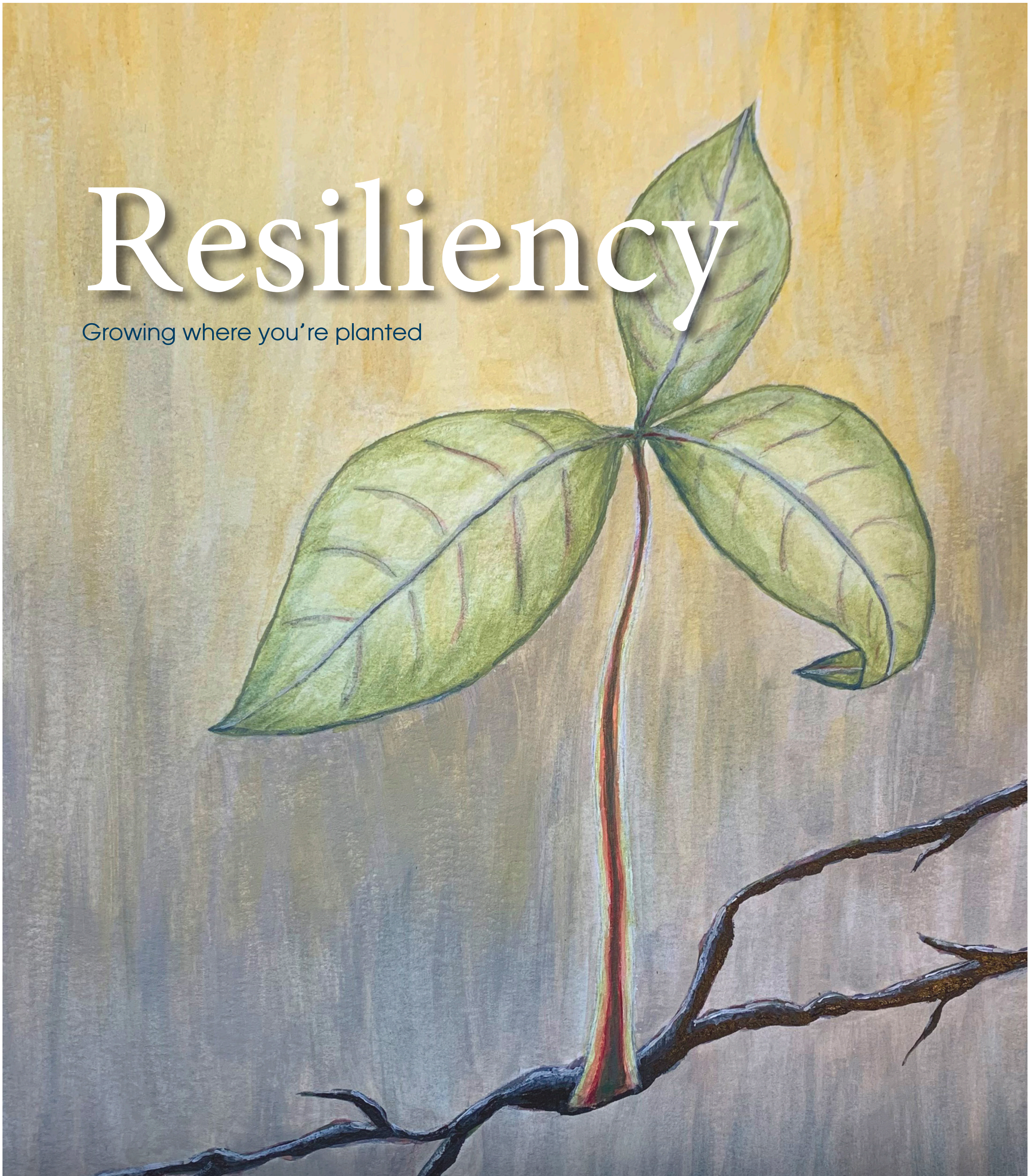
Resiliency

Growing where you're planted



PERS of MISSISSIPPI

2020 COMPREHENSIVE ANNUAL FINANCIAL REPORT

A Component Unit of the State of Mississippi | Fiscal Year Ended June 30

2020 Comprehensive Annual Financial Report

A Component Unit of the State of Mississippi
Fiscal Year Ended June 30

PREPARED BY:

The Office of Administrative Services
Public Employees' Retirement System of Mississippi

PERS Building
429 Mississippi Street
Jackson, MS
39201-1005

PERS
of MISSISSIPPI

RESILIENCY

Life promises difficult times; being prepared for those times is key to survival and, even, growth.

The Public Employees' Retirement System of Mississippi (PERS) understands the importance of resiliency. Whether facing a national economic downturn or a global pandemic, our responsibility is to grow where we are planted.

Decades of knowledge and experience have taught us the significance of being both well-rooted and adaptable so that we can weather any storm that might come our way. We are the provisioner of benefits for hundreds of thousands of Mississippians and their loved ones. Therefore we know PERS must be sustainable for generations to come.

We are staid and steadfast in our responsibilities, whether processing a retirement application while we work remotely or continuing to pay benefits when people are sheltered for safety and need those benefits the most. There will always be difficulties to overcome in this world. As a defined benefit provider that looks to the future, finding a way to grow and, hopefully, thrive —even in the worst of times— is what we will do.

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ACTUARIAL

STATISTICAL

PERS
of MISSISSIPPI

Providing Benefits for Life

Board of Trustees Public
Employees' Retirement System
429 Mississippi Street
Jackson, MS 39201-1005

December 15, 2020

Dear Board Members:

It is my pleasure to present the 2020 *Comprehensive Annual Financial Report* (CAFR) of the Public Employees' Retirement System. We take our role to heart as a fiduciary for this System and remain vigilant and resourceful in honoring the commitment to our membership. I join with the PERS team as we dedicate ourselves to serving our teachers, law enforcement officers, healthcare workers, and many other public servants who make up the membership of our System.

This CAFR is a presentation of the financial results of the System as of June 30, 2020. We believe this information is useful for transparency and perspective over the long term. We trust you and other members will find this CAFR helpful in understanding your retirement system.

PROFILE OF THE SYSTEM

The System was established to provide retirement benefits for all state and public education employees, officers of the Mississippi Highway Safety Patrol, elected members of the State Legislature, the President of the Senate, and other public employees of participating employers. Plans administered by the System include: The Public Employees' Retirement System of Mississippi (PERS), which was established by legislation in 1952; the Mississippi Highway Safety Patrol Retirement System (MHSPRS), established in 1958; the Supplemental Legislative Retirement Plan (SLRP), established in 1989; and the Municipal Retirement Systems (MRS), which came under the System's administration in 1987. As of June 30, 2020, the System's defined benefit plans served a total of 341,766 members, including 112,448 retirees and beneficiaries. There are 872 participating employers from across the state. Primary sources of funding for the System include employer contributions, member contributions, and investment income. Retirement benefits paid during the fiscal year totaled $2.9 billion. Employers contributed $1.2 billion during the fiscal year, while members of the System contributed a total of $597 million. As of June 30, 2020, net position restricted for pension benefits totaled $28.3 billion.

Public Employees' Retirement System of Mississippi
429 Mississippi Street, Jackson, MS 39201-1005   601.359.3589   800.444.PERS   www.pers.ms.gov

The System is administered by a 10-member Board of Trustees that includes: The State Treasurer; one gubernatorial appointee who is a member of PERS; two state employees; two PERS retirees; and one representative each from public schools and community colleges, state universities, municipalities, and counties. Apart from the State Treasurer and the gubernatorial appointee, all members are elected to staggered six-year terms by the constituents they represent. The Board of Trustees is responsible for the general administration and proper operation of the System. The Executive Director is designated by the Board to lead and conduct all business for the System. The Public Employees' Retirement System of Mississippi operates under legislative mandate with respect to administrative budgets, human resources, and purchasing guidelines. The System is considered a component unit of the State of Mississippi for financial reporting purposes and, as such, the financial statements contained in this report are included in the State of Mississippi's Comprehensive Annual Financial Report.

Annual budgets are legally adopted for the administrative expenditure portion of the System's operations and are funded by earnings of the System. A budget request is approved by the Board of Trustees and submitted to the State Legislature, which legally enacts the budget in the form of an appropriation bill during the subsequent legislative session. Changes may be made in budget categories, consistent with legislative authority. A more detailed discussion of the budgetary process is presented in the Financial Section of this CAFR on page 34.

FINANCIAL INFORMATION

Our staff issues a CAFR within six months of the close of each fiscal year. The report contains basic financial statements presented in conformity with generally accepted accounting principles and audited in accordance with generally accepted auditing standards, as well as standards applicable to financial audits contained in government auditing standards. The 2020 independent audit was conducted by Eide Bailly LLP, a firm of licensed certified public accountants. The Independent Auditors' Report is presented in the Financial Section on pages 17 through 19.

This CAFR consists of management's representations concerning the finances of the System. Consequently, management assumes full responsibility for the completeness and reliability of all information presented in this report. A framework of internal controls is designed to establish reasonable assurance that assets are safeguarded, transactions are accurately executed, and financial statements are fairly presented in accordance with generally accepted accounting principles. The concept of reasonable assurance recognizes that the cost of a control should not appreciably exceed the benefits likely to be derived and that the analysis of costs and benefits requires estimates and professional judgments by management. The System maintains written policies and procedures and an internal audit department that provides reports to the Board of Trustees. The internal audit department makes recommendations for improvements in controls and operating efficiency. Management's Discussion and Analysis (MD&A) immediately follows the Independent Auditors' Report and provides a narrative introduction, overview, and analysis of the basic financial statements. MD&A complements, and should be read in conjunction with, this letter of transmittal.

