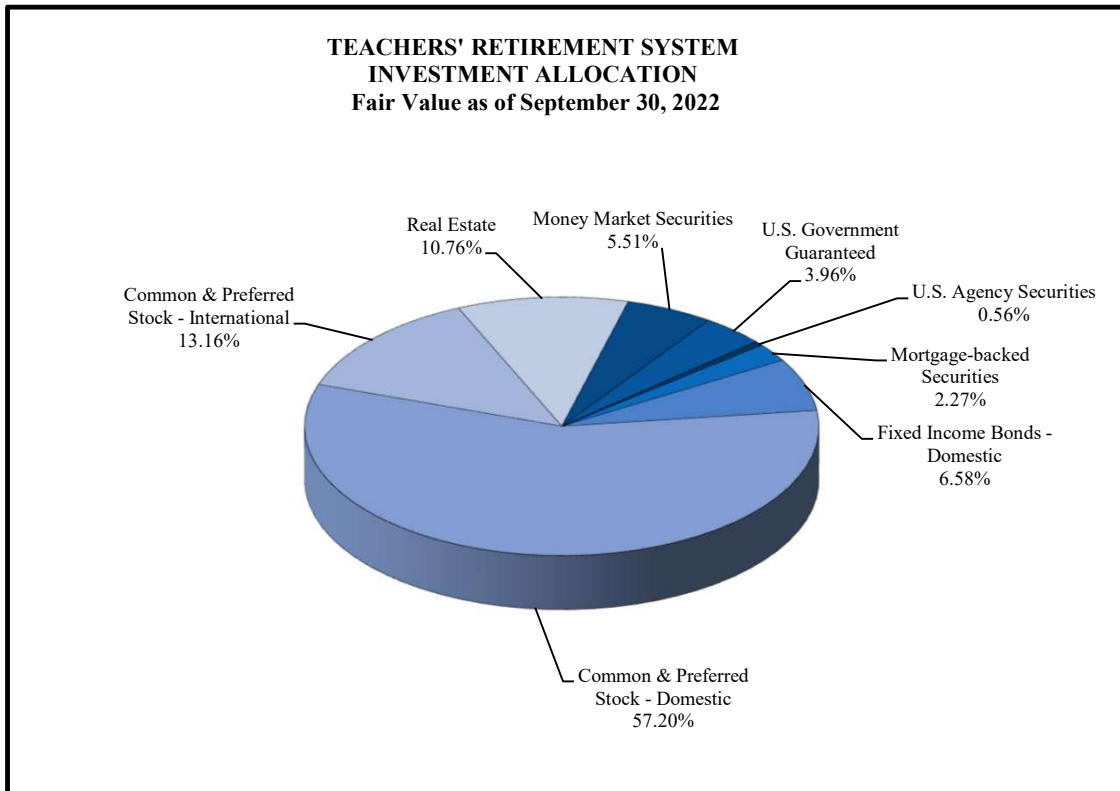


RETIREMENT SYSTEMS OF ALABAMA

Investment Section

Teachers' Retirement System

Investment Allocation and Summary



**TEACHERS' RETIREMENT SYSTEM
INVESTMENT SUMMARY AT FAIR VALUE
As of September 30, 2022**

(\$ In Thousands)

	Fair Value	% of Fair Value
Money Market Securities and Mutual Funds	\$ 1,391,695	5.51
U.S. Government Guaranteed	1,000,429	3.96
U.S. Agency Securities	141,573	0.56
Mortgage-backed Securities	572,062	2.27
Fixed Income Bonds		
Domestic	1,660,427	6.58
Common and Preferred Stocks		
Domestic	14,437,073	57.20
International	3,322,273	13.16
Real Estate	2,714,552	10.76
Total Investments	\$ 25,240,084	100.00

RETIREMENT SYSTEMS OF ALABAMA

Investment Section

Teachers' Retirement System

Largest Stock and Bond Holdings

TEACHERS' RETIREMENT SYSTEM LARGEST STOCK HOLDINGS

September 30, 2022

(Amounts In Thousands)

	<u>Shares</u>	<u>Stock</u>	<u>Fair Value</u>
1)	13	New Water Street Corporation	\$ 1,291,218
2)	860	Morgan Stanley Small Cap Equity Linked Note	1,265,425
3)	4,316	Apple, Inc.	596,475
4)	2,153	Microsoft Corporation	501,401
5)	379	Gray Media Preferred	391,801
6)	11,193	ISHARES MSCI Emerging Markets	390,400
7)	2,657	Amazon.Com, Inc.	300,244
8)	701	Tesla, Inc.	186,016
9)	616	Berkshire Hathaway, Inc.	164,440
10)	1,693	Alphabet, Inc. CL A	161,964

TEACHERS' RETIREMENT SYSTEM LARGEST BOND HOLDINGS

September 30, 2022

(Amounts In Thousands)

	<u>Par</u>	<u>Bonds</u>	<u>Fair Value</u>
1)	92,015	U.S. Treasury, 2%, Due 2/15/2025	\$ 87,314
2)	74,115	U.S. Treasury, 2.25%, Due 11/15/2024	71,075
3)	68,666	U.S. Treasury, 2.75%, Due 2/15/2024	67,185
4)	62,625	Charter Communications, Inc, 5.55%, Due 7/15/2035	66,158
5)	74,191	U.S. Treasury, 1.375%, Due 10/31/2028	63,555
6)	64,607	Alliance Laundry Systems, LLC, 4.25%, Due 10/8/2027	62,753
7)	72,049	GNMA Pool MA7534, 2.5%, Due 8/20/2051	62,050
8)	67,014	U.S. Treasury, 2%, Due 11/15/2026	61,543
9)	88,737	U.S. Treasury, 1.125%, Due 5/15/2040	55,419
10)	64,465	U.S. Treasury, 1.875%, Due 2/15/2032	54,654

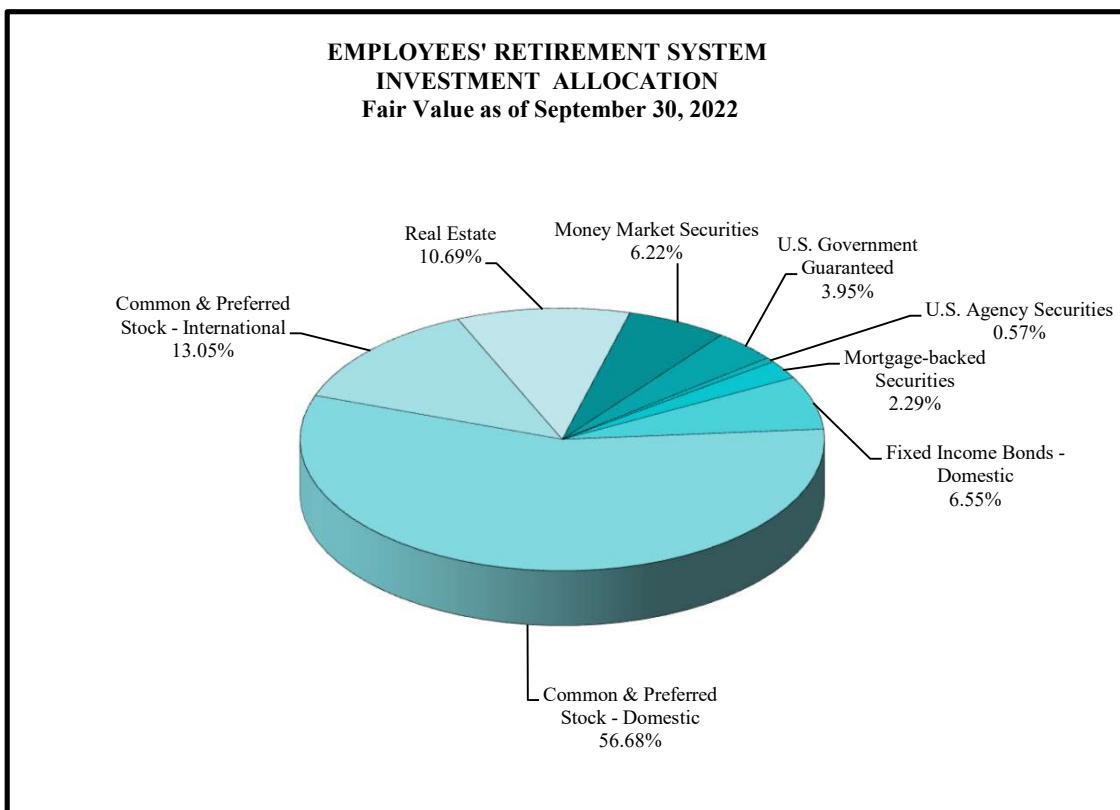
A complete list of portfolio holdings is available upon request.

RETIREMENT SYSTEMS OF ALABAMA

Investment Section

Employees' Retirement System

Investment Allocation and Summary



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

As of September 30, 2022

(\$ In Thousands)

	Fair Value	% of Fair Value
Money Market Securities and Mutual Funds	\$ 799,842	6.22
U.S. Government Guaranteed	508,547	3.95
U.S. Agency Securities	73,698	0.57
Mortgage-backed Securities	294,584	2.29
Fixed Income Bonds		
Domestic	842,861	6.55
Common and Preferred Stocks		
Domestic	7,292,918	56.68
International	1,679,190	13.05
Real Estate	1,375,316	10.69
Total Investments	\$ 12,866,956	100.00

RETIREMENT SYSTEMS OF ALABAMA

Investment Section

Employees' Retirement System

Largest Stock and Bond Holdings

EMPLOYEES' RETIREMENT SYSTEM LARGEST STOCK HOLDINGS

September 30, 2022

(Amounts in Thousands)

	<u>Shares</u>	<u>Stock</u>	<u>Fair Value</u>
1)	6	New Water Street Corporation	593,277
2)	354	Morgan Stanley Small Cap Equity Linked Note	520,413
3)	2,210	Apple, Inc.	305,384
4)	271	Gray Media Preferred	279,626
5)	1,101	Microsoft Corporation	256,480
6)	5,264	ISHARES MSCI Emerging Markets	183,601
7)	1,366	Amazon.Com, Inc.	154,322
8)	3,052	ISHARES CORE MSCI Emerging Markets	131,157
9)	358	Tesla, Inc.	94,871
10)	205	Goldman Sachs MSCI Emerging Markets Equity Linked Note	90,125

EMPLOYEES' RETIREMENT SYSTEM LARGEST BOND HOLDINGS

September 30, 2022

(Amounts In Thousands)

	<u>Par</u>	<u>Bonds</u>	<u>Fair Value</u>
1)	46,700	U.S. Treasury, 2%, Due 2/15/2025	\$ 44,314
2)	37,516	U.S. Treasury, 2.25%, Due 11/15/2024	35,977
3)	30,845	Charter Communications, Inc, 5.55%, Due 7/15/2035	32,585
4)	37,866	U.S. Treasury, 1.375%, Due 10/31/2028	32,438
5)	36,764	GNMA Pool MA7534, 2.5%, Due 8/20/2051	31,662
6)	34,203	U.S. Treasury, 2%, Due 11/15/2026	31,411
7)	31,821	Alliance Laundry Systems, LLC, 4.25% Due 10/8/2027	30,908
8)	31,457	U.S. Treasury, 2.75%, Due 2/15/2024	30,779
9)	29,362	U.S. Treasury, 2.5%, Due 5/15/2024	28,517
10)	45,467	U.S. Treasury, 1.125%, Due 5/15/2040	28,396

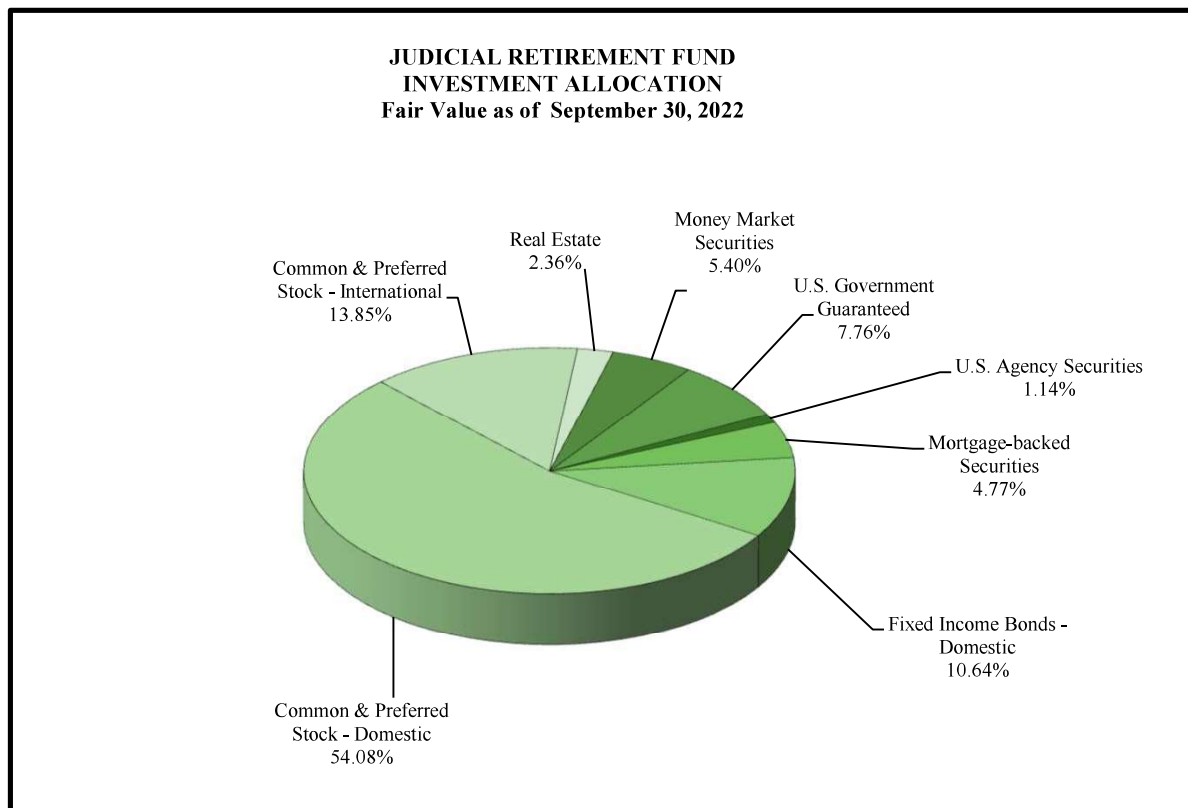
A complete list of portfolio holdings is available upon request.