INVESTMENT INFORMATION

The Board of Trustees continues to focus on an investing approach that emphasizes a diversified portfolio of securities invested over a long time horizon, which moderates the effects of a changing economic environment. The portfolio is broadly diversified among cash equivalents, equities, debt securities, real estate, and private equity with additional variation through domestic and international investing. Our asset allocation policy is tactically balanced to provide an expected level of return while incurring minimal risk, which over time will fund the liabilities of the System, given an adequate contribution rate expressed as a percent of payroll. This year the System posted a 3.35 percent rate of return on investments measured on June 30, 2020.

Callan LLC is employed by the Board of Trustees as the System's investment consultant. Services include calculating investment returns for both the total fund and for each of the investment managers retained to invest the System's assets. All returns are calculated using a time-weighted rate of return methodology based on portfolio fair values determined by the System's custodial bank. Additional information regarding the System's investment holdings and performance may be found in the Financial and Investment Sections of this report.

FUNDING INFORMATION

PERS continues to operate under the funding policy initially adopted in June 2018. The goals of the funding policy include an increasing funded ratio over the projection period, with an ultimate goal of 100% funding and contribution stability as a percent of payroll.

The information in this year's CAFR is based on the actuarial valuation reports as of June 30, 2019 which were presented to and approved by the PERS Board in December 2019. The PERS valuation was based on certain changes in assumptions, as approved by the Board in August 2019, including but not limited to a change to recently published mortality tables that more closely match the System's experience and a change in the inflation rate from 3.0 percent to 2.75 percent. These changes contributed to a slight decline in the funded ratio from 61.8 percent to 60.9 percent but overall, the valuation report indicated that the employer contribution rate of 17.4 percent and the employee contribution rate of 9.0 percent meet the basic financial objectives of the funding policy. More detail specific to the PERS plan and funding, as well as for MHSPRS, SLRP, and MRS, is provided in the footnotes to the financial statements and in the actuarial sections of this report.

AWARDS

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the System for its comprehensive annual financial report for the fiscal year ended June 30, 2019. The Certificate of Achievement is a prestigious national award, recognizing conformance with the highest standards for preparation of state and local government financial reports.

To be awarded a Certificate of Achievement, a governmental unit must publish an easily readable and efficiently organized comprehensive annual financial report with contents that conform to program standards. Such financial reports must satisfy both generally accepted accounting principles and applicable legal requirements. A Certificate of Achievement is valid for a period of only one year. The System has received a Certificate of Achievement for the last 33 consecutive years. We believe our current report continues to conform to the Certificate of Achievement Program's requirements, and we are submitting it to GFOA for evaluation.

The Public Employees' Retirement System of Mississippi's submission of a Popular Annual Financial Report to the GFOA resulted in an Award for Outstanding Achievement in Popular Annual Financial Reporting for the fiscal year ended June 30, 2019. To receive an Award for Outstanding Achievement in Popular Annual Financial Reporting, a government unit must publish a popular annual financial report with contents that conform to program standards of creativity, presentation, understandability, and reader appeal.

An Award for Outstanding Achievement in Popular Annual Financial Reporting is valid for a period of one year. The Public Employees' Retirement System of Mississippi has received a Popular Award certificate for the last 17 consecutive fiscal years. We believe our current report continues to conform to the Popular Annual Financial Reporting requirements, and we are submitting it to GFOA for consideration this year.

The Public Employees' Retirement System received the Public Pension Coordinating Council's (PPCC) Public Pension Standards 2020 Award in recognition of meeting professional standards for plan design and administration. The PPCC is a national confederation of state retirement associations whose standards are widely recognized benchmarks for public pension systems in the areas of plan design, funding, actuarial, and financial audits, as well as member communications.

CONCLUSION

This report is a product of the combined efforts of the System's staff and advisors functioning under your leadership and is intended to provide extensive and reliable information as a basis for making management decisions, determining compliance with legal provisions, and determining responsible stewardship for the assets contributed by the System's members and employers. This report is available to the Governor, members of the Mississippi Legislature, State Auditor, and all member agencies via our website, www.pers.ms.gov. These agencies form the link between the System and its members, whose cooperation contributes significantly to our success. I hope all stakeholders of the System will find this report informative and useful.

My deepest thanks go to you, our team of staff professionals, the advisors, and others who have worked so diligently as we partner together in the enduring commitment to serve the members and retirees of the Public Employees' Retirement System. I remain humbled and honored to serve as your Executive Director and I look forward to working together in the future.

Respectfully submitted,

H. Ray Higgins, Jr.
Executive Director

Organizational Chart

BOARD OF TRUSTEES

EXECUTIVE SERVICES

H. Ray Higgins, Jr.
Executive Director

POLICY ADVISOR

Davetta Lee
Counsel & Policy Advisor

LEGAL

Martin Millette
Special Assistant, Office of the Attorney General

COMMUNICATIONS

Shelley Powers
Communications Director

INVESTMENTS

Robert Clark
CFA
Chief Investment Officer

MEMBER & EMPLOYER SERVICES

Kenny Grissett
CIA, CIDA, CGAP
Deputy Administrator, Office of Member & Employer Services

BENEFIT SERVICES

Shirley Sessoms
CPM
Deputy Administrator, Office of Benefit Services

ADMINISTRATIVE SERVICES

Terri Hudson
CPA, CIA
Deputy Administrator, Office of Administrative Services

2020 Board of Trustees

The Board of Trustees of the Public Employees' Retirement System of Mississippi (PERS) is responsible for designating the System's executive director and for establishing the policies for administration of the trust. The Board also works to carry out the intent and purposes of the state Legislature by establishing rules and regulations for the administration of PERS and the transaction of its business.

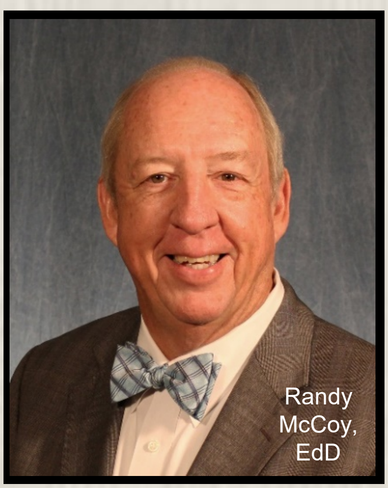
CHAIR Brian Rutledge, PhD *Elected by Institutions of Higher Learning Employees*
Term of Service: January 2016 - December 2022

VICE CHAIR Chris Howard *Elected by State Employees*
Term of Service: July 2014 - June 2020

Bill Benson *Elected by County Employees*
Term of Service: January 2016 - December 2021

Kelly Breland *Elected by State Employees*
Term of Service: January 2019 - December 2024

2020 Board of Trustees
(continued)



Outside Professional Services

ACTUARY
Cavanaugh Macdonald Consulting, LLC

AUDITOR
Eide Bailly LLP

CUSTODIAN INVESTMENT FUNDS
Bank of New York Mellon

FUNDS EVALUATION SERVICES & ASSET ALLOCATION/INVESTMENT POLICY STUDY
Callan LLC

INVESTMENT MANAGERS

EQUITY MANAGERS
Acadian Asset Management, LLC
Arrowstreet Capital, LP
Artisan Partners, LP
Baillie Gifford & Company
Dimensional Fund Advisors, Inc.
Eagle Capital Management, LLC
Epoch Investment Partners, Inc.
Fisher Investments
Harding Loevner, LP
Lazard Asset Management, LLC
Longview Partners, LLC
Marathon Asset Management, LLP
Mondrian Investment Partners, Limited
Northern Trust Investments, Inc.
Principal Global Investors, LLC
Riverbridge Partners, LLC
Wellington Management Company, LLP

DEBT MANAGERS
AllianceBernstein, LP
Loomis Sayles & Company, LP
Northern Trust Investments, Inc.
Manulife Asset Management, LLC
Pacific Investment Management Company
Prudential Investment Management, Inc.
Wellington Management Company, LLP

PRIVATE EQUITY MANAGERS
GCM Grosvenor Diversified Partners, LP
Pathway Capital Management, LLC

REAL ESTATE MANAGERS
AEW Capital Management, LP
Angelo, Gordon & Company
CenterSquare Investment Management
Cohen & Steers Capital Management, Inc.
Hancock Natural Resource Group, Inc.
Heitman, LLC
Invesco, LP
J.P. Morgan Investment Management, Inc.
Principal Global Investors, LLC
T.A. Associates Realty
UBS Realty Investors, LLC
Westbrook Partners

LEGAL COUNSEL
Office of the Attorney General
Martin Millette, Special Assistant

Additional information on investment professional fees can be found on pages 60 and 82.
Information on commissions is also found on page 82.

Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Public Employees' Retirement System of Mississippi

For its Comprehensive Annual
Financial Report
For the Fiscal Year Ended

June 30, 2019

Christopher P. Morrill

Executive Director/CEO

Public Pension Coordinating Council

Public Pension Standards Award For Funding and Administration 2020

Presented to

Public Employees' Retirement System of Mississippi

In recognition of meeting professional standards for
plan funding and 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)

Alan H. Winkle

Alan H. Winkle Program
Administrator

ROOTED

Strength and endurance come from being deeply rooted in knowledge and experience.

Financial

EideBailly

CPAs & BUSINESS ADVISORS

Independent Auditor's Report

To the Board of Trustees
Public Employees' Retirement System of Mississippi
Jackson, Mississippi

Report on the Financial Statements

We have audited the accompanying financial statements of the Public Employees' Retirement System of Mississippi (the System), which comprise the statement of fiduciary net position as of June 30, 2020, and the related statement of changes in fiduciary net position, for the year then ended, and the related notes to the financial statements.

Management's Responsibility for the Financial Statements

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

Auditor's Responsibility

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

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

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

What inspires you, inspires us. eidebailly.com

877 W. Main St., Ste. 800 Boise, ID 83702-5858 T 208.344.7150 F 208.344.7435 EOE

Opinions
In our opinion, the financial statements referred to above present fairly, in all material respects, the respective statement of the fiduciary net position of the Public Employees' Retirement System of Mississippi, as of June 30, 2020, and the respective statement of changes in fiduciary net position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

<u>Other Matters</u>

Required Supplementary Information
Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 20-26 and the required supplementary information on pages 51-58 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information
Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the System's basic financial statements. The introductory, investment, actuarial, statistical and supplementary information are presented for purposes of additional analysis and are not a required part of the financial statements.

The additional supplementary information accompanying financial information including the Schedule of Administrative Expenses and Depreciation, Schedule of Managers' Fees, Investment Global Out-of-Pocket Fees, and Professional Service Fees, and Schedule of Investments Due to MRS from PERS are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the accompanying financial information listed as supplemental schedules are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

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

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated November 25, 2020, on our consideration of the System's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. That report will be issued separately under its own cover. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the System's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering System's internal control over financial reporting and compliance.

Eide Bailly LLP

Boise, Idaho
November 25, 2020

This section presents management's discussion and analysis of the Public Employees' Retirement System of Mississippi's (System) financial position and performance for the year ended June 30, 2020. This section is presented as a narrative overview and analysis in conjunction with the Letter of Transmittal (included in the Introductory Section), the financial statements and other information presented in the Financial Section of this *Comprehensive Annual Financial Report*.

The System is responsible for administering retirement benefits for all state and public education employees, sworn officers of the Mississippi Highway Safety Patrol, other public employees whose employers have elected to participate and elected members of the State Legislature, as well as the President of the Senate. The System is comprised of four defined benefit pension plans: the Public Employees' Retirement System of Mississippi (PERS), the Mississippi Highway Safety Patrol Retirement System (MHSPRS), the Municipal Retirement Systems (MRS), and the Supplemental Legislative Retirement Plan (SLRP). Throughout this discussion and analysis, units of measure (i.e., billions, millions and thousands) are approximate, being rounded up or down to the nearest tenth of the respective unit value.

The System also oversees two other plans: the Mississippi Government Employees' Deferred Compensation Plan & Trust (MDC), which is a voluntary supplemental retirement savings plan, and the Optional Retirement Plan (ORP), which is offered as an alternative to PERS to certain employees of the state's institutions of higher learning. As explained in Note 1 to the basic financial statements, MDC, and ORP are not part of the System's reporting entity.

Overview of the Financial Statements

This discussion and analysis is intended to serve as an introduction to the System's financial reporting, which is comprised of the following components:

1. Basic financial statements;
2. Notes to the basic financial statements;
3. Required supplementary information; and
4. Other supplementary schedules.

Collectively, this information presents the net position restricted for pension benefits for each of the funds administered by the System as of June 30, 2020. This financial information also summarizes changes in net position restricted for pension benefits for the year then ended. The information in each of these components is briefly summarized as follows:

1. BASIC FINANCIAL STATEMENTS

The June 30, 2020, financial statements are presented for the fiduciary funds administered by the System. Fiduciary funds are used to account for resources held for the benefit of parties outside of the System. Fiduciary funds include the PERS, MHSPRS, MRS, and SLRP pension trust funds. A Statement of Fiduciary Net Position and a Statement of Changes in Fiduciary Net Position are presented for the fiduciary funds as of and for the year ended June 30, 2020. These financial statements reflect the resources available to pay benefits to members, including retirees and beneficiaries, as of year end, as well as the changes in those resources during the year.

2. NOTES TO THE BASIC FINANCIAL STATEMENTS

The notes to the financial statements provide additional information essential to a full understanding of the data provided in the basic financial statements. Information in the notes to the basic financial statements is described as follows:

» Note 1 provides a general description of the System, as well as a concise description of each of the funds administered by the System. Information regarding employer and member participation in the pension plans administered by the System also is provided.

» Note 2 provides a summary of significant accounting policies, including the basis of accounting, management's use of estimates, and other significant accounting policies.

» Note 3 describes investments, including investing authority and policies, fair value measurement, investment risk discussion, and additional information about cash, derivatives, and securities lending.

» Note 4 provides a summary of the capital assets of the System, including depreciation and net holding amounts.

» Note 5 provides information about the net pension liability of employers in the defined benefit plans administered by the System.

» Note 6 provides information about contributions to the defined benefit plans administered by the System.

» Note 7 provides information about System employees as members of PERS.

» Note 8 provides information postemployment benefits other than pensions.

3. REQUIRED SUPPLEMENTARY INFORMATION

The required supplementary information consists of this management's discussion and analysis, the schedule of changes in the net pension liability and related ratios, schedules of employer contributions, the schedule of investment returns, and related notes concerning accounting and financial reporting information for the defined benefit pension plans administered by the System. Also included are the schedules of proportionate share of the net Other Post Employee Benefits (OPEB) liability and employer contributions for OPEB and related notes.

4. OTHER SUPPLEMENTARY SCHEDULES

Other schedules include detailed information on administrative expenses incurred by the System, investment and other professional service expenses incurred, as well as the balances due to individual municipal retirement plans.

Financial Highlights

The combined net position of the defined benefit plans administered by the System decreased by $393.6 million, or 1.4 percent. This decrease was primarily the result of the fiscal year 2020 investment performance.

The defined benefit plan's 2020 rate of return on investments was 3.35 percent, compared to the prior fiscal year's 6.87 percent rate of return. Domestic, global, and international equity portfolios returned 4.5 percent, 3.0 percent, and negative 2.6 percent, respectively, while the return on fixed income debt securities was 7.4 percent. The rate of return on real estate investments was 1.2 percent, and the rate of return on the private equity portfolio was 3.4 percent.

The PERS, MHSPRS, and SLRP defined benefit plans administered by the System had a Net Pension Liability of $19.4 billion, $191.0 million, and $4.4 million, respectively. The ratios of fiduciary net position to total pension liability were 59.0 percent, 65.6 percent, and 80.4 percent, respectively.

Fiduciary Net Position—Defined Benefit Plans
June 30, 2020 & June 30, 2019

[in thousands]

	PERS		MHSPRS		MRS	
	2020	2019	2020	2019	2020	2019
Assets:						
Cash, Cash equivalents, & Receivables	$1,441,064	$1,927,378	$17,860	$24,091	$6,971	$10,109
Investments at Fair Value	27,443,530	27,701,428	360,184	360,717	135,048	145,948
Invested Securities Lending Collateral	2,864,459	3,353,600	37,595	43,669	14,097	17,669
Capital Assets	13,781	18,146	-	-	-	-
Total Assets	**31,762,834**	**33,000,552**	**415,639**	**428,477**	**156,116**	**173,726**
Deferred Outflows of Resources	**148**	**55**	**-**	**-**	**-**	**-**
Liabilities:						
Investment Accounts & Other Payables	1,069,283	1,441,842	13,919	18,662	5,230	7,602
Securities Lending Liability	2,866,228	3,352,088	37,618	43,650	14,105	17,661
Total Liabilities	**3,935,511**	**4,793,930**	**51,537**	**62,312**	**19,335**	**25,263**
Deferred Inflows of Resources	**77**	**75**	**-**	**-**	**-**	**-**
Net Position Restricted for Pension Benefits	**$27,827,394**	**$28,206,602**	**$364,102**	**$366,165**	**$136,781**	**$148,463**

	SLRP		Total Defined Benefit Pension Plan		Total Percent Change
	2020	2019	2020	2019	
Assets:					
Cash, Cash equivalents, & Receivables	$869	$1,209	$1,466,764	$1,962,787	(25.27)%
Investments at Fair Value	17,823	18,350	27,956,585	28,226,443	(0.96)
Invested Securities Lending Collateral	1,859	2,222	2,918,010	3,417,160	(14.61)
Capital Assets	-	-	13,781	18,146	(24.05)
Total Assets	**20,551**	**21,781**	**32,355,140**	**33,624,536**	**(3.78)**
Deferred Outflows of Resources	**-**	**-**	**148**	**55**	**169.09**
Liabilities:					
Investment Accounts & Other Payables	695	951	1,089,127	1,469,057	(25.86)
Securities Lending Liability	1,861	2,221	2,919,812	3,415,620	(14.52)
Total Liabilities	**2,556**	**3,172**	**4,008,939**	**4,884,677**	**(17.93)**
Deferred Inflows of Resources	**-**	**-**	**77**	**75**	**2.67**
Net Position Restricted for Pension Benefits	**$17,995**	**$18,609**	**$28,346,272**	**28,739,839**	**(1.37)%**

Changes in Fiduciary Net Position—Defined Benefit Plans
June 30, 2020 & June 30, 2019

[in thousands]