RETIREMENT SYSTEMS OF ALABAMA

Investment Section

Judicial Retirement Fund

Investment Allocation and Summary



**JUDICIAL RETIREMENT FUND
INVESTMENT SUMMARY AT FAIR VALUE**

As of September 30, 2022

(\$ In Thousands)

	Fair Value	% of Fair Value
Money Market Securities and Mutual Funds	\$ 15,783	5.40
U.S. Government Guaranteed	22,691	7.76
U.S. Agency Securities	3,345	1.14
Mortgage-backed Securities	13,929	4.77
Fixed Income Bonds		
Domestic	31,097	10.64
Common and Preferred Stocks		
Domestic	158,117	54.08
International	40,495	13.85
Real Estate	6,905	2.36
Total Investments	\$ 292,362	100.00

RETIREMENT SYSTEMS OF ALABAMA*Investment Section*

Judicial Retirement Fund

Largest Stock and Bond Holdings

**JUDICIAL RETIREMENT FUND
LARGEST STOCK HOLDINGS****September 30, 2022**

(Amounts in Thousands)

	Shares	Stock	Fair Value
1)	8	Morgan Stanley Small Cap Equity Linked Note	\$ 11,399
2)	61	Apple, Inc.	8,499
3)	30	Microsoft Corporation	7,071
4)	143	ISHARES MSCI Emerging Markets	4,976
5)	*	New Water Street Corporation	4,182
6)	36	Amazon.Com, Inc.	4,077
7)	11	Tesla, Inc.	2,876
8)	24	Alphabet, Inc. CL A	2,335
9)	22	Alphabet, Inc. CL C	2,099
10)	7	Berkshire Hathaway, Inc.	1,962

* Less than 1,000 shares

**JUDICIAL RETIREMENT FUND
LARGEST BOND HOLDINGS****September 30, 2022**

(Amounts In Thousands)

	Par	Bonds	Fair Value
1)	3,986	U.S. Treasury, 2.5%, Due 5/15/2024	\$ 3,871
2)	2,042	U.S. Treasury, 2.25%, Due 11/15/2024	1,958
3)	1,871	U.S. Treasury, 2.75%, Due 2/15/2024	1,831
4)	1,924	U.S. Treasury, 1.375%, Due 10/31/2028	1,648
5)	1,689	U.S. Treasury, 2.25%, Due 8/15/2027	1,552
6)	1,527	GNMA Pool MA7534, 2.5%, Due 8/20/2051	1,315
7)	1,326	U.S. Treasury, 2.875%, Due 4/30/2025	1,281
8)	1,619	U.S. Treasury, 2.5%, Due 2/15/2045	1,234
9)	1,333	U.S. Treasury, 2%, Due 11/15/2026	1,224
10)	1,340	U.S. Treasury, 3%, Due 5/15/2042	1,139

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, 2022

	Stock		Commissions (000's)	Fixed Securities Commissions (000's)	Total Commissions (000's)
	Commissions Per Share	# of Shares (000's)			
Bank of America Merrill Lynch	0.022	8,613	193	185	378
Barclays	-	-	-	38	38
Bernstein	0.045	7,968	359	-	359
Citigroup	0.050	4,152	208	140	348
Convergex	0.047	8,517	404	-	404
Cornerstone	0.051	632	32	-	32
Cowen	0.049	2,708	134	-	134
Credit Suisse	0.050	1,395	70	10	80
Goldman Sachs	0.036	6,630	241	88	329
Harbor Financial	0.050	700	35	-	35
Instinet	0.050	3,017	151	-	151
International Strategy and Investment - ISI	0.050	7,220	361	-	361
Issuer Designated	-	-	-	319	319
Jefferies	0.032	2,512	80	-	80
JP Morgan Chase	0.050	4,023	201	96	297
Keybank Capital Markets	0.050	1,302	65	20	85
Leerink Swann	0.051	672	34	-	34
Morgan Stanley	0.024	20,578	489	334	823
National Bank of Commerce - NBC Securities	0.050	1,600	80	-	80
Oppenheimer	-	-	-	8	8
Piper Sandler	0.050	880	44	-	44
Raymond James & Associates	0.050	3,240	162	-	162
Renaissance Macro Securities - Renmac	0.050	4,683	234	-	234
Royal Bank of Canada - RBC	0.050	6,174	309	39	348
Securities Capital	0.050	700	35	-	35
Stifel Nicolaus	0.050	8,836	442	32	474
Strategas	0.032	10,238	330	-	330
Truist	-	-	-	13	13
Union Bank of Switzerland - UBS	0.050	1,945	97	-	97
Wells Fargo	0.019	24,598	461	135	596
Totals		143,533	\$ 5,251	\$ 1,457	\$ 6,708

Average Commission Per Share of Stock = \$ 0.0366

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 21, 2022

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, 2021. 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)**
 - **Initial Total UAAL** - The initial total UAAL established as of the initial valuation date (September 30, 2021) for which this funding policy is adopted shall be amortized over a closed period. (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). All gains and losses occurring after the initial valuation date and before September 30, 2028, with the exception of those due to benefit improvements, shall be included in the remaining initial total UAAL each year and amortized over the remaining closed period. (applicable only to employers participating in the System as of the adoption date of the funding policy).
 - **New Incremental UAAL** - Each valuation after the initial valuation date will produce a New Incremental UAAL consisting of all benefit changes that have occurred since the previous valuation. Each valuation beginning with the September 30, 2028 valuation will produce a New Incremental UAAL consisting of all assumption and method changes and experience gains and/or losses that have occurred since the previous valuation.
- **UAAL Amortization Period and Contribution Rates**
 - The Initial Total UAAL will be amortized over a 27-year closed period.
 - Except as noted later, each New Incremental UAAL shall be amortized over a closed 20-year period.
 - Incremental UAAL resulting from plan changes that grant benefit improvements shall be amortized over a period not to exceed 15 years.



Board of Control
April 21, 2022
Page 2

- 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, and the amortization rate of the remaining initial 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, 2021. This valuation indicates that the current employer contribution rates of 12.59% of payroll for Tier I members and 11.57% 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 134,034 active members as of September 30, 2021.

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, 2015 to September 30, 2020. 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 for funding purposes, 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 the following legislative Acts:

- Act 2021-537 which allows sick leave conversion for Tier II members and increases the member contribution rates for Tier II members to 6.20% for regular members and 7.20% for police officers, firefighters, and correctional officers (FLC) effective on October 1, 2021,
- Act 2022-222 which allows Tier II members to retire with 30 years of creditable service regardless of age with an early retirement reduction of 2% for each year that the member is less than age 62 at retirement (age 56 for FLC), and
- Act 2022-184 which allows surviving spouses of retirement-eligible members who die in active service to receive an Option 2 monthly allowance.

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 21, 2022
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, 2021
- 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 be 'LL'.

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

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

Cathy Turcot
Principal and Managing Director

A handwritten signature in blue ink, appearing to be 'Edward J. Koebel'.

Edward Koebel, EA, FCA, MAAA
Chief Executive Officer

RETIREMENT SYSTEMS OF ALABAMA

Actuarial Section

Teachers' 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, 2020, dated July 12, 2021, and adopted by the Board on September 13, 2021.

Ultimate Investment Rate of Return: 7.45% per annum, compounded annually, including price inflation at 2.50%.

Salary Increases: Representative values of the assumed annual rates of future salary increases are as follows and include wage inflation at 3.75% 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:

Age	Annual Rates							
	Death*		Disability Retirement**					
			Tier 1				Tier 2	
	Males	Females	Males		Females		Males	Females
			Years of Service		Years of Service			
<25			>=25	<25	>=25			
25	0.0143%	0.0072%	0.1000%		0.0700%		0.1000%	0.0700%
30	0.0195	0.0111	0.1000		0.0700		0.1000	0.0700
35	0.0267	0.0169	0.1000		0.0700		0.1000	0.0700
40	0.0371	0.0260	0.1300		0.1700		0.1300	0.1700
45	0.0585	0.0403	0.2500	0.2000%	0.3200	0.2000%	0.2500	0.3200
50	0.0969	0.0605	0.5000	0.2000	0.5800	0.2000	0.5000	0.5800
55	0.1508	0.0878	0.8000	0.2000	0.9000	0.2250	0.8000	0.9000
60	0.2321	0.1326	0.5000	0.2000	0.6500	0.3000	0.5000	0.6500
65	0.3809	0.2223	0.5000	0.2000	0.6500	0.3000	0.5000	0.6500

*Base mortality rates as of 2010 before application of the improvement scale.

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

RETIREMENT SYSTEMS OF ALABAMA*Actuarial Section*

Teachers' Retirement System

Summary of Actuarial Assumptions and Methods (Continued)

Values of the assumed annual rates of withdrawal are as follows:

Years of Service	Annual Rates of Withdrawal*	
	Males	Females
0-3	12.00%	11.00%
4	10.00	9.00
5	7.25	6.50
6	6.25	5.50
7	5.25	5.00
8	5.00	4.25
9	4.25	3.50
10	3.25	3.25
11	3.25	3.00
12	3.00	2.75
13	3.00	2.50
14	2.75	2.25
15	2.50	2.25
16	2.00	2.00
17	2.00	1.90
18	2.00	1.85
19	2.00	1.70
>=20	1.00	1.00

*No rates after eligibility for retirement.

Values of the assumed rates of retirement for Tier 1 are as follows:

Age	Annual Rates				
	Males		Females		
	Years of Service		Years of Service		
	<25	>=25	<25	25	>=25
40-47		25.00%		25.00%	25.00%
48		22.00		18.00	18.00
49		17.50		15.50	15.50
50		16.00		17.50	12.50
51		16.00		19.00	14.00
52		16.00		19.50	14.50
53		16.00		20.00	15.00
54		16.00		21.50	16.50
55		15.50		22.00	17.00
56		15.50		22.00	17.00
57		15.50		22.50	17.50
58		15.50		23.50	18.50
59		18.00		25.00	20.00
60	12.00%	18.00	15.00%	29.00	24.00
61	9.50	18.00	12.00	29.00	24.00
62	22.00	32.00	21.00	45.00	40.00
63	16.00	27.50	16.00	36.00	31.00
64	14.00	21.50	15.50	32.50	27.50
65	25.00	27.50	27.00	38.00	38.00
66	25.00	27.50	28.00	40.00	40.00
67	22.00	23.50	23.00	33.00	33.00
68	21.00	22.50	25.00	33.00	33.00
69	21.00	22.50	20.50	30.00	30.00
70	21.00	22.50	24.50	30.00	30.00
71-74	20.00	22.50	22.00	30.00	30.00
75-76	30.00	22.50	30.00	30.00	30.00
77-79	30.00	22.50	30.00	30.00	30.00
80	100.00	100.00	100.00	100.00	100.00

RETIREMENT SYSTEMS OF ALABAMA

Actuarial Section

Teachers' Retirement System

Summary of Actuarial Assumptions and Methods (Continued)

Values of the assumed annual rates of service retirement for Tier 2 (Non-FLC) are as follows:

Age	Annual Rates								
	Males				Females				
	Years of Service				Years of Service				
	<25	25-29	30	>=31	<25	25	26-29	30	>=31
40-47			10.00%	10.00%				10.00%	10.00%
48			10.00	10.00				10.00	10.00
49			10.00	10.00				10.00	10.00
50			10.00	10.00				10.00	10.00
51			10.00	10.00				10.00	10.00
52			10.00	10.00				10.00	10.00
53			10.00	10.00				10.00	10.00
54			10.00	10.00				10.00	10.00
55			20.00	10.00				20.00	10.00
56			20.00	10.00				20.00	10.00
57			20.00	10.00				20.00	10.00
58			20.00	10.00				20.00	10.00
59			20.00	10.00				20.00	10.00
60			40.00	40.00				45.00	45.00
61			40.00	40.00				45.00	45.00
62	50.00%	60.00%	60.00	60.00	50.00%	70.00%	70.00%	70.00	70.00
63	16.00	27.50	27.50	27.50	16.00	36.00	31.00	31.00	31.00
64	14.00	21.50	21.50	21.50	15.50	32.50	27.50	27.50	27.50
65	25.00	27.50	27.50	27.50	27.00	38.00	38.00	38.00	38.00
66	25.00	27.50	27.50	27.50	28.00	40.00	40.00	40.00	40.00
67	22.00	23.50	23.50	23.50	23.00	33.00	33.00	33.00	33.00
68	21.00	22.50	22.50	22.50	25.00	33.00	33.00	33.00	33.00
69	21.00	22.50	22.50	22.50	20.50	30.00	30.00	30.00	30.00
70	21.00	22.50	22.50	22.50	24.50	30.00	30.00	30.00	30.00
71-74	20.00	22.50	22.50	22.50	22.00	30.00	30.00	30.00	30.00
75-76	30.00	22.50	22.50	22.50	30.00	30.00	30.00	30.00	30.00
77-79	30.00	30.00	22.50	22.50	30.00	30.00	30.00	30.00	30.00
80	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Values of the assumed rates of service retirement of Tier 2 (FLC) (for both males and females) are as follows:

Age	Annual Rates		
	Years of Service		
	10	11-29	30
40-47			2.50%
48			2.50
49			5.00
50			5.00
51			10.00
52			10.00
53			10.00
54			10.00
55			10.00
56	15.00%	15.00%	15.00
57	15.00	15.00	15.00
58	15.00	15.00	15.00
59	15.00	15.00	15.00
60	17.00	17.00	17.00
61	40.00	18.50	18.50
62	40.00	30.00	30.00
63	40.00	25.00	25.00
64	40.00	22.00	22.00
65	40.00	27.00	27.00
66	40.00	38.00	38.00
67	40.00	30.00	30.00
68	40.00	30.00	30.00
69	40.00	30.00	30.00
70-74	60.00	30.00	30.00
75	100.00	100.00	100.00

RETIREMENT SYSTEMS OF ALABAMA

Actuarial Section

Teachers' Retirement System

Summary of Actuarial Assumptions and Methods (Continued)

Deaths after Retirement: Mortality rates 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	SetForward(+)/ 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

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: 2.5% 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.