	PERS		MHSPRS		MRS	
Additions:	2020	2019	2020	2019	2020	2019
Contributions	$1,766,516	$1,619,049	$22,572	$21,715	$16,622	$17,129
Investment Income	856,935	1,701,321	11,196	22,144	4,197	9,297
Other Additions	22	38	-	-	-	-
Total Additions:	**2,623,473**	**3,320,408**	**33,768**	**43,859**	**20,819**	**26,426**
Deductions:						
Pension Benefits	2,878,073	2,747,397	35,455	34,671	32,170	32,935
Refunds to Terminated Employees	104,851	108,042	48	16	-	-
Administrative Expenses	19,757	21,557	328	312	331	342
Total Deductions	**3,002,681**	**2,876,996**	**35,831**	**34,999**	**32,501**	**33,277**
Net Increase/(Decrease)	**(379,208)**	**443,412**	**(2,063)**	**8,860**	**(11,682)**	**(6,851)**
Net Position, Beginning of Year	**28,206,602**	**27,763,190**	**366,165**	**357,305**	**148,463**	**155,314**
Net Positions Restricted for Pension Benefits	**$27,827,394**	**$28,206,602**	**$364,102**	**$366,165**	**$136,781**	**$148,463**

	SLRP		Total Defined Benefit Pension Plan		Total Percent Change
Additions:	2020	2019	2020	2019	
Contributions	$719	$739	$1,806,429	$1,658,632	8.91%
Investment Income	554	1,287	872,882	1,734,049	(49.66)
Other Additions	-	-	22	38	(42.11)
Total Additions:	**1,273**	**2,026**	**2,679,333**	**3,392,719**	**(21.03)**
Deductions:					
Pension Benefits	1,857	1,442	2,947,555	2,816,445	4.66
Refunds to Terminated Employees	20	-	104,919	108,058	(2.90)
Administrative Expenses	10	11	20,426	22,222	(8.08)
Total Deductions	**1,887**	**1,453**	**3,072,900**	**2,946,725**	**4.28**
Net Increase/(Decrease)	**(614)**	**573**	**(393,567)**	**445,994**	**(188.24)%**
Net Position, Beginning of Year	**18,609**	**18,036**	**28,739,839**	**28,293,845**	**1.58%**
Net Positions Restricted for Pension Benefits	**$17,995**	**$18,609**	**$28,346,272**	**$28,739,839**	**(1.37)%**

PUBLIC EMPLOYEES' RETIREMENT SYSTEM

PERS is a defined benefit cost-sharing plan that provides retirement benefits to all eligible state of Mississippi public employees, public education employees, other public employees whose employers have elected to participate, elected members of the state Legislature, and President of the Senate. Benefits of the plan are funded by member and employer contributions and earnings on investments. Net position restricted for pension pension benefits at June 30, 2020, amounted to $27.8 billion, a decrease of $379 million or by 1.3 percent compared to the prior fiscal year end.

Additions to PERS' net position restricted for benefits of $2.6 billion include employer and member contributions of $1.8 billion and net investment income of $857 million. Net investment income decreased by $844 million, or 49.6% compared to the prior fiscal year. This decrease was due to the market decline in March 2020 in response to the Covid-19 pandemic.

Deductions from PERS' net position restricted for pension benefits primarily include retirement and beneficiary benefits, as well as administrative expenses. For the 2020 fiscal year, benefit payments amounted to $2.9 billion, an increase of $131 million or 4.8 percent over the prior fiscal year. This increase in benefit payments is consistent with recent trends. The cost of administering the System for fiscal year 2020, including depreciation, amounted to $19.8 million, a decrease of $1.8 million.

At June 30, 2020, PERS employers' total pension liability was $47.2 billion. The plan fiduciary net position was $27.8 billion, resulting in a net pension liability of $19.4 billion. The plan fiduciary net position as a percentage of the total pension liability was 59.0 percent using Governmental Accounting Standards Board (GASB) Statement No. 67, *Financial Reporting for Pension Plans*, measurements.

MISSISSIPPI HIGHWAY SAFETY PATROL RETIREMENT SYSTEM

MHSPRS provides retirement benefits to sworn officers of the Mississippi Highway Safety Patrol. Benefits of the plan are funded by member and employer contributions and by earnings on investments. MHSPRS' net position restricted for pension benefits at June 30, 2020, amounted to $364.1 million, a decrease of $2.1 million or 0.6 percent from $366.2 million at the prior fiscal year end.

Additions to MHSPRS' net position restricted for pension benefits include employer and member contributions and investment income. For the 2020 fiscal year, employer and member contributions were $22.6 million, an increase of $857 thousand or 3.9 percent over the prior fiscal year end. Motor vehicle fees of $3.1 million and driver's license reinstatement fees of $642 thousand were added to 2020 employer contributions. MHSPRS recognized net investment income of $11.2 million for the 2020 fiscal year compared with net investment income of $22.1 million for the prior fiscal year.

Deductions from MHSPRS' net position restricted for pension benefits primarily include retirement and beneficiary benefits. For the 2020 fiscal year, benefit payments amounted to $35.5 million, an increase of $784 thousand or 2.3 percent over the 2019 fiscal year. For the 2020 fiscal year, MHSPRS transferred $328 thousand to PERS to offset the cost of administration.

At June 30, 2020, MHSPRS employers' total pension liability was $555.1 million. The plan fiduciary net position was $364.1 million, resulting in a net pension liability of $191.0 million. The plan fiduciary net position as a percentage of the total pension liability was 65.6 percent using GASB Statement No. 67 measurements.

MUNICIPAL RETIREMENT SYSTEMS

Two municipal retirement plans, and 17 fire and police disability and relief plans comprise MRS, all of which are closed to new members. Seventeen of these separate plans provide retirement benefits to municipal employees, fire fighters, and police officers who were not already members of PERS and who were hired prior to July 1, 1976. Membership in the other two plans was extended until July 1, 1987. All active employees have retired from the municipal plans. The financial positions of MRS plans have been aggregated for financial reporting purposes. Individual plan information is included with the specific municipality's annual financial report. MRS Benefits are funded by employer and member contributions and by earnings on investments. The aggregated plan's net position restricted for pension benefits at June 30, 2020, amounted to $136.8 million, a decrease of $11.7 million or 7.9 percent from $148.5 million at June 30, 2019.

Additions to MRS' net position restricted for pension benefits consist of employer and member contributions and investment income. For the 2020 fiscal year, employer and member contributions of $16.6 million were $507 thousand or 3.0 percent less than contributions of $17.1 million received in the prior fiscal year. MRS employer contributions are funded through taxes levied on assessed properties. All active members have now retired; therefore, the number of retirees will continue to decrease due to mortality leading to both lower contributions and benefits. MRS recognized net investment income of $4.2 million for the 2020 fiscal year compared with net investment income of $9.3 million for the 2019 fiscal year.

Deductions from MRS' net position restricted for pension benefits include retirement and beneficiary benefits and administrative fees. For the 2020 fiscal year, benefit payments amounted to $32.2 million, a decrease of $765 thousand or 2.3 percent from the prior fiscal year. For the 2020 fiscal year, MRS transferred $331 thousand to PERS to offset the cost of administration, compared to $342 thousand transferred for the prior year.

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

SUPPLEMENTAL LEGISLATIVE RETIREMENT PLAN

SLRP provides supplemental retirement benefits to all elected members of the state Legislature and President of the Senate. Benefits of the plan are funded by member and employer contributions and by earnings on investments. The plan's net position restricted for pension benefits at June 30, 2020, amounted to $18.0 million, a decrease of $614 thousand or 3.3 percent from the prior fiscal year.

Additions to SLRP's net position restricted for pension benefits include employer and member contributions and investment income. For the 2020 fiscal year, employer and member contributions were $719 thousand, a decrease of $20 thousand or 2.7 percent from those of the prior fiscal year. SLRP recognized net investment income of $554 thousand for the 2020 fiscal year, compared to net investment income of $1.3 million for the prior fiscal year.

Deductions from SLRP's net position restricted for pension benefits primarily include retirement and beneficiary benefits. For the 2020 fiscal year, benefit payments amounted to $1.9 million. For the 2020 fiscal year, SLRP transferred $10 thousand to PERS to offset the cost of administration.

At June 30, 2020, the SLRP employers' total pension liability was $22.3 million. The plan fiduciary net position was $18.0 million, resulting in a net pension liability of $4.4 million. The plan fiduciary net position as a percentage of the total pension liability was 80.4 percent using GASB Statement No. 67 measurements.

INVESTMENTS

The investment assets of the defined benefit plans administered by the System are combined in a commingled investment pool as authorized by state statute. Each plan owns an equity position in the pool and receives a proportionate investment allocation of income or loss from the pool in accordance with its respective ownership percentage. Therefore, the rate of return on investments is approximately the same for each of the plans. Each plan's allocated share of each type of investment in the pool is shown in the Statement of Fiduciary Net Position. Investment gains or losses are reported in the Statement of Changes in Fiduciary Net Position.

TOTAL SYSTEM INVESTMENTS

At June 30, 2020 the System's total investments, before securities lending activities, approximated $28.0 billion, a decrease of $269.9 million from the prior fiscal year. The combined investment portfolio experienced a return of 3.35 percent compared with a median large public plan, which is Callan Associates Public Funds > $10 billion median, return of 3.91 percent. The Investment Section includes comparisons of the System's investment results to benchmarks over time.

SHORT-TERM SECURITIES

At June 30, 2020, the System held $353.1 million in short-term investments, a decrease of $60.4 million from the prior year holdings. Short-term investments returned 1.29 percent for the year.

EQUITY SECURITIES

At June 30, 2020, the System held $17.3 billion in domestic, global, and international equity securities, an increase of $305.3 million over the prior fiscal year. Domestic and global equity securities had returns of 4.52 percent and 3.02 percent, respectively. The System's custom benchmark return for domestic equity securities was 3.85 percent while the global securities custom benchmark posted a return of 1.17 percent. International equity securities returned a negative 2.64 percent while the return for the international custom benchmark was a negative 3.34 percent.

DEBT SECURITIES

At June 30, 2020, the System held $5.3 billion in debt securities, a decrease of $358.4 million from the prior fiscal year. Debt securities returned 7.38 percent compared with the System's custom benchmark return of 7.39 percent.

REAL ESTATE

The real estate asset class includes investments through limited partnerships in core commingled funds, value-added funds, and timber. The System also invests in Real Estate Investment Trusts (REITs), which are exchange-traded securities that provide indirect exposure to real estate properties and real estate management companies. At June 30, 2020, combined holdings totaled $2.7 billion, a decrease of $226.3 million from the prior fiscal year. The System experienced a return of 1.17 percent on total real estate holdings and was under the benchmark return of 2.69 percent for the year ended June 30, 2020.

PRIVATE EQUITY

The private equity asset class, totaling $2.4 billion, posted a return of 3.35 percent. Private equities are investments in operating companies, typically accessed through limited partnerships, that provide a differentiated return stream and diversification. This asset class is generally managed for long-term gains, where returns and asset value take time to develop. The System's benchmark return was 11.11 percent. The System began investing in private equities in fiscal year 2008.

SECURITIES LENDING

The System earns additional income by lending investment securities to broker-dealers. This is done on a pooled basis by the System's custodial bank, Bank of New York Mellon (BNYM). The broker-dealers provide collateral to BNYM for the temporary use of the borrowed securities. BNYM invests cash collateral in debt securities to earn interest. For the 2020 fiscal year, net securities lending income to the System amounted to $15.4 million, a decrease of $97 thousand from the prior fiscal year.

REQUESTS FOR INFORMATION

This financial report is designed to provide a general overview of the finances of the System. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to:

Public Employees' Retirement System of Mississippi Accounting Department
429 Mississippi Street
Jackson, MS 39201-1005

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Statement of Fiduciary Net Position
As of June 30, 2020

[in thousands]

	PERS	MHSPRS	MRS	SLRP	Total Defined Benefit Pension Plans
ASSETS					
Cash & Cash Equivalents	$650,059	$8,525	$3,195	$422	$662,201
Receivables:					
Employer	67,746	267	379	-	68,392
Member	34,695	40	-	-	34,735
Investment Sales & Other	596,864	7,833	2,937	388	608,022
Interest & Dividends	91,017	1,195	448	59	92,719
Other Receivables	683	-	12	-	695
Total Receivables	**791,005**	**9,335**	**3,776**	**447**	**804,563**
Investments, at Fair Value:					
Short-term Investments	346,665	4,550	1,706	225	353,146
Long-term Debt Securities	5,167,477	67,821	25,429	3,356	5,264,083
Equity Securities	16,962,217	222,622	83,470	11,016	17,279,325
Private Equity	2,349,321	30,834	11,561	1,526	2,393,242
Real Estate Investments	2,617,850	34,357	12,882	1,700	2,666,789
Total Investments before Lending Activities	**27,443,530**	**360,184**	**135,048**	**17,823**	**27,956,585**
Securities Lending:					
Short-term Investments	958,775	12,584	4,719	621	976,699
Long-term Debt Securities	1,905,684	25,011	9,378	1,238	1,941,311
Total Securities Lending	**2,864,459**	**37,595**	**14,097**	**1,859**	**2,918,010**
Total Investments	**30,307,989**	**397,779**	**149,145**	**19,682**	**30,874,595**
Capital Assets, at Cost, Net of Accumulated Depreciation	13,781	-	-	-	13,781
Total Assets	**31,762,834**	**415,639**	**156,116**	**20,551**	**32,355,140**
DEFERRED OUTFLOWS OF RESOURCES					
Postemployment Benefits	148	-	-	-	148
LIABILITIES					
Investment Purchases & Other	1,059,181	13,901	5,212	688	1,078,982
Accounts Payable & Accrued Expenses	8,962	18	18	7	9,005
Obligations Under Securities Lending	2,866,228	37,618	14,105	1,861	2,919,812
Net Other Postemployment Benefits	1,130	-	-	-	1,130
Due to State of Mississippi	10	-	-	-	10
Total Liabilities	**3,935,511**	**51,537**	**19,335**	**2,556**	**4,008,939**
DEFERRED INFLOWS OF RESOURCES					
Other Postemployment Benefits	77	-	-	-	77
NET POSITION RESTRICTED FOR PENSION BENEFITS	**$27,827,394**	**$364,102**	**$136,781**	**$17,995**	**$28,346,272**

The accompanying notes are an integral part of these basic financial statements.

Statement of Changes in Fiduciary Net Position
For the Year Ended June 30, 2020

[in thousands]

	PERS	MHSPRS	MRS	SLRP	Total Defined Benefit Pension Plans
ADDITIONS					
Contributions:					
Employer	$1,171,805	$20,144	$16,614	$512	$1,209,075
Member	594,711	2,428	8	207	597,354
Total Contributions	**1,766,516**	**22,572**	**16,622**	**719**	**1,806,429**
Net Investment Income:					
Net Appreciation in Fair Value	388,217	5,095	1,910	252	395,474
Interest & Dividends	551,278	7,184	2,694	355	561,511
Total Before Lending Activities	**939,495**	**12,279**	**4,604**	**607**	**956,985**
Securities Lending:					
Net Depreciation in Fair Value	(3,439)	(45)	(17)	(2)	(3,503)
Interest	62,072	815	305	40	63,232
Program Fees	(43,478)	(571)	(214)	(28)	(44,291)
Net Income from Securities Lending	**15,155**	**199**	**74**	**10**	**15,438**
Managers' Fees & Trading Costs	(97,715)	(1,282)	(481)	(63)	(99,541)
Net Investment Income	**856,935**	**11,196**	**4,197**	**554**	**872,882**
Other Additions	22	-	-	-	22
Total Additions	**2,623,473**	**33,768**	**20,819**	**1,273**	**2,679,333**
DEDUCTIONS					
Pension Benefits	2,878,073	35,455	32,170	1,857	2,947,555
Refunds to Terminated Employees	104,851	48	-	20	104,919
Totals	**2,982,924**	**35,503**	**32,170**	**1,877**	**3,052,474**
Administrative Expense	19,757	328	331	10	20,426
Total Deductions	**3,002,681**	**35,831**	**32,501**	**1,887**	**3,072,900**
Net Decrease	**(379,208)**	**(2,063)**	**(11,682)**	**(614)**	**(393,567)**
NET POSITION RESTRICTED FOR PENSION BENEFITS					
Beginning	**28,206,602**	**366,165**	**148,463**	**18,609**	**28,739,839**
Ending	**$27,827,394**	**$364,102**	**$136,781**	**$17,995**	**$28,346,272**

The accompanying notes are an integral part of these basic financial statements.

Note 1: Plan Description

GENERAL

The System is the administrator of four defined benefit trust funds as listed below. Although each of the defined benefit pension trust funds is a legally separate plan, the funds are included in the System's reporting entity due to their financial relationships and because the governing boards are substantially identical.

Plan Name	Type of Plan
PERS	Cost-sharing multiple-employer defined benefit pension plan
MHSPRS	Single-employer defined benefit pension plan
MRS *	Agent multiple-employer defined benefit pension plan
SLRP	Single-employer defined benefit pension plan

** Closed to New Members*

The System's purpose is to provide pension benefits for all state and public education employees, sworn officers of the Mississippi Highway Safety Patrol, other public employees whose employers have elected to participate in the System, and elected members of the state Legislature and the President of the Senate. The System is administered by a ten-member Board of Trustees (Board) that includes the state Treasurer; one gubernatorial appointee who is a member of PERS; two state employees; two PERS retirees; and one representative each from public schools and community colleges, state universities, municipalities, and counties. With the exception of the state Treasurer and the gubernatorial appointee, all members are elected to staggered six-year terms by the constituents they represent.

The System is considered a component unit of the state of Mississippi reporting entity in accordance with Governmental Accounting Standards Board (GASB) requirements.

The System also oversees the MDC and the ORP; however, these plans are not part of the System's reporting entity. The System has contracted with a third-party to administer the MDC plan. MDC is a savings plan organized in accordance with IRC § 457 and is established or may be amended under Miss. Code Ann. § 25-14-1 et seq. Eligible participants are any persons – whether appointed, elected, or under contract - providing services for the state, state agencies, counties, municipalities or other political subdivisions for which compensation is paid. The plan permits participants to defer a portion of their income. Membership of ORP is composed of teachers and administrators of institutions of higher learning appointed or employed on or after July 1, 1990, who elect to participate in ORP and reject membership in PERS. Title 25, Article 11 of the Mississippi Code states that the Board of the System will provide for administration of the ORP program. MDC and ORP participants direct the investment of their funds among investment managers and vendors. Benefits payable to participants of MDC and ORP are not obligations of the state of Mississippi. Such benefits and other rights of participants or their beneficiaries are the liability of the managers and vendors and are governed solely by the terms of the agreements issued by them.

MEMBERSHIP AND BENEFIT PROVISIONS

PERS - Membership in PERS is a condition of employment granted upon hiring for qualifying employees and officials of the state of Mississippi (the State), state universities, community and junior colleges and teachers and employees of the public-school districts. For those persons employed by political subdivisions and instrumentalities of the State, membership is contingent upon approval of the entity's participation in PERS by the Board. If approved, membership for the entity's employees is a condition of employment and eligibility is granted to those who qualify upon hiring. Members and employers are statutorily required to contribute certain percentages of salaries and wages as specified by the Board. A member who terminates employment from all covered employers and who is not eligible to receive monthly retirement benefits may request a full refund of his or her accumulated member contributions plus interest. Upon withdrawal of contributions, a member forfeits service credit represented by those contributions.