Assets Method: 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. The amount recognized each year is 20% of the difference between market value and expected value.

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 7.45%). 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.

RETIREMENT SYSTEMS OF ALABAMA

Actuarial Section

Teachers' Retirement System

Summary of Plan Provisions (Continued)

Benefits

Service Retirement Allowance

Condition for Allowance

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

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

Amount of Allowance

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

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

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

Disability Retirement Allowance

Condition for Allowance

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

Amount of Allowance

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

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

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

Benefits Payable upon Separation of Service

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

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.

RETIREMENT SYSTEMS OF ALABAMA

Actuarial Section

Teachers' 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.

Partial Lump Sum Option Plan (PLOP). For members retiring on or after October 1, 2019, in addition to selecting Options 1, 2, 3 or 4, the member may also elect to receive a one-time lump-sum distribution in addition to the monthly retirement benefit. The PLOP distribution will be made as a single payment at the time the first monthly benefit is paid. Based on the amount of the PLOP and the member's age, the monthly retirement benefit is actuarially reduced.

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 – Prior to October 1, 2021, regular members contributed 6% of salary and full-time certified firefighters, police officers and correctional officers contributed 7% of salary. Beginning October 1, 2021, the contribution rates were increased to 6.20% for regular members and 7.20% for police officers, firefighters, and correctional officers.

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
9/30/2021	A	134,034	\$ 7,221,790,242	\$ 53,880	1.87
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

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.

RETIREMENT SYSTEMS OF ALABAMA

Actuarial Sections

Teachers' Retirement System

Supporting Schedules (Continued)

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

SCHEDULE OF FUNDING PROGRESS

(Dollar Amounts in Thousands)

Valuation Date		Actuarial Value of Assets (A)	Actuarial	Unfunded	% Funded (A/B)	Covered Payroll (C)	UAAL
			Accrued Liability (AAL) (B)	AAL (UAAL) (B-A)			as a % of Covered Payroll ((B-A)/C)
9/30/2021	¹	\$28,154,229	\$ 40,106,806	\$11,952,577	70.2	\$ 7,221,790	165.5
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	²	25,006,419	35,628,398	10,621,979	70.2	6,756,474	157.2
9/30/2017	²	23,887,077	34,688,078	10,801,001	68.9	6,698,835	161.2
9/30/2016	¹	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

¹Reflects changes in actuarial assumptions and methods.

²Reflects 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)				
9/30/2021	¹ \$ 6,589,860	\$ 23,111,616	\$ 10,405,330	\$ 28,154,229	100.00	93.00	0.00
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	¹ 5,788,187	20,511,811	9,328,400	25,006,419	100.00	93.00	0.00
9/30/2017	¹ 5,504,125	19,886,016	9,297,937	23,887,077	100.00	92.00	0.00
9/30/2016	² 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	² 3,921,179	17,085,972	7,244,216	18,786,008	100.00	87.00	0.00

¹ Reflects changes in actuarial assumptions.

² Reflects changes in actuarial assumptions and methods.

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)		
2021	4,990	\$ 138,383	2,684	\$ 62,781	102,638	\$2,105,374	3.72	\$ 20,513
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

§ Includes retirees completing DROP participation and entering regular retirement.

*Does not include active DROP participants.

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

ANALYSIS OF ACTUARIAL GAINS AND LOSSES

(Dollar Amounts in Thousands)

	<u>Amount</u>
Unfunded Actuarial Liability as of September 30, 2020	\$ 11,071,566
Normal Cost for 2021 Plan Year	97,800
Contributions Received During the Year	(848,153)
Interest to Year End	827,387
Expected Unfunded Actuarial Liability as of September 30, 2021	<u>11,148,600</u>
Actuarial (Gains)/Losses During the Year	
From Investments	(562,705)
From Actuarial Liabilities	1,366,682
Total Actuarial (Gains)/Losses During the Year	<u>803,977</u>
Actual Unfunded Actuarial Liability as of September 30, 2021	<u>\$ 11,952,577</u>







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June 12, 2022

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, 2021. 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) for State Employees and State Police**
 - **Initial Total UAAL** - The initial total UAAL established as of the initial valuation date (September 30, 2021) for which this funding policy is adopted shall be amortized over a closed period. (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). All gains and losses occurring after the initial valuation date and before September 30, 2028 for State Employees, and September 30, 2021 for State Police, with the exception of those due to benefit improvements, shall be included in the remaining initial total UAAL each year and amortized over the remaining closed period.
 - **New Incremental UAAL** - Each valuation after the initial valuation date will produce a New Incremental UAAL consisting of all benefit changes that have occurred since the previous valuation. Each valuation beginning with the September 30, 2028 valuation for State Employees and the September 30, 2022 valuation for State Police, will produce a New Incremental UAAL consisting of all assumption and method changes and experience gains and/or losses that have occurred since the previous valuation



- **UAAL Amortization Period and Contribution Rates for State Employees and State Police**
 - The Initial Total UAAL will be amortized over a 27-year closed period for State Employees and a 21-year closed period for State Police.
 - Except as noted later, each New Incremental UAAL shall be amortized over a closed 20-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, and the amortization rate for the remaining initial total UAAL.
- **UAAL and UAAL Amortization Period and Contribution Rates for Local Employers**

Local employers have assumptions and funding appropriate for their situations as deemed by Actuary and staff.
- **UAAL Amortization Period for Employers joining the System after the Implementation of this Funding Policy**

For Employers joining the System after the implementation of this Funding Policy, the employer contribution rate shall be computed as the sum of the employer Normal Contribution rate, a contribution rate for administrative expenses, a contribution rate for the pre-retirement death benefit fund and the initial UAAL contribution rate. The initial UAAL contribution rate shall be determined by amortizing the initial UAAL over a closed period equal to the expected future working lifetime of the active membership. This initial amortization period shall not be less than 10 years nor greater than 20 years.
- **Special Consideration**

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 addition, If the resulting contribution rate is determined to be in excess of the cash flow and projected benefit payment needs of a particular unit or employer, then the RSA staff may approve a less 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, 2021.

This valuation indicates that the current employer contribution rates for State employees (other than State policemen) of 16.00% of payroll for Tier I members and 15.76% of payroll for Tier II members and employer contribution rates for State policemen of 53.38% of payroll for Tier I members and 44.84% of payroll for Tier II members, for benefits then in effect, meet the basic financial objective and the goals of the funding policy as listed above. In addition, there are varying employer contribution rates for each participating Local employer actuarially determined in accordance with the funding policy. There are 84,571 total active members as of September 30, 2021.



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, 2015 to September 30, 2020. 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 for funding purposes, 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 the following legislative Acts:

- Act 2022-348 removes the deadline for local units to elect to provide Tier I benefits for Tier II members. The valuation includes 202 additional employers that elected to provide these benefits under Act 2019-132 since the prior valuation date.
- Act 2022-351 allows Tier II members to retire with 30 years of creditable service regardless of age with an early retirement reduction of 2% for each year that the member is less than age 62 at retirement (age 56 for FLC).
- Act 2022-184 allows surviving spouses of retirement-eligible members who die in active service to receive an Option 2 monthly allowance.
- Act 2022-229 provides a one-time lump sum payment equal to \$2 per month for each year of service to retired state employee and state police members in April, 2022. The cost of the lump sum payment will be paid by the state and state police as an increase in the employer contribution rate for the fiscal year beginning October 1, 2023.

The results shown reflect all local employer elections approved by the Board through October 1, 2021. The contribution rates for local employers for the fiscal year beginning October 1, 2023 will be submitted in a separate report and will include the impact of any employer elections as of September 30, 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, 2021
- 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,

A handwritten signature in blue ink, appearing to be 'LL'.

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

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

Cathy Turcot
Principal and Managing Director

A handwritten signature in blue ink, appearing to be 'Edward J. Koebel'.

Edward J. 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, 2020, dated July 7, 2021, and adopted by the Board on September 14, 2021.

Ultimate Investment Rate of Return: 7.45% per annum, compounded annually, including price inflation at 2.50%.

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	6.00
1 - 5	4.25
6 - 10	4.00
11 - 15	3.75
16 - 19	3.5
20 & Over	3.25

*Includes wage inflation at 2.75% per annum.

Salary Increases: Representative values of the assumed annual rates of future salary increases for State Policemen are as follows:

Years of Service	Annual Rate* (%)
0 - 3	7.75
4 - 5	7.50
6	6.25
7 - 10	5.50
11 - 14	5.25
15 - 17	4.75
18 - 19	4.50
20 & Over	4.00

*Includes wage inflation at 2.75% per annum.

Separations before Service Retirement: Representative values of the assumed annual rates of withdrawal are shown in the following table:

Years of Service	Annual Rate of Withdrawal*	
	Non-FLC Members	FLC Members
0-1	20.00%	16.50%
2	16.75	12.00
3	14.00	11.50
4	13.00	11.00
5	7.50	6.50
6	6.75	6.25
7	6.50	6.00
8	5.75	5.40
9	5.25	5.00
10-12	3.50	3.00
13-14	3.50	2.75
15	3.00	2.25
16-18	2.50	2.00
19	2.00	1.50
20+	1.50	1.50

There are no withdrawal decrements after eligibility for service retirement.

* For local employers with fewer than 25 employees the rates are multiplied by 50%.

Service Retirement: The assumed annual rates of service retirement are as follows:

Regular Members

Age	Annual Rate (1)			
	TIER I (2)		TIER II	
	1st Eligible	Subsequent	1st Eligible	Subsequent
49 & Under	16.50%	10.50%	2.50%	2.50%
50 to 54	20.00	10.50	2.50	2.50
55 to 56	20.00	10.50	10.00	10.00
57	20.00	10.50	20.00	20.00
58	25.00	12.50	20.00	20.00
59	23.00	12.50	20.00	20.00
60	12.00	15.00	50.00	50.00
61	13.00	12.00	50.00	50.00
62	23.00	23.00	50.00	50.00
63	23.00	20.00	23.00	20.00
64	23.00	17.00	23.00	17.00
65	32.00	25.00	32.00	25.00
66	35.00	28.50	35.00	28.50
67	35.00	24.00	35.00	24.00
68 to 79	35.00	21.00	35.00	21.00
80 & Above	100.00	100.00	100.00	100.00

(1) For local employers with fewer than 25 employees we assume that all members retire upon first eligibility for a service retirement benefit.

(2) 25% are assumed to retire at age 60 with 25 years of service.

RETIREMENT SYSTEMS OF ALABAMA

Actuarial Section

Employees' Retirement System

Summary of Actuarial Assumptions and Methods (Continued)

FLC Members

Age	Annual Rate (1)			
	TIER I (2)		TIER II	
	1st Eligible	Subsequent	1st Eligible	Subsequent
48 & Under 49	35.00%	22.00%	2.50%	2.50%
50	35.00	22.00	10.00	10.00
51	35.00	22.00	10.00	10.00
52 to 55	35.00	22.00	20.00	20.00
56 to 59	35.00	18.00	20.00	20.00
60	40.00	18.00	15.00	15.00
61	17.00	21.00	17.00	17.00
62	40.00	18.50	40.00	18.50
63	40.00	30.00	40.00	30.00
64	40.00	25.00	40.00	25.00
65	40.00	22.00	40.00	22.00
66	40.00	27.00	40.00	27.00
67-69	40.00	38.00	40.00	38.00
70 to 74	40.00	30.00	40.00	30.00
75 & Above	60.00	30.00	60.00	30.00
	100.00	100.00	100.00	100.00

(1) For local employers with fewer than 25 employees we assume that all members retire upon first eligibility for a service retirement benefit.

(2) 50% are assumed to retire at age 60 with 25 years of service.

Rates of Death: Representative values of the assumed annual rates of death are as follows:

Age	Annual Rate of Death*			
	Non FLC State & Local		FLC State & Local	
	Male	Female	Male	Female
20	0.040%	0.014%	0.042%	0.016%
25	0.040	0.011	0.049	0.025
30	0.050	0.017	0.054	0.034
35	0.065	0.027	0.060	0.046
40	0.089	0.043	0.074	0.062
45	0.132	0.066	0.101	0.085
50	0.201	0.099	0.147	0.115
55	0.297	0.145	0.216	0.157
60	0.432	0.218	0.323	0.213
65	0.631	0.344	0.499	0.290
69	0.866	0.512	0.793	0.466

*Base mortality rates as of 2010 before application of the improvement scale

Rates of Disability: Representative values of the assumed annual rates of disability are as follows:

State Employees

Age	Annual Rate of Disability*				
	Tier I			Tier II	
	Service < 25		Service >=25		
	Male	Female		Male	Female
20	0.014%	0.013%	0.250%	0.014%	0.013%
25	0.082	0.075		0.082	0.075
30	0.150	0.138		0.150	0.138
35	0.180	0.200		0.180	0.200
40	0.350	0.300		0.350	0.300
45	0.650	0.500		0.650	0.500
50	1.000	0.800	0.250	1.000	0.800
55	1.350	1.100	0.250	1.350	1.100
60	1.200	1.450	0.250	1.200	1.450
65	0.600	0.750	0.250	0.600	0.750
69	0.200	0.270		0.200	0.270

Local Employees

Age	Annual Rate of Disability*				
	Tier I			Tier II	
	Service < 25		Service >=25		
	Male	Female		Male	Female
20	0.006%	0.014%	0.250%	0.006%	0.014%
25	0.033	0.082		0.033	0.082
30	0.060	0.150		0.060	0.150
35	0.120	0.080		0.120	0.080
40	0.290	0.230		0.290	0.230
45	0.470	0.350		0.470	0.350
50	0.800	0.600	0.250	0.800	0.600
55	1.300	0.900	0.250	1.300	0.900
60	1.000	0.550	0.250	1.000	0.550
65	0.500	0.160	0.250	0.500	0.160
69	0.100	0.032		0.100	0.032

*There are no disability rates for members with less than 10 years of service.