Participating members who are vested and retire at or after age 60 or those who retire regardless of age with at least 30 years of creditable service (25 years of creditable service for employees who became members of PERS before July 1, 2011) are entitled, upon application, to an annual retirement allowance payable monthly for life in an amount equal to 2.0 percent of their average compensation for each year of creditable service up to and including 30 years (25 years for those who became members of PERS before July 1, 2011), plus 2.5 percent for each additional year of creditable service with an actuarial reduction in the benefit for each year of creditable service below 30 years or the number of years in age that the member is below 65, whichever is less. Average compensation is the average of the employee's earnings during the four highest compensated years of creditable service. A member may elect a reduced retirement allowance payable for life with the provision that, after death, a beneficiary receives benefits for life or for a specified number of years. Benefits vest upon completion of eight years of membership service (four years of membership service for those who became members of PERS before July 1, 2007). PERS also provides certain death and disability benefits. In the event of death prior to retirement of any member whose spouse and/or children are not entitled to a retirement allowance, the deceased member's accumulated contributions and interest are paid to the designated beneficiary.

A Cost-of-Living Adjustment (COLA) payment is made to eligible retirees and beneficiaries. The COLA is equal to 3.0 percent of the annual retirement allowance for each full fiscal year of retirement up to the year in which the retired member reaches age 60 (55 for those who became members of PERS before July 1, 2011), with 3.0 percent compounded for each fiscal year thereafter. For the year ended June 30, 2020, the total COLA payments for PERS were $751,646,000.

Plan provisions and the Board's authority to determine contribution rates are established by Miss. Code Ann. § 25-11-1 et seq., (1972, as amended) and may be amended only by the Mississippi Legislature.

MHSPRS - Membership in MHSPRS is a condition of employment granted upon hiring for all officers of the Mississippi Highway Safety Patrol who have completed a course of instruction in an authorized highway patrol training school on general law enforcement and who serve as sworn officers of the highway patrol in the enforcement of the laws of the State. Members and employers are statutorily required to contribute certain percentages of salaries and wages as specified by the Administrative Board of MHSPRS. Participating members who withdraw from service at or after age 55 with at least five years of membership service, or after reaching age 45 with at least 20 years of creditable service, or with 25 years of service at any age, are entitled, upon application, to an annual retirement allowance payable monthly for life in an amount equal to 2.5 percent of average compensation during the four highest consecutive years of earnings, with an actuarial reduction in the benefit for each year below age 55 or for each year under 25 years of service, whichever is less. MHSPRS also provides certain death and disability benefits. In the event of death prior to retirement of any member whose spouse and/or children are not entitled to a retirement allowance, the deceased member's accumulated contributions and interest are paid to the designated beneficiary. A member who terminates employment from the highway patrol and who is not eligible to receive monthly retirement benefits may request a full refund of his or her accumulated employee contributions plus interest. Upon withdrawal of contributions, a member forfeits service credit represented by those contributions.

A COLA payment is made to eligible retirees and beneficiaries. The COLA is equal to 3.0 percent of the annual retirement allowance for each full fiscal year of retirement up to the year in which the retired member reaches age 60, with 3.0 percent compounded for each fiscal year thereafter. For the year ended June 30, 2020, the total COLA payments for MHSPRS were $10,876,000.

Plan provisions and the Administrative Board's authority to determine contribution rates for MHSPRS are established by Miss. Code Ann. § 25-13-1 et seq., (1972, as amended) and may be amended only by the Mississippi Legislature.

MRS - Membership in the two general municipal employee plans and the 17 fire and police disability and relief systems under MRS was granted to all municipal employees, fire fighters and police officers who were not already members of PERS and who were hired prior to July 1, 1976. Two fire and police plans elected to extend the eligibility period for membership to July 1, 1987. All MRS plans were closed to new members by July 1, 1987. Eligible employees hired after July 1, 1987, automatically become members of PERS. Members covered by MRS are required to contribute varying amounts of their salary, depending on the actuarial soundness of their respective plans. Each employer contributes the remaining amounts necessary to finance participation of its own employees in MRS.

Regardless of age, participating employees who retire with at least 20 years of membership service are entitled to an annual retirement allowance payable monthly for life in an amount equal to 50.0 percent of their average monthly compensation and to an additional 1.7 percent for each year of creditable service beyond 20 years, not to exceed 66.67 percent of average monthly compensation, except as may otherwise be provided through local and private legislation. Average monthly compensation for the MRS plans is the monthly average for the last six months of service. Certain participating employers provide a minimum monthly retirement allowance. Benefits vest upon reaching 20 years of membership service. MRS plans also provide certain death and disability benefits. Members who terminate employment from all covered employers and are not eligible to receive monthly retirement benefits may request a full refund of employee contributions. Members covered by MRS do not receive interest on their accumulated contributions. Upon withdrawal of contributions, a member forfeits service credit represented by those contributions.

The retirees and beneficiaries of MRS plans with provisions for COLAs who are receiving a retirement allowance on July 1 of each fiscal year may be entitled to a COLA. This payment is equal to the annual percentage change of the Consumer Price Index (CPI) but not to exceed 2.5 percent of the annual retirement allowance for each full fiscal year of retirement. Certain MRS plans may adopt a COLA other than one linked to the change in the CPI. These additional payments will be made only when funded by the employers. For the year ended June 30, 2020, the total COLAs for MRS plans were $5,451,000.

Plan provisions are established by Miss. Code Ann. § 21-29-1 et seq., Articles 1, 3, 5 and 7, (1972, as amended) and annual local and private legislation. Statutes may be amended only by the Mississippi Legislature.

SLRP - Membership in SLRP is composed of all elected members of the state Legislature and the President of the Senate. This plan is designed to supplement the provisions of PERS. Members and employers are statutorily required to contribute certain percentages of salaries and wages as specified by the Board.

The retirement allowance is 50.0 percent of an amount equal to the retirement allowance payable by PERS, determined by creditable service as an elected senator or representative in the state Legislature or as President of the Senate. Benefits vest upon completion of the requisite number of membership service years in PERS. SLRP also provides certain death and disability benefits. In the event of death prior to retirement of any member whose spouse and/or children are not entitled to a retirement allowance, the deceased member's accumulated contributions and interest are paid to the designated beneficiary. A member who terminates legislative employment and who is not eligible to receive monthly retirement benefits may request a full refund of his or her accumulated employee contributions plus interest. Upon withdrawal of contributions, a member forfeits service credit represented by those contributions.

Retirees and beneficiaries of SLRP may receive COLAs calculated identically to PERS retirees and beneficiaries. For the year ended June 30, 2020, the total COLAs for SLRP were $359,000.

Plan provisions and the Board's authority to determine contribution rates for SLRP are established by Miss. Code Ann. § 25-11-301 et seq., (1972, as amended) and may be amended only by the Mississippi Legislature.

FBCP – During fiscal year 2020, the System changed the administrator for the employees' cafeteria plan as defined in § 1-25 et seq. of the Internal Revenue Code of 1954. As a result, the agency fund which accounted for transactions related to cafeteria fund activity was abolished. Under the new arrangement, employee balances are maintained by the administrator.

Summary of Participating Employers and Members

	PERS	MHSPRS*	MRS	SLRP**	TOTAL
Employers:					
State Agencies	104	1	-	1	106
State Universities	9	-	-	-	9
Public Schools	139	-	-	-	139
Community/Junior Colleges	15	-	-	-	15
Counties	82	-	-	-	82
Municipalities	242	-	17	-	259
Other Political Subdivisions	262	-	-	-	262
Total Employers	**853**	**1**	**17**	**1**	**872**
Members:					
Active Vested	77,163	382	-	111	77,656
Active Non-vested	72,692	129	-	60	72,881
Total Active Members	**149,855**	**511**	**-**	**171**	**150,537**
Inactive Vested	16,436	47	-	29	16,512
Inactive Non-vested	62,211	25	-	33	62,269
Total Inactive Members	**78,647**	**72**	**-**	**62**	**78,781**
Retirees & Beneficiaries	109,881	740	1,592	235	112,448
Total Retired/Inactive Members	**188,528**	**812**	**1,592**	**297**	**191,229**
Total Members	**338,383**	**1,323**	**1,592**	**468**	**341,766**
Active Members by Employer:					
State Agencies	26,811	511	-	171	27,493
State Universities	17,764	-	-	-	17,764
Public Schools	61,308	-	-	-	61,308
Community/Junior Colleges	5,978	-	-	-	5,978
Counties	13,738	-	-	-	13,738
Municipalities	15,847	-	-	-	15,847
Other Political Subdivisions	8,409	-	-	-	8,409
Total Active Members	**149,855**	**511**	**-**	**171**	**150,537**

** MHSPRS has two reporting entities.*

*** SLRP has five reporting entities.*

Note 2: Summary of Significant Accounting Policies

BASIS OF ACCOUNTING

PERS, MHSPRS, MRS and SLRP use the accrual basis of accounting and the economic resources measurement focus as contained in generally accepted accounting principles established by the GASB (GAAP). Member and employer contributions are recognized as revenue when due pursuant to legal requirements; investment income is recognized when earned. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan. Other expenses are recognized when incurred.