RETIREMENT SYSTEMS OF ALABAMA

Actuarial Section

Employees' Retirement System

Summary Actuarial Assumptions and Methods (Continued)

State Police

Group 1: Members hired before January 1, 2015

Withdrawal			Death		Disability		Retirement		
Years of Service	Rate	Age	Male	Female	Male	Female	10-19	20-24	25+
0	6.00%	20	0.042%	0.016%	0.050%	0.012%			
1-5	6.00	25	0.049	0.025	0.250	0.060			
6-10	1.50	30	0.054	0.034	0.500	0.120			
11-15	1.50	35	0.060	0.046	0.300	0.180			
20+	1.00	40	0.074	0.062	0.200	0.290	5.00%	33.00%	40.00%
		45	0.101	0.085	0.550	0.440	20.00	35.00	40.00
		50	0.147	0.115	0.500	0.500	20.00	35.00	40.00
		55	0.216	0.157			100.00	100.00	33.00
		60	0.323	0.213					35.00
		62	0.383	0.241					35.00
		65	0.499	0.290					100.00

Group 2: Members hired after January 1, 2015

Rates of Withdrawal

Years of Service	Annual Rate of Withdrawal
0 - 1	16.50%
2	12.00
3	11.50
4	11.00
5	6.50
6	6.25
7	6.00
8	5.40
9	5.00
10 - 12	3.00
13 - 14	2.75
15	2.25
16 - 18	2.00
19	1.50
20+	1.50

There are no withdrawal decrements after eligibility for service retirement.

Rates of Service Retirement

Age	Annual Rate			
	TIER I (1)		TIER II	
	1st Eligible	Subsequent	1st Eligible	Subsequent
51 & Under	35.00%	22.00%		
52 to 55	35.00	18.00	15.00%	15.00%
56 to 59	40.00	18.00	17.00	17.00
60	17.00	21.00	40.00	18.50
61	40.00	18.50	40.00	30.00
62	40.00	30.00	40.00	25.00
63	40.00	25.00	40.00	22.00
64	40.00	22.00	40.00	27.00
65	40.00	27.00	40.00	38.00
66	40.00	38.00	40.00	30.00
67	40.00	30.00	40.00	30.00
68 to 69	40.00	30.00	60.00	30.00
70 to 74	60.00	30.00	100.00	100.00
75 & Above	100.00	100.00		

(1) 50% are assumed to retire at age 60 with 25 years of service.

Rates of Death: Representative values of the assumed annual rates of death are as follows:

Age	Annual Rate of Death*	
	Male	Female
20	0.04%	0.02%
25	0.049	0.025
30	0.054	0.034
35	0.060	0.046
40	0.074	0.062
45	0.101	0.085
50	0.147	0.115
55	0.216	0.157
60	0.323	0.213
65	0.499	0.290
69	0.793	0.466

*Base mortality rates as of 2010 before application of the improvement scale.

RETIREMENT SYSTEMS OF ALABAMA

Actuarial Section

Employees' Retirement System

Summary Actuarial Assumptions and Methods (Continued)

Rates of Disability: Representative values of the assumed annual rates of disability are as follows:

Age	Annual Rate of Disability				
	Tier I		Service >=25	Tier II	
	Service < 25			Male	Female
	Male	Female	Male	Female	
20	0.014%	0.013%	0.250%	0.014%	0.013%
25	0.082	0.075		0.082	0.075
30	0.150	0.138		0.150	0.138
35	0.180	0.200		0.180	0.200
40	0.350	0.300		0.350	0.300
45	0.650	0.500		0.650	0.500
50	1.000	0.800	0.250	1.000	0.800
55	1.350	1.100	0.250	1.350	1.100
60	1.200	1.450	0.250	1.200	1.450
65	0.600	0.750	0.250	0.600	0.750
69	0.200	0.270		0.200	0.270

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.

Group	Membership Table	Set Forward (+)/ Setback (-)	Adjustment to Rates
Non-FLC Service Retirees	General Healthy Below Median	Male: +2 Female: +2	Male: 90% ages < 65, 96% ages >= 65 Female: 96% all ages
FLC/State Police Service Retirees	Public Safety Healthy Below Median	Male: +1 Female: None	None
Beneficiaries	Contingent Survivor Below Median	Male: +2 Female: +2	None
Non-FLC Disabled Retirees	General Disability	Male: +7 Female: +3	None
FLC/State Police Disabled Retirees	Public Safety Disability	Male: +7 Female: None	None

Death in Active Service Benefit: 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 and the value of the deferred annuity.

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: 1.00% load on service retirement liabilities for active members (No load for Tier II 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. The amount recognized each year is 20% of the difference between market value and expected market value.

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 7.45%). 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.

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").

RETIREMENT SYSTEMS OF ALABAMA

Actuarial Section

Employees' Retirement System

Summary of Plan Provisions (Continued)

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.

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)*).

Members of Local Employers

Members of local employers generally receive the same benefit structure as State employees, however some benefits must be elected by individual employers. Members whose employers have not yet elected to grant retirement upon completion of 25 years of service must have 30 years of service for retirement before age 60 (For Tier I). These employers have the option of electing 25-year retirement for their Tier I members. Employers may also elect to increase Tier I member contribution rates to 7.5% of payroll for regular members and 8.5% of payroll for FLC members. Employers who have not elected to allow sick leave conversion may still elect to do so. Employers may elect to provide Tier I benefits to their Tier II members, provided the members pay the increased members rates shown above.

RETIREMENT SYSTEMS OF ALABAMA

Actuarial Section

Employees' Retirement System

Summary of Plan Provisions (Continued)

Members of the City of Montgomery who elected to remain under the City's retirement plan structure are subject to the conditions and benefit structure of that plan. A brief description of this structure is as follows:

Service Retirement Allowance

Condition for Allowance

Group I - For general municipal employees hired before October 1, 2013, a retirement allowance is payable upon the request of any member who has completed 20 years of creditable service, or who has attained age 65 (25 years or age 62 if hired after October 1, 2005 or elected)

Group II - For members of the fire department or police department of the City, a retirement allowance is payable upon the request of any member who has completed 20 years of creditable service or attained age 62 (25 years or age 55 if hired after October 1, 2005, or 25 years or age 55 with 10 years of creditable service if hired after October 1, 2013).

Amount of Allowance

Group I - 20-year retirement plan: Upon service retirement a member receives a retirement allowance equal to 2.0% of the member's average final compensation multiplied by the number of years of his creditable service (up to 20 years), and 1% of the member's average final compensation multiplied by the number of years of his creditable service over 20 years. Maximum benefit is 60% of average final compensation.

Group I - 25-year retirement plan: Upon service retirement a member receives a retirement allowance equal to 2.0% of the member's average final compensation multiplied by the number of years of his creditable service. Maximum benefit is 100% of average final compensation.

Group II - 20-year retirement plan: Upon service retirement a member receives a retirement allowance equal to 2.5% of the member's average final compensation multiplied by the number of years of his creditable service (up to 20 years), and 1% of the member's average final compensation multiplied by the number of years of his creditable service over 20 years. Maximum benefit is 60% of average final compensation.

Group II - 25-year retirement plan: Upon service retirement a member receives a retirement allowance equal to 2.5% of the member's average final compensation multiplied by the number of years of his creditable service. Maximum benefit is 100% of average final compensation.

Group II - Age 62 retirement plan: Upon service retirement a member receives a retirement allowance equal to 2.5% of the member's average final compensation multiplied by the number of years of his creditable service. Maximum benefit is 100% of average final compensation. Benefit is reduced by early retirement factor (5/9% for each month annuity start date precedes age 62 but not earlier than age 55).

Employee Retention Incentive Program (ERIP) - An employee is eligible to enter the ERIP plan if he or she is an active employee and has at least 20 years of service (25 years for a 25-year retirement plan participant). The participant can effectively elect to retire up to three years prior to termination and receive the payments that would have been made as a lump sum (accumulated with 5% interest). Subsequent monthly benefits are based on the benefit used to determine the lump sum.

Preretirement Death Benefits - If the member is eligible for a service retirement, 50% of the accrued benefit, reduced for a 50% joint and survivor annuity. If the member is not eligible for a service retirement benefit, a lump sum of member contributions is payable.

Disability Benefits - If a participant has 10 years of service and becomes permanently disabled he is entitled to immediately receive his monthly accrued benefit, based on his current years of service and current final average earnings.

Separation Benefits

Group I - Return of contributions if less than 10 years of service. If more than 10 years of service, member is entitled to his accrued benefit payable at age 62 (age 65 for 20-year plan).

Group II - Return of contributions if less than 10 years of service. If more than 10 years of service, member is entitled to his accrued benefit payable at age 55 (age 62 for 20-year plan and Age 62 plan).

Benefits – Members Classified as State Police

Service Retirement Allowance

Condition of Allowance

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

Members hired after January 1, 2015: A retirement allowance is payable upon the request of any 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 - A retirement allowance is payable upon the request of any member who has attained age 56 and completed at least 10 years of creditable service.

Amount of Allowance

Tier 1 – Members hired prior to January 1, 2015: Upon service retirement, a member receives a retirement allowance equal to 2.875% of the member's average final compensation multiplied by the number of years of creditable service.

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

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

Members hired after January 1, 2015: 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 an officer.

RETIREMENT SYSTEMS OF ALABAMA

Actuarial Section

Employees' Retirement System

Summary of Plan Provisions (Continued)

Tier 2 – Members hired prior to January 1, 2015: 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.

Members hired after January 1, 2015: Upon service 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. For a member whose age at retirement is less than age 56, the amount of the allowance will be reduced by 2% for each year that the member's age is less than age 56.

Disability Retirement Allowance

Condition for Allowance

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

Amount of Allowance

Tier 1 – Members hired prior to January 1, 2015: 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.

Members hired after January 1, 2015: Upon retirement for disability, 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 an additional year of creditable service in determining the retirement allowance for each five years of service as a full-time officer.

Tier 2 – Members hired prior to January 1, 2015: 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. The benefit is capped at 80% of the member's average final compensation.

Members hired after January 1, 2015: Upon retirement for disability, a member receives a retirement allowance equal to 1.65% of the member's average final compensation multiplied by the number of years of his creditable service. The benefit is capped at 80% of the member's average final compensation.

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.

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 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

Tier 1 – Members hired prior to January 1, 2015: Each member contributes to 10% of salary.

Members hired after January 1, 2015: Each member contributes 8.5% of salary.

Tier 2 – Members hired prior to January 1, 2015: Each member contributes 10% of salary.

Members hired after January 1, 2015: Each member contributes 7% of salary.

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.

Partial Lump Sum Option Plan (PLOP). For members retiring on or after October 1, 2019, in addition to selecting Options 1, 2, 3 or 4, the member may also elect to receive a one-time lump-sum distribution in addition to the monthly retirement benefit. The PLOP distribution will be made as a single payment at the time the first monthly benefit is paid. Based on the amount of the PLOP and the member's age, the monthly retirement benefit is actuarially reduced.

RETIREMENT SYSTEMS OF ALABAMA

Actuarial Section

Employees' Retirement System

Supporting Schedules

Supporting Schedules

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

SCHEDULE OF ACTIVE MEMBER VALUATION DATA

(Dollar Amounts Not in Thousands)

<u>Valuation Date</u>		<u>Number</u>	<u>Annual Payroll</u>	<u>Annual Average Pay</u>	<u>% Increase/ (Decrease) in Average Pay</u>
9/30/2021	A	84,571	\$ 4,069,349,840	\$ 48,118	2.54
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)

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.

RETIREMENT SYSTEMS OF ALABAMA

Actuarial Section

Employees' Retirement System

Supporting Schedules (Continued)

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)
9/30/2021	\$ 14,291,093	\$ 21,104,942	\$ 6,813,849	67.7	\$ 4,069,350	167.4
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

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

SOLVENCY TEST

(Dollar Amounts in Thousands)

Valuation Date	Aggregate Accrued Liabilities For			Reported Assets	% of Accrued Liabilities Covered by Reported Assets			
	(1)	(2)	(3)		(1)	(2)	(3)	
	Active Member Contributions	Retirants and Beneficiaries	Active Members (Employer Financed Portion)					
9/30/2021	1, 2 & 3	\$ 3,292,498	\$ 11,794,825	\$ 6,017,619	\$ 14,291,093	100	93	0.0
9/30/2020		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	1	2,922,432	9,944,503	4,962,800	12,240,597	100	93	0.0
9/30/2017	1	2,817,368	9,567,278	4,866,189	11,690,952	100	93	0.0
9/30/2016	1	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	1	2,218,478	7,781,431	3,885,086	9,116,551	100	89	0.0

1 - Reflects changes in actuarial assumptions and methods.

2 - Reflects impact of Act 2019-132

3 - Reflects impact of Act 2022-351 and Act 2022-184

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)		
9/30/2021	2,977	\$ 84,598	1,786	\$ 40,029	55,301	\$1,078,087	4.31	\$ 19,495
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

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, 2020	\$ 6,295,296
Normal Cost for 2021 Plan Year	49,302
Contributions Received During the Year	(501,003)
Interest to Year End	469,245
Expected Unfunded Actuarial Liability as of September 30, 2021	<u>6,312,840</u>
Actuarial (Gains)/Losses During the Year	
From Investments	(309,760)
From Actuarial Liabilities	810,768
Total Actuarial (Gains)/Losses During the Year	<u>501,008</u>
Actual Unfunded Actuarial Liability as of September 30, 2021	<u><u>\$ 6,813,848</u></u>







Cavanaugh Macdonald CONSULTING, LLC

The experience and dedication you deserve

April 21, 2022

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, 2021. 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)**
 - **Initial Total UAAL** – The UAAL established as of the initial valuation date (September 30, 2021) for which this funding policy is adopted.
 - **New Incremental UAAL** – Each subsequent valuation will produce a New Incremental UAAL consisting of all benefit changes that have occurred since the previous valuation. Each subsequent valuation will produce a New Incremental UAAL consisting of all assumption and method changes and experience gains and/or losses that have occurred since the previous valuation.
- **UAAL Amortization Period and Contribution Rates**
 - The Initial Total UAAL established as of the initial valuation will be amortized over a closed 19-year period.
 - Except as noted later, each New Incremental UAAL shall be amortized over a closed 20-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 21, 2022
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- 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, 2021. 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 42.47% of payroll for Tier I members and 37.72% 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 368 active members as of September 30, 2021.