INVESTMENTS

Investments are reported at fair value. Securities traded on a national or international exchange are valued at the last reported sales price at current exchange rates. Corporate bonds are valued based on yields currently available on comparable securities from issuers of similar credit ratings. Mortgage securities are valued on the basis of future principal and interest payments and are discounted at prevailing interest rates for similar instruments. Short-term investments are reported at fair value when published prices are available or at cost plus accrued interest, which approximates fair value. The fair value of commingled real estate funds is based on independent appraisals, while REITS traded on a national or international exchange are valued at the last reported sales price at current exchange rates. For individual investments where no readily ascertainable fair value exists, the System, in consultation with its investment advisors and custodial bank, has determined the fair values based on cash flows and prices for similar investments. Security transactions are accounted for on a trade-date basis.

CAPITAL ASSETS

Capital assets used for administering the plans are carried at historical cost. Depreciation is provided using the straight-line method. The System's policy is to capitalize all acquisitions of furniture and equipment with a unit cost of $5,000 or more and software with a cost of $1,000,000 or more. The following schedule summarizes estimated useful lives by asset classification:

Asset Classification	Estimated Useful Life
Building	40 Years
Improvements	20 Years
Furniture & Equipment	5-15 Years
Computer Equipment	3 Years
Vehicles	3-10 Years
Software	5 Years

ACCUMULATED PERSONAL LEAVE AND MAJOR MEDICAL LEAVE

Miss. Code Ann. § 25-3-97, (1972, as amended) authorizes a lump sum payment for a maximum of 30 days of accrued personal leave upon termination of employment. No payment is authorized for accrued major medical leave unless the employee presents medical evidence that his or her physical condition is such that he or she no longer has the capacity to work in state government. Accumulated personal leave (including fringe benefits) of employees directly related to the administration of the System is paid from the pension trust funds and is accrued in the financial statements when earned, up to a maximum of 30 days per employee. The System does not accrue accumulated major medical leave since it is not probable that the compensation will be paid and since the leave vests only upon termination for medical disability.

USE OF ESTIMATES IN THE PREPARATION OF FINANCIAL STATEMENTS

The preparation of financial statements in conformity with US generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, and the reported amounts of additions to and deductions from net position. Actual results could differ from those estimates.

OTHER POSTEMPLOYMENT BENEFITS (OPEB)

The net OPEB liability, deferred outflows of resources and deferred inflows of resources related to OPEB and OPEB expense have been measured using the same basis as the State Life and Health Insurance Plan's fiduciary net position. For the purposes of determining the OPEB fiduciary net position, benefit payments are recognized when due and payable in accordance with benefit terms. The OPEB Plan reports investments at fair value.

ANNUAL BUDGET

Annual budgets are legally adopted for the administrative expenditure portion of the System's operations and are funded by earnings of the System. The System's operating budget request for the upcoming fiscal year is prepared in conjunction with a review of the strategic long-range plan. A budget request is approved by the Board and submitted to the state Legislature, which legally enacts the budget in the form of an appropriation bill during the subsequent legislative session. Changes may be made in budget categories consistent with legislative authority.

Note 3: Cash, Cash Equivalents, and Investments

CASH AND CASH EQUIVALENTS

For cash deposits and cash equivalents, custodial credit risk is the risk that, in the event of a bank failure, the government's deposits may not be returned to it. Miss. Code Ann. § 25-11-121 (1972, as amended) provides that funds may be deposited in any institution insured by the Federal Deposit Insurance Corporation (FDIC) that maintains a facility that takes deposits in the State or in a custodial bank. As of June 30, 2020, deposits in commercial cash management accounts in the State totaled $2,025,000, which were covered by FDIC.

The System's Board of Trustees determines the degree of collateralization necessary for both foreign and domestic demand deposits in addition to that which is guaranteed by FDIC. Deposits of the System must, where possible, be safeguarded and guaranteed by the posting of bonds, notes, and other securities as collateral by the depository. Where possible, the types of collateral securing deposits are limited to securities in which the System itself may invest. The Board has formally adopted a short-term investment policy that requires the fair value of securities guaranteeing deposits be equal to 100.0 percent of the funds on deposit at all times.

At June 30, 2020, the System's custodial bank held $660,176,000 in cash equivalents in the highly liquid BNYM Government Short-Term Investment Fund (GSTIF). GSTIF is a custodial bank-sponsored commingled fund invested in short-term domestic government securities and repurchase agreements. Cash equivalents are created through daily sweeps of excess cash held in investment manager accounts and the internally managed administrative account used by the System to maintain appropriate liquidity for meeting short-term cash obligations.

INVESTMENTS

Investment assets for all systems are pooled and invested in equity securities, debt securities, real estate, and private equity. These investments are accounted for as part of the PERS pension trust fund and then allocated to MHSPRS, MRS, and SLRP based on their proportionate share.

For the fiscal year ending June 30, 2020, the annual money-weighted rate of return on the System's investments was 3.06 percent. A money-weighted rate of return expresses investment performance, net of investment expense, and considers the effect of timing of transactions that increase the amount of pension plan investments, such as contributions, and those that decrease the amount of pension plan investments, such as benefit payments.

Investment Policies – As stated in Miss. Code Ann. § 25-11-121, (1972, as amended) the System is authorized to invest in the following:

- Corporate bonds and taxable municipal bonds, corporate short-term obligations of corporations or of wholly owned subsidiaries of corporations, whose short-term obligations are rated A-2 or better by S&P, rated P-2 or better by Moody's Investment Service, F-2 or better by Fitch Ratings, Ltd., or the equivalent of these ratings if assigned by another United States Securities and Exchange Commission designated Nationally Recognized Statistical Rating Organization;
- Agency and nonagency residential and commercial mortgage-backed securities and collateralized mortgage obligations;
- Asset-backed securities;
- Bank loans;
- Convertible bonds;
- Bonds of the Tennessee Valley Authority;
- Bonds, notes, certificates and other valid obligations of the United States and other valid obligations of any federal instrumentality that issues securities under authority of an act of Congress and are exempt from registration with the Securities and Exchange Commission;
- Bonds, notes, debentures, and other securities issued by any federal instrumentality and fully guaranteed by the United States;
- Interest-bearing revenue bonds or notes that are general obligations of any state in the United States or of any city or county therein;

» Bonds of established non-United States companies and foreign government securities. The Board may take requisite action to effectuate or hedge transactions or invest in currency through foreign or domestic banks, including the purchase and sale, transfer, exchange, or otherwise disposal of, and generally deal in foreign exchange through the use of foreign currency, interbank forward contracts, futures contracts, options contracts, swaps and other related derivative instruments, notwithstanding any other provisions of the statute to the contrary;

» Shares of stocks, common and/or preferred, of corporations created by or existing under the laws of the United States or any state, district or territory thereof and shares of stocks, common and/or preferred, and convertible securities of non-United States companies; provided: (1) the maximum investments in stocks shall not exceed 80 percent of the total book value of the total investment fund of the System; (2) the stock of such corporation shall be listed on a national stock exchange or be traded in the over-the-counter market; (3) the outstanding shares of such corporation shall have a total market value of not less than $50,000,000; (4) the amount of investment in any one corporation shall not exceed 3 percent of the book value of the assets of the System; and (5) the shares of any one corporation owned by the system shall not exceed 5 percent of that corporation's outstanding stock. The Board may take requisite action utilizing foreign currency as an investment vehicle, or to effectuate or hedge transactions for shares of stocks and convertible securities of non-United States companies through foreign or domestic banks, including the purchase and sale, transfer, exchange, or otherwise disposal of, and generally deal in foreign exchange through the use of foreign currency, interbank forward contracts, futures contracts, options contracts, swaps and other related derivative instruments, notwithstanding any other provisions of this article to the contrary;

» Covered call and put options on securities traded on one or more of the regulated exchanges;

» Pooled or commingled funds managed by a corporate trustee or by a Securities and Exchange Commission registered investment advisory firm retained as an investment manager by the Board, and shares of investment companies and unit investment trusts registered under the Investment Company Act of 1940, where such pooled or commingled funds or shares are comprised of common or preferred stocks, bonds, money market instruments or other investments authorized under this section. Such investment in commingled funds or shares shall be held in trust; provided that the total book value of investments under this paragraph shall at no time exceed 5 percent of the total book value of all investments of the system. Any investment manager approved by the Board shall invest such commingled funds or shares as a fiduciary; and

» Pooled or commingled real estate funds or real estate securities managed by a corporate trustee or by a Securities and Exchange Commission registered investment advisory firm retained as an investment manager by the Board. Such investment in commingled funds or shares shall be held in trust; provided that the total book value of investments under this paragraph shall at no time exceed 10 percent of the total book value of all investments of the System. Any investment manager approved by the Board shall invest such commingled funds or shares as a fiduciary. The 10 percent limitation in this paragraph shall not be subject to the 5 percent limitation in the previous paragraph;

» Types of investments not specifically authorized by this subsection if the investments are in the form of a separate account managed by a Securities and Exchange Commission registered investment advisory firm retained as an investment manager by the Board, or a limited partnership or commingled fund approved by the Board provided that the total book value of investments under this paragraph shall at no time exceed 10 percent of the total book value of all investments of the System. Any person or entity who exercises any discretionary authority or discretionary control respecting management of the separate account, limited partnership or commingled fund, or who exercises any authority or control respecting management or disposition of the assets of the separate account, limited partnership or commingled fund, shall exercise such authority or control as a fiduciary.

The statute requires that investments of the System be managed solely for the interest of the System with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent investor 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 sums, including diversifying the investments of the System so as to minimize the risk of large losses, unless under the circumstances it is clearly prudent not to do so.

The PERS Board has adopted a policy that further restricts all short-term investments to be of corporations with long-term debt rated A or better by S&P or Moody's.