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, 2015 to September 30, 2020. 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 for funding purposes, 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, 2021
- Ten-Year History of Average Monthly Benefit Payments as of September 30



Board of Control
April 21, 2022
Page 3

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

Respectfully submitted,

A handwritten signature in blue ink, appearing to be 'LL' with a stylized flourish underneath.

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

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

Cathy Turcot
Principal and Managing Director

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

Edward Koebel, EA, FCA, MAAA
Chief Executive Officer

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RETIREMENT SYSTEMS OF ALABAMA

Actuarial Section

Judicial Retirement Fund

Summary of Actuarial Assumptions and Methods

Summary of Actuarial Assumptions and Methods

The assumptions and methods used in the valuation were selected based on the actuarial experience study prepared as of September 30, 2020, dated July 12, 2021 and adopted by the Board on September 14, 2021.

Ultimate Investment Rate of Return: 7.40% per annum, compounded annually, including inflation at 2.50%.

Salary Increases: 7.30% per annum for all ages with service less than 14 years, and 5.00% per annum for all ages with service of 14 years or more, compounded annually, including wage inflation at 2.75%.

Rates of Withdrawal: 3.00% per annum for service less than 10 years, and 1.30% per annum for service between 10 and 24 years.

Death and Disability: Representative values of the assumed annual rates of pre-retirement death and disability are as follows:

Age	Death*		Disability**
	Males	Females	
30	0.0195	0.0111	0.020%
35	0.0267	0.0169	0.040
40	0.0371	0.0260	0.068
45	0.0585	0.0403	0.108
50	0.0969	0.0605	0.163
55	0.1508	0.0878	0.250
60	0.2321	0.1326	0.395
65	0.3809	0.2223	0.618

*Rates of preretirement mortality are according to the Pub-2010 Teacher Employee Below Median Mortality Table adjusted by 65%; projected with the MP-2020 with an adjustment factor of 66-2/3% beginning with the year 2019.

**Disability rates turn off at retirement eligibility.

Rates of Retirement:

Tier 1 (Groups 1 and 2):

Age	Rate of Retirement
Less than 60	7.5%
60-61	16.5
65-69*	20.0
70-74	30.0
75+	100.0

*Before age 70, an additional 15% are assumed to retire in the first year they reach retirement eligibility.

RETIREMENT SYSTEMS OF ALABAMA

Actuarial Section

Judicial Retirement Fund

Summary of Actuarial Assumptions and Methods (Continued)

Tier 2 (Group 3) and District Attorneys' Plan:

Age	Judges		Clerks and District Attorneys
	<18 years	≥18 years	
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.

Deaths after Retirement: Rates of mortality for the period after becoming a retiree are according to the Pub-2010 Family of Tables projected generationally with MP-2019 Scale adjusted by 66-2/3% beginning with year 2019, and with further adjustments are used for post-retirement mortality assumptions as follows:

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

Representative values of the assumed annual rates of mortality are as follows*:

Age	Service Retirement		Disability Retirement		Beneficiaries	
	Male	Female	Male	Female	Male	Female
55	0.4230%	0.3300%	2.7850%	1.8740%	1.1080%	0.7040%
60	0.6070	0.4290	3.5240	2.1100	1.3710	0.9210
65	0.8860	0.6270	4.5990	2.5690	1.9210	1.2430
70	1.5090	1.0940	6.3470	3.4640	2.9500	1.7840
75	2.7990	1.9140	9.2590	5.0750	4.5590	2.6690
80	5.1310	3.6810	13.6030	7.8110	7.1100	4.2580
85	9.3440	7.0020	20.5880	11.8780	11.3610	7.1270
90	16.2380	12.9240	28.7230	16.7400	18.3000	12.0640

*Base mortality rates as of 2010 before application of the improvement scale

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 2.75% 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 a member for the highest years in the last 10 years of creditable service.

Creditable Service

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

Benefits

Service Retirement Benefit

Condition of Benefit

Tier 1 (Groups 1 and 2):

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

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

However, a judge who became a member on or after July 30, 1979, or who is a district or probate judge must meet the following age and service requirement combinations in order to be eligible to retire:

- Completed 12 years of creditable service and attained age 65, or
- Completed at least 15 years of creditable service and attained age 60, and whose age plus service equals or exceeds 77, or
- Completed 10 years of creditable service and attained age 70, or
- Completed 25 years of creditable service or 24 years of creditable service provided the member purchases one year of service prior to retirement, regardless of age.

Tier 2 (Group 3) and District Attorneys:

A service retirement benefit is payable upon request of a member who has completed 10 years of service and attained age 62.

Amount of Benefit

Tier 1 (Groups 1 and 2):

The service retirement benefit for a member is equal to:

- (a) For circuit or appellate judges who were members prior to July 30, 1979, 75% of the salary prescribed by law for the position from which the member retires.
- (b) For circuit and appellate judges who assumed office on or after July 30, 1979, 75% of the member's salary at the time of separation from service.
- (c) For district judges, 75% of the position's salary immediately prior to retirement.
- (d) For probate judges, 75% of the member's salary at the time of separation from service.

RETIREMENT SYSTEMS OF ALABAMA

Actuarial Section

Judicial Retirement Fund

Summary of Plan Provisions (Continued)

Tier 2 (Group 3) and District Attorneys:

The service retirement benefit for a member is equal to:

- (a) For a member who is judge with years of service less than 18 years, 4% of average final compensation multiplied by years of creditable service; for a member who is a judge with 18 or more years of service, 75% of average final compensation, not to exceed 75% of average final compensation.
- (b) For a member who is clerk or district attorney, 3% of average final compensation multiplied by years of creditable service, not to exceed 80% of average final compensation.

Disability Retirement Benefit

Condition of Benefit A disability retirement benefit is payable to a member who becomes permanently, physically or mentally, unable to carry out his duties on a full-time basis, provided the member has completed five or more years of creditable service.

Amount of Benefit

Tier 1 (Groups 1 and 2):

The disability retirement benefit for a member other than a district or probate judge who was a member prior to July 30, 1979, is equal to 25% of the salary prescribed by law for the position from which the member retires on disability plus 10% of such salary for each year of creditable service in excess of five years. The disability retirement benefit is subject to a minimum of 30% and a maximum of 75% of such salary.

The disability retirement benefit for a judge who became a member on or after July 30, 1979, or who is a district or probate judge is equal to 25% of his salary immediately prior to retirement plus 10% of such salary for each year of creditable service in excess of five years. The disability retirement benefit is subject to a minimum of 30% and a maximum of 75% of such salary.

Tier 2 (Group 3) and District Attorneys:

For a member who is judge with years of service less than 18 years, 4% of average final compensation multiplied by years of creditable service; for a member who is a judge with 18 or more years, 75% of average final compensation, not to exceed 75% of average final compensation.

For a member who is a clerk or district attorney, 3% of average final compensation multiplied by years of creditable service, not to exceed 80% of average final compensation.

Spousal Benefit

Tier 1 (Groups 1 and 2):

Condition of Benefit Upon the death of an active, inactive or retired member with at least 5 years of creditable service, a death benefit is payable to the member's spouse.

Amount of Benefit The death benefit payable to the spouse of a judge other than a district or probate judge consists of a yearly benefit equivalent to 3% of the salary prescribed by law for the position of the former member for each year of creditable service, not to exceed 30% of such salary.

The death benefit payable to the spouse of a district judge consists of a yearly benefit equal to 3% of the position's salary prescribed by law at the time of death for each year of creditable service, not to exceed 30% of such salary.

The death benefit for the spouse of a probate judge is a yearly benefit equal to the greater of \$480 for each year of creditable service to a maximum of 10 years, or 3% of the member's salary at the time of separation from service for each year of creditable service, not to exceed 30% of such salary.

The benefit is payable for the spouse's life or until his or her remarriage.

Death in Active Service Benefit

Tier 2 (Group 3) and District Attorneys:

Amount of Benefit	In the event of the death of a member who is eligible for service retirement, the designated beneficiary may elect: (1) to exercise option 3 as defined below "Special Privileges at Retirement – All Employees" or (2) to receive a return of member contributions and total interest earned plus a death benefit payable from the per-retirement death benefit fund equal to the salary on which the member made retirement contributions for the previous fiscal year (October 1 – September 30).
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	In the event of the death of a member who is not eligible for retirement, the designated beneficiary shall receive the accumulated contributions not to exceed \$5,000 or the accumulated contributions of the member plus an additional death benefit payable from the per-retirement death benefit payable from the per-retirement death benefit fund equal to the salary on which their retirement contributions were made for the previous fiscal year. (October 1 – September 30).
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Benefit Payable upon Separation from Service

If a member terminates service and elects not to withdraw his or her contributions and accrued interest from the JRF, the member is eligible to receive any of the benefits for which the member has sufficient creditable service upon reaching an eligible retirement age.

A member terminating service prior to reaching eligibility for retirement benefits may elect to receive a return of contributions and accrued interest. "Regular Interest" is 4% which is the rate adopted by the Board and applied to the balance in each member's account every year; however, if a member receives a refund of contributions, the interest rate applied to the refund is lower than the 4% regular rate (Based on the *Code of Alabama 1975, Section 36-27-25(g)*).

Member Contributions

Tier 1 (Groups 1 and 2):

- Prior to October 1, 2011, each member contributed 6.0% of salary.
- Beginning October 1, 2011, each member contributed 8.25% of salary.
- Beginning October 1, 2012, each member contributed 8.5% of salary.

Tier 2 (Group 3) and District Attorneys:

Each Tier 2 member and District Attorney member contributes 8.5% of salary.

If a positive investment performance results in a decrease in the total contribution rate paid by employers and employees participating in the System, the Retirement Systems of Alabama shall first reduce the employee contribution rate.

By State The State makes contributions, which in addition to the members' contributions, are sufficient to provide the retirement allowances described.

RETIREMENT SYSTEMS OF ALABAMA

Actuarial Section

Judicial Retirement Fund

Supporting Schedules

Supporting Schedules

The following schedule presents a ten-year history of active member valuation data:

SCHEDULE OF ACTIVE MEMBER VALUATION DATA

(Dollar Amounts Not in Thousands)

Valuation Date	Number	Annual Payroll*	Annual Average Pay**	% Increase/ (Decrease) in Average Pay
9/30/2021	368	\$ 47,891,703	\$ 130,140	0.88
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

*2.2% increase for total pay since 2016.

**0.3% increase for average pay since 2016.

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

SCHEDULE OF FUNDING PROGRESS

(Dollar Amounts in Thousands)

Valuation Date	Actuarial Value of Assets (A)	Actuarial Liability (AAL) (B)	Unfunded AAL (UAAL) (B-A)	Percentage Funded (A/B)	Covered Payroll (C)	UAAL as a % of Covered Payroll ((B-A)/C)
9/30/2021 ¹	\$ 333,779	\$ 499,916	\$ 166,136	66.8	\$47,892	346.9
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 ¹	305,397	457,834	152,437	66.7	43,819	347.9
9/30/2017 ²	293,090	448,446	155,356	65.4	44,292	350.8
9/30/2016 ¹	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 ¹	234,300	380,470	146,170	61.6	42,446	344.4

¹Reflects changes in actuarial assumptions and methods.

²Reflects changes in benefit structure beginning November 8, 2016.

The following schedule presents a ten- year history of solvency tests:

SOLVENCY TEST
(Dollar Amounts in Thousands)

		<u>Aggregate Accrued Liabilities For</u>						
		<u>(1)</u>	<u>(2)</u>	<u>(3)</u>				
<u>Valuation Date</u>		<u>Active Member Contributions</u>	<u>Retirants and Beneficiaries</u>	<u>Active Members (Employer Financed Portion)</u>	<u>Reported Assets</u>	<u>% of Accrued Liabilities Covered by Reported Assets</u>		
						<u>(1)</u>	<u>(2)</u>	<u>(3)</u>
9/30/2021	¹	\$ 47,304	\$ 343,885	\$ 108,727	\$ 333,779	100	83	0.0
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	¹	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	¹	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	¹	38,341	237,197	104,932	234,300	100	83	0.0

¹Reflects a change in actuarial assumptions and methods.

The following schedule presents ten years of retirant and beneficiary data:

SCHEDULE OF RETIRANTS AND BENEFICIARIES ADDED AND REMOVED FROM ROLLS

<u>Fiscal Year Ended</u>	<u>Retirees Added</u>		<u>Retirees Removed</u>		<u>Retirees - Year-end</u>		<u>% Increase/ (Decrease) in Annual Allowances</u>	<u>Average Annual Allowance</u>
	<u>Number</u>	<u>Annual Allowances (000s)</u>	<u>Number</u>	<u>Annual Allowances (000s)</u>	<u>Number</u>	<u>Annual Allowances (000s)</u>		
2021	10	\$ 609	17	\$ 1,470	447	\$ 32,946	(2.55)	\$ 73,705
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

RETIREMENT SYSTEMS OF ALABAMA

Actuarial Section

Judicial Retirement Fund

Supporting Schedules (Continued)

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, 2020	\$ 163,189
Normal Cost for 2021 Plan Year	4,971
Contributions Received During the Year	(17,634)
Interest to Year End	<u>12,190</u>
Expected Unfunded Actuarial Liability as of September 30, 2021	<u>162,716</u>
Actuarial (Gains)Losses During the Year	
From Investments	(8,606)
From Actuarial Liabilities	<u>12,026</u>
Total Actuarial (Gains)/Losses During the Year	<u>3,420</u>
Actual Unfunded Actuarial Liability as of September 30, 2021	<u><u>\$ 166,136</u></u>







Statistical Section

Annual Comprehensive Financial Report
Component Units of the State of Alabama



RETIREMENT SYSTEMS OF ALABAMA

Statistical Section

Overview

The Statistical Section of the annual comprehensive 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 176

Deductions by Type – Ten-Year History – page 177

Benefits by Type – Ten-Year History – page 178

Ten-Year History of Additions, Reductions, and Changes in Net Position – page 179

Retirees and Beneficiaries

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

Retired Members by Type of Benefit – page 185

Ten-Year History of Average Monthly Benefit Payments – page 188

Participating Units

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

Local Participating Employers – page 191

Largest Employers – Ten-Year History – page 200

RETIREMENT SYSTEMS OF ALABAMA

Statistical Section

Additions by Source

Ten-Year History

(Dollar 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		Marketing & Advertising Revenue	Direct Appropriation from the Education Trust Fund	Investment Income/(Loss)	Total
		Amount	Tier 1	Tier 2 [ⓐ]		Employer Rate (%)	Internal Service Fund				
2022	\$ 563,132	\$ 932,332	12.43	11.32	-	-	\$ 335	\$ 58,400	\$ (3,876,927)	\$ (2,322,728)	
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	-	-	-	-	2,473,152	3,693,548	
2013	477,586	627,892	10.08	9.44	-	-	-	-	2,732,706	3,838,184	

EMPLOYEES' RETIREMENT SYSTEM
ADDITIONS BY SOURCE

Fiscal Year	Member Contributions \$	Employer Contributions		Employer Rate (%)
		State	Local	
2022	\$ 309,720	\$ 559,869	14.44	42.86
2021	286,396	516,402	14.24	42.89
2020	270,947	519,806	14.87	45.56
2019	254,440	467,553	14.14	43.43
2018	241,741	426,340	13.29	39.29
2017	233,901	426,215	13.25	53.55
2016	238,017	435,098	14.09	38.98
2015	229,254	410,932	13.31	32.45
2014	226,016	391,181	11.96	29.52
2013	223,646	338,819	10.12	25.32

JUDICIAL RETIREMENT FUND
ADDITIONS BY SOURCE

Fiscal Year	Member Contributions \$	Employer Contributions				New Units	Marketing & Advertising Revenue	Investment Income/(Loss)	Total
		State	Police	State Police	Local				
2022	\$ 309,720	\$ 4,692	42.10	37.47	19.77	\$ 2,679	\$ 165	\$ (1,945,460)	\$ (1,073,027)
2021	286,396	4,271	18,260	40.80	19.77	-	-	251	2,860,948
2020	270,947	4,184	18,099	41.40	19.77	344,352	-	395	723,630
2019	254,440	4,101	18,022	41.40	19.77	-	-	-	723,630
2018	241,741	3,867	17,180	40.09	19.77	-	-	-	320,585
2017	233,901	3,972	17,373	40.65	-	-	-	-	1,098,412
2016	238,017	3,723	17,529	40.98	-	-	-	-	1,402,163
2015	229,254	3,683	15,077	35.24	-	-	-	-	1,053,031
2014	226,016	3,764	15,790	35.24	-	-	-	-	126,490
2013	223,646	3,919	13,903	32.06	-	-	-	-	1,186,529
									1,296,460
									1,858,925

JUDICIAL RETIREMENT FUND
ADDITIONS BY SOURCE

Fiscal Year	Member Contributions \$	Employer Contributions				Investment Income/(Loss)	Total
		Groups 1 & 2	Judges & Clerks**	District Attorneys***	Group 3-		
2022	\$ 309,720	\$ 4,692	42.10	37.47	19.77	\$ (51,779)	\$ (26,470)
2021	286,396	4,271	18,260	40.80	19.77	63,731	86,262
2020	270,947	4,184	18,099	41.40	19.77	23,159	45,442
2019	254,440	4,101	18,022	41.40	19.77	11,016	33,139
2018	241,741	3,867	17,180	40.09	19.77	27,622	48,669
2017	233,901	3,972	17,373	40.65	-	32,685	54,030
2016	238,017	3,723	17,529	40.98	-	28,321	49,573
2015	229,254	3,683	15,077	35.24	-	(856)	17,904
2014	226,016	3,764	15,790	35.24	-	31,344	50,898
2013	223,646	3,919	13,903	32.06	-	32,245	50,067

§ 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 previously 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

(Dollar Amounts in Thousands)

**TEACHERS' RETIREMENT SYSTEM
DEDUCTIONS BY TYPE**

Fiscal Year	Retirement Allowance Payments	Return of Contributions & Death Benefits	Membership Service Transfers	Administrative Expenses	Depreciation	Total
2022	\$ 2,555,391	\$ 68,722	\$ 6,213	\$ 18,945	\$ 9,060	\$ 2,658,331
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

**EMPLOYEES' RETIREMENT SYSTEM
DEDUCTIONS BY TYPE**

Fiscal Year	Retirement Allowance Payments	Return of Contributions & Death Benefits	Unit Withdrawals & Membership Service Transfers	Administrative Expenses	Depreciation	Total
2022	\$ 1,323,657	\$ 58,978	\$ 9,798	\$ 11,306	\$ 3,551	\$ 1,407,290
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

**JUDICIAL RETIREMENT FUND
DEDUCTIONS BY TYPE**

Fiscal Year	Retirement Allowance Payments	Return of Contributions & Death Benefits	Membership Service Transfers	Administrative Expenses	Depreciation	Total
2022	\$ 40,542	\$ 325	\$ -	\$ 443	\$ -	\$ 41,310
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

RETIREMENT SYSTEMS OF ALABAMA

Statistical Section

Benefits by Type

Ten-Year History

(Dollar Amounts in Thousands)

**TEACHERS' RETIREMENT SYSTEM
BENEFITS BY TYPE**

Fiscal Year	Age & Service Benefits			Disability Benefits	Return of Contributions & Death Benefits	
	Retirants	Beneficiaries	Return of Contributions		Death Benefits	
2022	\$ 2,382,245	\$ 102,109	\$ 71,037	\$ 45,812	\$ 22,910	
2021	2,248,819	95,720	70,589	40,818	22,929	
2020	2,168,552	90,192	70,148	43,657	16,944	
2019	2,079,529	85,566	68,419	42,528	14,333	
2018	2,053,906	82,406	67,719	45,711	12,827	
2017	1,971,017	75,812	65,001	42,492	13,142	
2016	2,021,973	70,959	62,852	42,552	14,578	
2015	1,947,983	66,636	60,683	43,965	14,095	
2014	1,876,615	62,674	58,306	43,474	11,225	
2013	1,778,541	58,669	56,111	44,207	11,684	

**EMPLOYEES' RETIREMENT SYSTEM
BENEFITS BY TYPE**

Fiscal Year	Age & Service Benefits			Disability Benefits	Return of Contributions & Death Benefits	
	Retirants	Beneficiaries	Return of Contributions		Death Benefits	
2022	\$ 1,197,220	\$ 63,716	\$ 62,721	\$ 44,504	\$ 14,474	
2021	1,138,176	59,538	62,445	37,651	16,506	
2020	1,092,775	55,119	61,543	34,267	12,478	
2019	1,010,482	52,028	60,640	38,696	9,979	
2018	987,527	49,220	60,136	34,577	10,843	
2017	946,203	45,810	58,327	39,486	9,197	
2016	937,752	43,376	57,389	36,926	8,842	
2015	919,657	42,308	56,550	41,224	9,800	
2014	855,857	39,488	53,133	38,250	9,687	
2013	806,846	37,730	50,899	36,948	7,889	

**JUDICIAL RETIREMENT FUND
BENEFITS BY TYPE**

Fiscal Year	Age & Service Benefits			Disability Benefits	Return of Contributions & Death Benefits	
	Retirants	Beneficiaries	Return of Contributions		Death Benefits	
2022	\$ 35,373	\$ 4,657	\$ 512	\$ 109	\$ 216	
2021	34,518	4,047	524	28	-	
2020	34,193	4,054	565	133	123	
2019	32,288	4,055	566	646	-	
2018	28,983	3,913	523	86	44	
2017	28,370	3,956	481	334	19	
2016	26,556	3,850	487	105	10	
2015	26,082	3,839	427	92	8	
2014	25,796	3,703	327	54	-	
2013	25,022	3,715	375	196	-	

RETIREMENT SYSTEMS OF ALABAMA

Statistical Section

Teachers' Retirement System

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

(Amounts in Thousands)

	2022	2021	2020	2019	2018
Additions					
Contributions					
Employee	\$ 553,615	\$ 519,627	\$ 510,818	\$ 516,675	\$ 488,503
Employer	932,332	874,401	862,475	869,336	802,598
Transfers from the Employees' Retirement System	9,517	6,128	4,185	6,234	4,963
Transfers from the Judicial Retirement Fund	-	-	-	-	-
Transfers from PEEHIP	-	-	-	-	24,700
Transfers from an Internal Service Fund	-	377	602	-	-
Marketing & Advertising Revenue	335	-	-	-	-
Direct Appropriation from the Education Trust Fund	58,400	-	-	-	-
Total Contributions	<u>1,554,199</u>	<u>1,400,533</u>	<u>1,378,080</u>	<u>1,392,245</u>	<u>1,320,764</u>
Investment Income					
From Investing Activities					
Net Increase/(Decrease) in Fair Value of Investments	(4,500,179)	5,155,012	801,465	33,671	1,615,440
Interest and Dividends	629,210	576,552	576,193	583,329	650,293
Total Investment Income/(Loss) from Investing Activities	(3,870,969)	5,731,564	1,377,658	617,000	2,265,733
Less: Investment Expenses, Net	11,573	11,191	9,719	9,205	9,171
Net Investment Income/(Loss) from Investing Activities	(3,882,542)	5,720,373	1,367,939	607,795	2,256,562
From Securities Lending Activities					
Securities Lending Income	12,606	11,019	13,960	28,905	23,246
Less Securities Lending Expenses:					
Borrower Rebates	4,585	108	4,423	19,431	12,385
Management Fees	2,406	3,445	3,120	2,842	3,189
Total Securities Lending Expenses	6,991	3,553	7,543	22,273	15,574
Net Income from Securities Lending Activities	5,615	7,466	6,417	6,632	7,672
Total Net Investment Income/(Loss)	(3,876,927)	5,727,839	1,374,356	614,427	2,264,234
Total Additions/Reductions	(2,322,728)	7,128,372	2,752,436	2,006,672	3,584,998
Deductions					
Retirement Allowance Payments	2,555,391	2,415,128	2,328,892	2,233,514	2,204,031
Return of Contributions and Death Benefits	68,722	63,747	60,601	56,861	58,538
Transfers to the Employees' Retirement System	6,213	4,421	4,891	4,187	4,899
Transfers to the Judicial Retirement Fund	-	-	-	-	9
Administrative Expenses	18,945	20,402	21,957	20,583	15,952
Depreciation	9,060	9,133	9,154	7,512	6,338
Total Deductions	<u>2,658,331</u>	<u>2,512,831</u>	<u>2,425,495</u>	<u>2,322,657</u>	<u>2,289,767</u>
Net Increase/(Decrease) in Fiduciary Net Position	<u>(4,981,059)</u>	<u>4,615,541</u>	<u>326,941</u>	<u>(315,985)</u>	<u>1,295,231</u>
Net Position Restricted for Pension Benefits					
Beginning of Year - as previously reported	30,561,930	25,946,389	25,619,448	25,935,433	24,651,457
Adjustment for Application of GASB 68	-	-	-	-	-
Adjustment for Application of GASB 75	-	-	-	-	(11,255)
Beginning of Year - as adjusted	<u>30,561,930</u>	<u>25,946,389</u>	<u>25,619,448</u>	<u>25,935,433</u>	<u>24,640,202</u>
End of Year	<u>\$ 25,580,871</u>	<u>\$ 30,561,930</u>	<u>\$ 25,946,389</u>	<u>\$ 25,619,448</u>	<u>\$ 25,935,433</u>

	2017	2016	2015	2014	2013
Additions					
Contributions					
Employee	\$ 486,542	\$ 472,390	\$ 473,903	\$ 477,300	\$ 474,241
Employer	782,695	751,902	737,671	739,547	627,892
Transfers from the Employees' Retirement System	3,096	3,590	4,015	3,549	3,345
Transfers from the Judicial Retirement Fund	-	-	-	-	-
Transfers from PEEHIP	-	-	-	-	-
Transfers from an Internal Service Fund	-	-	-	-	-
Marketing & Advertising Revenue	-	-	-	-	-
Direct Appropriation from the Education Trust Fund	-	-	-	-	-
Total Contributions	<u>1,272,333</u>	<u>1,227,882</u>	<u>1,215,589</u>	<u>1,220,396</u>	<u>1,105,478</u>
Investment Income					
From Investing Activities					
Net Increase/(Decrease) in Fair Value of Investments	2,021,774	1,589,279	(381,400)	1,853,288	2,090,646
Interest and Dividends	613,353	607,795	640,910	618,861	638,766
Total Investment Income/(Loss) from Investing Activities	2,635,127	2,197,074	259,510	2,472,149	2,729,412
Less: Investment Expenses, Net	8,685	7,731	6,407	5,732	5,712
Net Investment Income/(Loss) from Investing Activities	<u>2,626,442</u>	<u>2,189,343</u>	<u>253,103</u>	<u>2,466,417</u>	<u>2,723,700</u>
From Securities Lending Activities					
Securities Lending Income	20,125	15,930	11,512	9,629	12,753
Less Securities Lending Expenses:					
Borrower Rebates	7,350	2,825	365	65	401
Management Fees	3,112	3,044	2,782	2,829	3,346
Total Securities Lending Expenses	<u>10,462</u>	<u>5,869</u>	<u>3,147</u>	<u>2,894</u>	<u>3,747</u>
Net Income from Securities Lending Activities	9,663	10,061	8,365	6,735	9,006
Total Net Investment Income/(Loss)	<u>2,636,105</u>	<u>2,199,404</u>	<u>261,468</u>	<u>2,473,152</u>	<u>2,732,706</u>
Total Additions/Reductions	<u>3,908,438</u>	<u>3,427,286</u>	<u>1,477,057</u>	<u>3,693,548</u>	<u>3,838,184</u>
Deductions					
Retirement Allowance Payments	2,111,830	2,155,784	2,075,302	1,997,595	1,893,321
Return of Contributions and Death Benefits	55,634	57,130	58,060	54,699	55,891
Transfers to the Employees' Retirement System	3,413	6,223	3,432	2,880	1,823
Transfers to the Judicial Retirement Fund	-	-	-	-	-
Administrative Expenses	16,390	14,873	15,074	13,103	12,591
Depreciation	6,012	4,709	4,258	4,336	4,312
Total Deductions	<u>2,193,279</u>	<u>2,238,719</u>	<u>2,156,126</u>	<u>2,072,613</u>	<u>1,967,938</u>
Net Increase/(Decrease) in Fiduciary Net Position	<u>1,715,159</u>	<u>1,188,567</u>	<u>(679,069)</u>	<u>1,620,935</u>	<u>1,870,246</u>
Net Position Restricted for Pension Benefits					
Beginning of Year - as previously reported	22,936,298	21,747,731	22,441,307	20,820,372	18,950,126
Adjustment for Application of GASB 68	-	-	(14,507)	-	-
Adjustment for Application of GASB 75	-	-	-	-	-
Beginning of Year - as adjusted	<u>22,936,298</u>	<u>21,747,731</u>	<u>22,426,800</u>	<u>20,820,372</u>	<u>18,950,126</u>
End of Year	<u>\$ 24,651,457</u>	<u>\$ 22,936,298</u>	<u>\$ 21,747,731</u>	<u>\$ 22,441,307</u>	<u>\$ 20,820,372</u>

RETIREMENT SYSTEMS OF ALABAMA

Statistical Section

Employees' Retirement System

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

(Amounts in Thousands)

	2022	2021	2020	2019	2018
Additions					
Contributions					
Employee	\$ 303,507	\$ 281,975	\$ 266,056	\$ 250,253	\$ 236,842
Employer	559,869	516,402	519,806	467,553	426,340
New Units	2,679	-	344,352	-	-
Transfers from the Teachers' Retirement System	6,213	4,421	4,891	4,187	4,899
Transfers from the Judicial Retirement Fund	-	-	-	-	-
Transfers from an Internal Service Fund	-	251	395	-	-
Marketing & Advertising Revenue	165	-	-	-	-
Total Contributions	<u>872,433</u>	<u>803,049</u>	<u>1,135,500</u>	<u>721,993</u>	<u>668,081</u>
Investment Income					
From Investing Activities					
Net Increase/(Decrease) in Fair Value of Investments	(2,274,633)	2,558,276	425,632	30,092	775,132
Interest and Dividends	329,975	302,802	298,770	291,011	323,182
Total Investment Income/(Loss) from Investing Activities	(1,944,658)	2,861,078	724,402	321,103	1,098,314
Less: Investment Expenses, Net	3,544	4,003	3,828	3,661	3,395
Net Investment Income/(Loss) from Investing Activities	(1,948,202)	2,857,075	720,574	317,442	1,094,919
From Securities Lending Activities					
Securities Lending Income	6,284	5,685	6,534	13,884	10,589
Less Securities Lending Expenses:					
Borrower Rebates	2,367	39	1,996	9,394	5,647
Management Fees	1,175	1,773	1,482	1,347	1,449
Total Securities Lending Expenses	3,542	1,812	3,478	10,741	7,096
Net Income from Securities Lending Activities	2,742	3,873	3,056	3,143	3,493
Total Net Investment Income/(Loss)	(1,945,460)	2,860,948	723,630	320,585	1,098,412
Total Additions/Reductions	(1,073,027)	3,663,997	1,859,130	1,042,578	1,766,493
Deductions					
Retirement Allowance Payments	1,323,657	1,260,159	1,209,437	1,123,150	1,096,883
Return of Contributions and Death Benefits	58,978	54,157	46,745	48,675	45,070
Unit Withdrawals	53	-	-	380	350
Transfers to the Teachers' Retirement System	9,517	6,128	4,185	6,234	4,963
Transfers to the Judicial Retirement Fund	228	118	159	189	102
Administrative Expenses	11,306	10,977	13,128	12,934	11,219
Depreciation	3,551	3,520	3,411	2,895	2,544
Total Deductions	<u>1,407,290</u>	<u>1,335,059</u>	<u>1,277,065</u>	<u>1,194,457</u>	<u>1,161,131</u>
Net Increase/(Decrease) in Fiduciary Net Position	<u>(2,480,317)</u>	<u>2,328,938</u>	<u>582,065</u>	<u>(151,879)</u>	<u>605,362</u>
Net Position Restricted for Pension Benefits					
Beginning of Year - as previously reported	15,479,476	13,150,538	12,568,473	12,720,352	12,122,471
Adjustment for Application of GASB 68	-	-	-	-	-
Adjustment for Application of GASB 75	-	-	-	-	(7,481)
Beginning of Year - as adjusted	<u>15,479,476</u>	<u>13,150,538</u>	<u>12,568,473</u>	<u>12,720,352</u>	<u>12,114,990</u>
End of Year	<u>\$ 12,999,159</u>	<u>\$ 15,479,476</u>	<u>\$ 13,150,538</u>	<u>\$ 12,568,473</u>	<u>\$ 12,720,352</u>

	2017	2016	2015	2014	2013
Additions					
Contributions					
Employee	\$ 230,488	\$ 231,794	\$ 225,767	\$ 223,135	\$ 221,823
Employer	426,215	435,098	410,932	391,181	338,819
New Units	-	-	-	-	-
Transfers from the Teachers' Retirement System	3,413	6,223	3,432	2,880	1,823
Transfers from the Judicial Retirement Fund	-	-	55	1	-
Transfers from an Internal Service Fund	-	-	-	-	-
Marketing & Advertising Revenue	-	-	-	-	-
Total Contributions	<u>660,116</u>	<u>673,115</u>	<u>640,186</u>	<u>617,197</u>	<u>562,465</u>
Investment Income					
From Investing Activities					
Net Increase/(Decrease) in Fair Value of Investments	1,098,859	753,836	(186,154)	888,303	984,714
Interest and Dividends	302,295	297,369	311,516	298,049	310,220
Total Investment Income/(Loss) from Investing Activities	1,401,154	1,051,205	125,362	1,186,352	1,294,934
Less: Investment Expenses, Net	3,305	2,883	2,771	2,766	2,549
Net Investment Income/(Loss) from Investing Activities	<u>1,397,849</u>	<u>1,048,322</u>	<u>122,591</u>	<u>1,183,586</u>	<u>1,292,385</u>
From Securities Lending Activities					
Securities Lending Income	9,127	7,481	5,353	4,199	5,780
Less Securities Lending Expenses:					
Borrower Rebates	3,424	1,356	164	21	186
Management Fees	1,389	1,416	1,290	1,235	1,519
Total Securities Lending Expenses	4,813	2,772	1,454	1,256	1,705
Net Income from Securities Lending Activities	4,314	4,709	3,899	2,943	4,075
Total Net Investment Income/(Loss)	<u>1,402,163</u>	<u>1,053,031</u>	<u>126,490</u>	<u>1,186,529</u>	<u>1,296,460</u>
Total Additions/Reductions	<u>2,062,279</u>	<u>1,726,146</u>	<u>766,676</u>	<u>1,803,726</u>	<u>1,858,925</u>
Deductions					
Retirement Allowance Payments	1,050,340	1,038,517	1,018,515	948,478	895,475
Return of Contributions and Death Benefits	47,683	45,768	51,024	47,937	44,837
Unit Withdrawals	1,000	-	-	-	-
Transfers to Teachers' Retirement System	3,096	3,590	4,015	3,549	3,345
Transfers to Judicial Retirement Fund	261	78	44	83	242
Administrative Expenses	11,982	11,002	11,136	9,612	9,767
Depreciation	2,520	2,021	2,046	2,055	2,015
Total Deductions	<u>1,116,882</u>	<u>1,100,976</u>	<u>1,086,780</u>	<u>1,011,714</u>	<u>955,681</u>
Net Increase/(Decrease) in Fiduciary Net Position	<u>945,397</u>	<u>625,170</u>	<u>(320,104)</u>	<u>792,012</u>	<u>903,244</u>
Net Position Restricted for Pension Benefits					
Beginning of Year - as previously reported	11,177,074	10,551,904	10,883,952	10,091,940	9,188,696
Adjustment for Application of GASB 68	-	-	(11,944)	-	-
Adjustment for Application of GASB 75	-	-	-	-	-
Beginning of Year - as adjusted	<u>11,177,074</u>	<u>10,551,904</u>	<u>10,872,008</u>	<u>10,091,940</u>	<u>9,188,696</u>
End of Year	<u>\$ 12,122,471</u>	<u>\$ 11,177,074</u>	<u>\$ 10,551,904</u>	<u>\$ 10,883,952</u>	<u>\$ 10,091,940</u>

RETIREMENT SYSTEMS OF ALABAMA

Statistical Section

Judicial Retirement Fund

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

(Amounts in Thousands)

	2022	2021	2020	2019	2018
Additions					
Contributions					
Employee	\$ 4,464	\$ 4,153	\$ 4,025	\$ 3,912	\$ 3,756
Employer	20,617	18,260	18,099	18,022	17,180
Transfers from the Teachers' Retirement System	-	-	-	-	9
Transfers from the Employees' Retirement System	228	118	159	189	102
Total Contributions	<u>25,309</u>	<u>22,531</u>	<u>22,283</u>	<u>22,123</u>	<u>21,047</u>
Investment Income					
From Investing Activities					
Net Increase/(Decrease) in Fair Value of Investments	(59,058)	56,970	16,173	3,476	20,071
Interest and Dividends	7,229	6,689	6,928	7,463	7,471
Total Investment Income/(Loss) from Investing Activities	<u>(51,829)</u>	<u>63,659</u>	<u>23,101</u>	<u>10,939</u>	<u>27,542</u>
Less: Investment Expenses, Net	-	-	-	-	-
Net Investment Income/(Loss) from Investing Activities	<u>(51,829)</u>	<u>63,659</u>	<u>23,101</u>	<u>10,939</u>	<u>27,542</u>
From Securities Lending Activities					
Securities Lending Income	94	106	128	327	248
Less Securities Lending Expenses:					
Borrower Rebates	23	1	41	218	134
Management Fees	21	33	29	32	34
Total Securities Lending Expenses	<u>44</u>	<u>34</u>	<u>70</u>	<u>250</u>	<u>168</u>
Net Income from Securities Lending Activities	<u>50</u>	<u>72</u>	<u>58</u>	<u>77</u>	<u>80</u>
Total Investment Income/(Loss)	<u>(51,779)</u>	<u>63,731</u>	<u>23,159</u>	<u>11,016</u>	<u>27,622</u>
Total Additions/Reductions	<u>(26,470)</u>	<u>86,262</u>	<u>45,442</u>	<u>33,139</u>	<u>48,669</u>
Deductions					
Retirement Allowance Payments	40,542	39,089	38,812	36,909	33,419
Return of Contributions and Death Benefits	325	28	256	646	130
Transfers to the Employees' Retirement System	-	-	-	-	-
Administrative Expenses	443	374	357	357	328
Total Deductions	<u>41,310</u>	<u>39,491</u>	<u>39,425</u>	<u>37,912</u>	<u>33,877</u>
Net Increase/(Decrease) in Fiduciary Net Position	<u>(67,780)</u>	<u>46,771</u>	<u>6,017</u>	<u>(4,773)</u>	<u>14,792</u>
Net Position Restricted for Pension Benefits					
Beginning of Year - as previously reported	365,329	15,980	9,963	14,736	-
Adjustment for Application of GASB 68	-	-	-	-	-
Adjustment for Application of GASB 75	-	-	-	-	(56)
Beginning of Year - as adjusted	<u>365,329</u>	<u>15,980</u>	<u>9,963</u>	<u>14,736</u>	<u>(56)</u>
End of Year	<u>\$ 297,549</u>	<u>\$ 62,751</u>	<u>\$ 15,980</u>	<u>\$ 9,963</u>	<u>\$ 14,736</u>

	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>
Additions					
Contributions					
Employee	\$ 3,711	\$ 3,645	\$ 3,639	\$ 3,681	\$ 3,677
Employer	17,373	17,529	15,077	15,790	13,903
Transfers from the Teachers' Retirement System	-	-	-	-	-
Transfers from the Employees' Retirement System	261	78	44	83	242
Total Contributions	<u>21,345</u>	<u>21,252</u>	<u>18,760</u>	<u>19,554</u>	<u>17,822</u>
Investment Income					
From Investing Activities					
Net Increase/(Decrease) in Fair Value of Investments	25,639	21,302	(7,695)	24,197	25,207
Interest and Dividends	6,910	6,865	6,698	7,030	6,912
Total Investment Income/(Loss) from Investing Activities	<u>32,549</u>	<u>28,167</u>	<u>(997)</u>	<u>31,227</u>	<u>32,119</u>
Less: Investment Expenses, Net	-	-	-	-	-
Net Investment Income/(Loss) from Investing Activities	<u>32,549</u>	<u>28,167</u>	<u>(997)</u>	<u>31,227</u>	<u>32,119</u>
From Securities Lending Activities					
Securities Lending Income	270	258	195	167	184
Less Securities Lending Expenses:					
Borrower Rebates	90	58	7	1	10
Management Fees	44	46	47	49	48
Total Securities Lending Expenses	<u>134</u>	<u>104</u>	<u>54</u>	<u>50</u>	<u>58</u>
Net Income from Securities Lending Activities	<u>136</u>	<u>154</u>	<u>141</u>	<u>117</u>	<u>126</u>
Total Investment Income/(Loss)	<u>32,685</u>	<u>28,321</u>	<u>(856)</u>	<u>31,344</u>	<u>32,245</u>
Total Additions/Reductions	<u>54,030</u>	<u>49,573</u>	<u>17,904</u>	<u>50,898</u>	<u>50,067</u>
Deductions					
Retirement Allowance Payments	32,807	30,893	30,348	29,826	29,112
Return of Contributions and Death Benefits	353	115	100	54	196
Transfers to the Employees' Retirement System	-	-	55	1	-
Administrative Expenses	334	397	356	281	280
Total Deductions	<u>33,494</u>	<u>31,405</u>	<u>30,859</u>	<u>30,162</u>	<u>29,588</u>
Net Increase/(Decrease) in Fiduciary Net Position	<u>20,536</u>	<u>18,168</u>	<u>(12,955)</u>	<u>20,736</u>	<u>20,479</u>
Net Position Restricted for Pension Benefits					
Beginning of Year - as previously reported	282,042	263,874	277,096	256,360	235,881
Adjustment for Application of GASB 68	-	-	(267)	-	-
Adjustment for Application of GASB 75	-	-	-	-	-
Beginning of Year - as adjusted	<u>282,042</u>	<u>263,874</u>	<u>276,829</u>	<u>256,360</u>	<u>235,881</u>
End of Year	<u>\$ 302,578</u>	<u>\$ 282,042</u>	<u>\$ 263,874</u>	<u>\$ 277,096</u>	<u>\$ 256,360</u>

RETIREMENT SYSTEMS OF ALABAMA

Statistical Section

Teachers' Retirement System

Retired Members by Type of Benefit as of September 30, 2021

	Amount of Monthly Benefit	Number of Retirants	Type of Retirement ¹			Option Selected ²				
			A	B	C	Maximum	Option 1	Option 2	Option 3	Option 4
\$	1 - 250	1,420	824	462	134	238	289	467	426	-
	251 - 500	8,627	6,329	911	1,387	2,425	3,180	1,943	1,074	5
	501 - 750	9,302	7,407	759	1,136	2,367	3,643	2,096	1,194	2
	751 - 1,000	8,360	6,816	721	823	1,945	3,253	1,910	1,249	3
	1,001 - 1,250	7,207	5,944	614	649	1,382	2,669	2,005	1,148	3
	1,251 - 1,500	6,349	5,286	522	541	1,218	2,263	1,893	973	2
	1,501 - 1,750	7,364	6,495	399	470	1,304	2,917	2,142	999	2
	1,751 - 2,000	9,090	8,477	302	311	1,547	3,917	2,313	1,309	4
	2,001 - 2,250	9,594	9,139	262	193	1,425	4,199	2,680	1,286	4
	2,251 - 2,500	8,224	7,901	214	109	1,206	3,645	2,294	1,077	2
	2,501 - 2,750	6,186	5,971	153	62	876	2,713	1,793	804	-
	2,751 - 3,000	4,662	4,505	121	36	664	1,901	1,419	676	2
	3,001 - 3,250	3,521	3,393	105	23	469	1,428	1,101	519	4
	3,251 - 3,500	2,660	2,555	95	10	336	1,047	885	391	1
	3,501 - 3,750	2,065	1,990	64	11	266	804	692	298	5
	3,751 - 4,000	1,583	1,532	42	9	217	614	507	242	3
	4,001 - 4,250	1,344	1,294	46	4	177	545	414	206	2
	4,251 - 4,500	987	954	31	2	114	373	351	146	3
	4,501 - 4,750	769	749	20	-	101	260	282	125	1
	4,751 - 5,000	646	630	15	1	81	238	229	97	1
	Over 5,000	3,111	3,009	96	6	344	937	1,300	517	13
Totals		103,071	91,200	5,954	5,917	18,702	40,835	28,716	14,756	62

¹ Type of Retirement

- A - Service
- B - Survivor Benefit
- C - Disability

² Option

- Maximum - Life Annuity
- Option 1 - Cash Refund
- Option 2 - 100% Joint Survivorship
- Option 3 - 50% Joint Survivorship
- Option 4 - Other

RETIREMENT SYSTEMS OF ALABAMA

Statistical Section

Employees' Retirement System

Retired Members by Type of Benefit as of September 30, 2021

Amount of Monthly Benefit	Number of Retirants	Type of Retirement ¹			Option Selected ²				
		A	B	C	Maximum	Option 1	Option 2	Option 3	Option 4
\$ 1 - 250	388	173	207	8	45	25	66	190	62
251 - 500	3,536	2,364	850	322	853	855	887	748	193
501 - 750	5,270	3,725	802	743	1,479	1,538	1,171	854	228
751 - 1,000	5,138	3,703	624	811	1,420	1,628	977	842	271
1,001 - 1,250	5,764	4,568	514	682	1,258	1,965	1,249	903	389
1,251 - 1,500	5,191	4,268	422	501	1,086	1,857	1,174	784	290
1,501 - 1,750	4,834	4,178	301	355	945	1,786	1,100	789	214
1,751 - 2,000	4,522	4,078	190	254	822	1,737	975	745	243
2,001 - 2,250	3,963	3,631	163	169	706	1,340	999	676	242
2,251 - 2,500	3,349	3,093	116	140	586	1,218	847	548	150
2,501 - 2,750	2,712	2,542	80	90	434	1,012	701	455	110
2,751 - 3,000	2,105	1,992	63	50	343	791	545	376	50
3,001 - 3,250	1,895	1,808	60	27	301	721	509	322	42
3,251 - 3,500	1,365	1,305	39	21	207	513	367	247	31
3,501 - 3,750	1,145	1,109	26	10	181	440	300	204	20
3,751 - 4,000	843	816	16	11	145	331	203	145	19
4,001 - 4,250	714	696	12	6	97	275	188	138	16
4,251 - 4,500	536	516	12	8	76	197	155	100	8
4,501 - 4,750	422	409	12	1	74	154	112	72	10
4,751 - 5,000	376	366	8	2	57	132	105	78	4
Over 5,000	1,524	1,491	25	8	224	548	416	314	22
Totals	55,592	46,831	4,542	4,219	11,339	19,063	13,046	9,530	2,614

¹ Type of Retirement

- A - Service
- B - Survivor Benefit
- C - Disability

² Option

- Maximum - Life Annuity
- Option 1 - Cash Refund
- Option 2 - 100% Joint Survivorship
- Option 3 - 50% Joint Survivorship
- Option 4 - Other

RETIREMENT SYSTEMS OF ALABAMA

Statistical Section

Judicial Retirement Fund

Retired Members by Type of Benefit as of September 30, 2021

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	11	-	11	-	11	-
1,501 - 1,750	8	2	6	-	6	2
1,751 - 2,000	5	-	5	-	5	-
2,001 - 2,250	4	-	4	-	4	-
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	6	2	2	2	2	4
3,251 - 3,500	16	4	12	-	12	4
3,501 - 3,750	17	-	17	-	17	-
3,751 - 4,000	32	1	31	-	32	-
4,001 - 4,250	3	3	-	-	-	3
4,251 - 4,500	4	3	1	-	1	3
4,501 - 4,750	7	7	-	-	1	6
4,751 - 5,000	8	4	4	-	4	4
Over 5,000	316	307	5	4	55	261
Totals	452	333	112	7	164	288

† 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 of Creditable Service				
	10-14	15-19	20-24	25-29	30 & over
2021					
Average monthly benefit	\$ 926	\$ 1,364	\$ 1,815	\$ 2,672	\$ 3,819
Average final average salary	\$ 48,416	\$ 49,569	\$ 51,424	\$ 63,105	\$ 71,608
Number of active retirants	767	739	715	1,738	1,009
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

RETIREMENT SYSTEMS OF ALABAMA

Statistical Section

Employees' Retirement System

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

	Years of Creditable Service				
	10-14	15-19	20-24	25-29	30 & over
2021					
Average monthly benefit	\$ 866	\$ 1,350	\$ 2,234	\$ 2,865	\$ 3,885
Average final average salary	\$ 44,605	\$ 48,578	\$ 57,627	\$ 64,418	\$ 71,759
Number of active retirants	543	418	517	813	628
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

*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 Creditable Service				
	10-14	15-19	20-24	25-29	30+
2021					
Average monthly benefit	\$ 8,582	\$ 11,615	\$ 8,136	\$ 9,682	\$ 8,664
Average final average salary	\$ 137,316	\$ 185,842	\$ 130,179	\$ 154,916	\$ 138,620
Number of active retirants	3	1	3	3	1
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	-

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
Barbour County E-911 District Board
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 Commission
Choctaw County Emergency Communications District
Citizenship Trust American Village
Citronelle, City of
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 Housing Authority
Cordova Water & Gas Board
Cordova, City of

RETIREMENT SYSTEMS OF ALABAMA

Statistical Section

Employees' Retirement System

Local Participating Employers

Cottonwood Housing Authority
Cottonwood, City of
Courtland, Town of
Covington County Commission
Covington County E-911 Board
Covington County Water Authority
Cowarts, Town of
Crenshaw County Commission
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 & 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 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
 Gilberttown Utilities Board
 Gilberttown, Town of
 Glencoe Water & Sewer Board
 Glencoe, City of
 Goodwater Water Works & 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

RETIREMENT SYSTEMS OF ALABAMA

Statistical Section

Employees' Retirement System

Local Participating Employers

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

Marshall County Commission
Marshall County Community Punishment &
Corrections Authority
Marshall County Emergency Telephone
Services
Marshall County Gas District
Marshall 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, City of
Midland City, 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 Brockton, The Water Works & Sewer Board of
the Town of
New Hope, Town of
New London Water, Sewer & Fire Protection
Authority
New Site, Town of
Newton, 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

RETIREMENT SYSTEMS OF ALABAMA

Statistical Section

Employees' Retirement System

Local Participating Employers

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

Semmes, City of
Sheffield Utilities Board
Sheffield, City of
Shelby County Commission
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
Slocomb Waterworks & Sewer Board
Slocomb, Town of
Smiths Station, City of
Smiths Water & Sewer Authority
Snead, Town of
Somerville, Town of
South Alabama Gas District
South Alabama Regional Planning Commission
South Central Alabama Development
Commission
South Central Alabama Mental Health Board
South Central Alabama Regional Housing
Authority
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, 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 & 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

RETIREMENT SYSTEMS OF ALABAMA

Statistical Section

Employees' Retirement System

Local Participating Employers

Tuscaloosa County Special Tax Board
Tuscaloosa Housing Authority
Tuscaloosa Public Library
Tuscaloosa, City of
Tuscumbia, City of
Tuskegee Utilities Board
Tuskegee, City of
Union Grove Utilities Board
Union Springs Utilities Board
Union Springs, City of
Uniontown Housing Authority
Uniontown Utilities Board
Uniontown, Town of
USS Alabama Battleship Commission
Valley Grande, City of
Valley Head Water Works Board
Valley Head, City of
Valley Housing Authority
Valley, City of
Vance, Town of
Vernon Housing Authority
Vernon, City of
Vestavia Hills, City of
Vincent, City of
Vincent, The Water Works Board of the City of
Von Braun Civic Center
Wadley, Town of
Walker County Commission
Walker County E9-1-1 District
Walker County Housing Authority
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
Wilton, Town of
Winfield Water Works & Sewer Board
Winfield, City of
Winston County Commission
Winston County E9-1-1 Communications
District
Woodland, Town of
Woodstock, Town of
York Housing Authority
York, City of

RETIREMENT SYSTEMS OF ALABAMA

Statistical Section
 Employees' Retirement System
 Ten-Year History of Largest Employers

	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
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	28,333	29,019	28,533	29,664	29,548	29,756	30,109	30,297	30,659	31,795
% of Total Active Members	33.50%	33.95%	33.75%	34.27%	34.50%	35.08%	35.43%	35.40%	35.84%	36.85%
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	2,374	2,353	2,443	2,362	2,296	2,258	2,207	2,243	2,209	2,192
% of Total Active Members	2.81%	2.75%	2.89%	2.73%	2.68%	2.66%	2.60%	2.62%	2.58%	2.54%
3) Employer	Montgomery, City of	Montgomery, City of	Mobile County	Mobile County	Mobile County	Mobile County	Mobile County	Mobile County	Mobile County	Mobile County
# of Active Members	2,139	2,206	1,539	1,596	1,610	1,604	1,587	1,578	1,625	1,657
% of Total Active Members	2.53%	2.58%	1.82%	1.84%	1.88%	1.89%	1.87%	1.84%	1.90%	1.92%
4) Employer	Mobile County	Mobile County	Mobile, City of	Mobile, City of	Mobile, City of	Mobile, City of	Mobile, City of	AtaPointe Health*	Mobile, City of	Mobile, City of
# of Active Members	1,452	1,514	1,058	1,104	1,150	1,195	1,250	1,341	1,282	1,254
% of Total Active Members	1.72%	1.77%	1.25%	1.28%	1.34%	1.41%	1.47%	1.57%	1.50%	1.45%
5) Employer	Mobile, City of	Madison County	Madison County	Madison County	Madison County	Madison County	Madison County	Mobile, City of	AtaPointe Health*	Madison County
# of Active Members	1,043	1,048	1,044	1,083	1,107	1,145	1,152	1,254	1,236	1,154
% of Total Active Members	1.23%	1.23%	1.24%	1.25%	1.29%	1.35%	1.36%	1.47%	1.44%	1.34%
6) Employer	Madison County	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
# of Active Members	1,015	1,022	1,035	1,032	1,018	999	995	1,152	1,174	1,002
% of Total Active Members	1.20%	1.20%	1.22%	1.19%	1.19%	1.18%	1.17%	1.35%	1.37%	1.16%
7) Employer	Dothan, City of	Mobile, City of	Auburn, City of	Auburn, City of	Montgomery County	Montgomery County	AtaPointe Health*	Dothan, City of	Dothan, City of	Dothan, City of
# of Active Members	1,003	1,022	822	828	801	807	792	996	985	966
% of Total Active Members	1.19%	1.20%	0.97%	0.96%	0.94%	0.95%	0.93%	1.16%	1.15%	1.12%
8) Employer	Auburn, City of	Tuscaloosa, City of	Tuscaloosa, City of	Tuscaloosa, City of	Auburn, City of	Tuscaloosa, City of	Tuscaloosa, City of	Tuscaloosa, City of	Tuscaloosa, City of	AtaPointe Health*
# of Active Members	770	768	770	759	786	774	777	790	775	911
% of Total Active Members	0.91%	0.90%	0.91%	0.88%	0.92%	0.91%	0.91%	0.92%	0.91%	1.06%
9) Employer	Tuscaloosa, City of	Auburn, City of	Montgomery County	Montgomery County	Tuscaloosa, City of	Auburn, City of	Montgomery County	Montgomery County	Montgomery County	Montgomery County
# of Active Members	757	759	751	757	783	752	766	769	767	771
% of Total Active Members	0.90%	0.89%	0.89%	0.87%	0.91%	0.89%	0.90%	0.90%	0.90%	0.89%
10) Employer	Montgomery County	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
# of Active Members	697	715	726	689	706	704	706	678	729	763
% of Total Active Members	0.82%	0.84%	0.86%	0.80%	0.82%	0.83%	0.83%	0.79%	0.85%	0.88%
Total # of Active Members	84,572	85,485	84,534	86,565	85,657	84,814	84,985	85,585	85,549	86,290

* Formerly Greater Mobile-Washington Co. Mental Health Board







201 South Union Street
Montgomery, Alabama 36104

877.517.0020
www.rsa-al.gov