In accordance with the System's investment policy, the System's investment consultant conducts periodic asset allocation studies that include consideration of projected future liabilities of the System, expected risk, return and correlations for various asset classes and the System's statutory investment restrictions. An asset allocation study is performed every five years, or more frequently should significant liability changes occur. A strategic long-term asset allocation is adopted by the Board in conjunction with the study. The Investment Committee of the Board evaluates the actual investment allocation quarterly and may propose periodic adjustments to the System's strategic long-term asset allocation based on the investment consultant's recommendations, market conditions, and internal investment analysis.

The following table shows the Board approved asset allocation policy applicable for fiscal year 2020:

Asset Class	Target Allocation
Domestic Equities	27.0%
International Equities	22.0
Global Equities	12.0
Total Equities	**61.0%**
Debt Securities	20.0
Real Estate	10.0
Private Equity	8.0
Cash & Equivalents	1.0

Fair Value Measurements – Fair value is the price that would be received to sell an asset in an orderly transaction between market participants at the measurement date. The System categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on valuation inputs. Highest priority is given to unadjusted quoted prices in active markets and relies on observable inputs when available. The lowest level results from unobservable inputs. The three levels of the fair value hierarchy are as follows:

» Level 1 – Unadjusted quoted prices for identical instruments traded on an active exchange;

» Level 2 – Quoted prices in active markets for similar instruments, quoted prices for identical or similar instruments in markets not active, and model-derived valuations in which all significant inputs are observable; and

» Level 3 – Valuations derived from valuation techniques in which significant inputs are unobservable.

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

The System's equity and debt securities in Level 1 of the fair value hierarchy are valued using prices quoted in active markets for those securities. Included in Level 1 equities are real estate investment trusts (REITs), exchange-traded securities that provide indirect exposure to real estate properties and real estate management companies.

Securities classified in Level 2 of the fair value hierarchy are valued using a proprietary pricing source. The primary proprietary source uses continuous evaluations throughout the trading day based on factors such as dealer quotes and trades, trade execution data and transaction reporting services. Market sources, relative credit information, observed market movements and sector news are integrated and incorporated into evaluation pricing applications and models.

Commercial and residential mortgage-backed securities classified in Level 3 are valued using discounted cash flow techniques. Collateralized debt obligations classified in Level 3 are valued using a proprietary model that monitors structured product markets, interest rate movements, new issue information and other pertinent data. Evaluations of tranches (non-volatile and volatile) are based on market modeling, trading, and pricing conventions. New issue features are analyzed on data such as pricing speed, spread, and volatility. Information is also solicited from outside sources including secondary dealers, portfolio managers, and research analysts.

The System has the following fair value measurements as of June 30, 2020 [in thousands]:

	Amounts	Level 1	Level 2	Level 3
Equity Securities:				
Basic Materials	$624,403	$624,403	$-	$-
Communications	2,717,582	2,717,582	-	-
Consumer, Cyclical	1,619,450	1,619,237	213	-
Consumer, Non-Cyclical	3,925,525	3,925,525	-	-
Diversified	33,825	33,825	-	-
Energy	442,356	442,356	-	-
Financial	3,202,240	3,202,240	-	-
Industrial	1,856,302	1,856,302	-	-
Technology	2,902,770	2,902,770	-	-
Utilities	358,611	358,611	-	-
Total Equity Securities	**17,683,064**	**17,682,851**	**213**	**-**
Debt Securities:				
Commercial Paper	703,457	-	703,457	-
Repurchase Agreements	265,176	-	265,176	-
US Government Agency Obligations	19,599	-	19,599	-
US Treasury Obligations	750,768	750,768	-	-
Collateralized Mortgage Obligations	713,003	-	704,933	8,070
Domestic Corporate Bonds	1,780,836	1,854	1,737,217	41,765
Non-Domestic Corporate Bonds	1,177,321	667	1,176,654	-
Mortgage Pass-Throughs	630,099	-	630,099	-
State & Local Obligations	35,379	-	35,379	-
Asset-Backed Securities	1,073,600	-	1,073,600	-
Yankee/Global Bonds	38,447	-	38,447	-
Sovereign Governments Debt	1,086,504	-	1,086,504	-
Total Debt Securities	**8,274,189**	**753,289**	**7,471,065**	**49,835**
Total Investments by Fair Value Level	**$25,957,253**	**$18,436,140**	**$7,471,278**	**$49,835**
Investments Measured at NAV:				
Total Real Estate*	2,263,050			
Private Equity Funds	2,393,242			
Total Investments Measured at NAV	**4,656,292**			
Total Investments Measured at Fair Value	**30,613,545**			
International Currency	261,050			
Total Investments**	**$30,874,595**			
Investments Derivative Instruments:				
Foreign Exchange Contracts (Liabilities)	935,694			
Total Investment Derivative Instruments	**$935,694**			

** REITS, exchange traded investments, are reported in equity securities for this presentation, REITS totaled $403.7 million.*

*** Total investments do not include the $2.9 billion of Obligations under Securities Lending.*

As of June 30, 2020, the System had real estate and private equity investments legally structured as limited partnerships. The System was one of the limited partners within each fund, with the investment managers serving as the general partners.

Real estate funds include open-end and closed-end limited partnerships that invest primarily in domestic commercial real estate. The fair values of these commingled investment funds are calculated using the net asset value (NAV) per share and the number of shares owned by the System. Fair values of the underlying properties are based on the most recent independent appraisal values. Valuations are conducted at least annually by independent appraisal firms who are members of the Appraisal Institute. The governing document for each open-end real estate fund provides investors the ability to request the redemption of all or part of their investment.

A redemption request is funded by the sale of underlying real estate investments held by the open-end fund. Closed-end real estate funds have a finite life and do not contain provisions for limited partner redemptions on demand. Typically, real estate investments must be made within the first three to four years of the partnership's lifespan and liquidated by the end of the 10th year. As underlying real estate investments are sold over the life of the closed-end fund, pro-rata distributions of the proceeds are made to each partner.

The System's private equity investments consist of two fund-of-funds limited partnerships that invest in multiple private equity funds. Private equity funds invest primarily in non-public companies whose prices are not quoted on an exchange, are typically illiquid in nature, and cannot be redeemed on demand. It is probable that the private equity underlying investments will be sold at an amount different from the NAV per share of the System's ownership interest in partner's capital. Fair values of underlying investments have been determined using recent observable transaction information for similar investments and non-binding bids received from potential buyers of the investments of each partnership. The System's ownership agreements allow pro-rata distributions from liquidation of the assets. Based on the terms of each limited partnership, all partnership assets should be liquidated over the 10- to-12-year life of the partnerships. Each private equity fund's general partner has full discretion for the disposition of each partnership investment, including determining the most appropriate timing for the sale, determining the best exit strategy, identifying buyers and approving sale transactions of partnership investments.

Investments Measured at NAV [in thousands]:

	Fair Value	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Real Estate Funds:				
Core – Open End	$1,874,498	$-	Quarterly	45-90 Days
Value Added – Closed End	295,014	338,376	N/A	N/A
Timber	93,538	-	N/A	N/A
Total Real Estate	2,263,050	338,376		
Private Equity Funds:				
Diversified	2,393,242	1,503,410	N/A	N/A
Total Private Equity	**2,393,242**	**1,503,410**		
Total Investments Measured at NAV	**$4,656,292**	**$1,841,786**		

The average life of a fund is ten to twelve years.

Commitments - As part of the limited partnership agreements, the System agrees to potentially invest up to the committed amounts during the stated fund investment period.

As of June 30, 2020, the System had the following investment commitments [in thousands]:

	Committed Capital	Capital Contributed Net of Recallable Distributions & Released Commitments	Unfunded Commitments
Real Estate	$1,100,000	$761,624	$338,376
Private Equity	4,450,000	2,946,590	1,503,410
Totals	**$5,550,000**	**$3,708,214**	**$1,841,786**

Credit Risk - Credit risk is the risk that an issuer or other counterparty will not fulfill its obligation to the holder of the investment. The System follows the statute as previously discussed as its policy for limiting exposure to credit risk. The System's exposure to credit risk as of June 30, 2020, was as follows [in thousands]:

	Quality Ratings at Fair Value					
Investment Type	Aaa/AAA	Aa/AA	A/A	Baa/BBB	Ba/BB	B/B
Asset-Backed Securities	$971,931	$27,657	$23,353	$23,317	$938	$4,335
Collateralized Mortgage Obligations	349,609	251,111	16,784	25,371	10,507	10,983
Commercial Paper	-	228,455	475,002	-	-	-
Corporate Bonds	38,872	604,144	998,777	945,792	280,891	68,462
Mortgage Pass-Throughs	69	571,864	-	-	-	-
Repurchase Agreements	-	-	65,631	-	-	-
Sovereign Governments Debt	85,514	178,843	180,454	245,616	134,008	146,230
State & Local Obligations	3,373	15,759	8,225	6,312	142	-
US Government Agency Obligations	163	19,436	-	-	-	-
Yankee/Global Bonds	22,428	357	2,774	12,854	34	-
Totals *	**$1,471,959**	**$1,897,626**	**$1,771,000**	**$1,259,262**	**$426,520**	**$230,010**

Investment Type	Caa/CCC	Ca/CC	C/C	D/D	NR**	Total
Asset-Backed Securities	$2,793	$2	$13	$1,553	$17,708	$1,073,600
Collateralized Mortgage Obligations	4,165	181	-	-	44,292	713,003
Commercial Paper	-	-	-	-	-	703,457
Corporate Bonds	18,559	-	613	280	1,767	2,958,157
Mortgage Pass-Throughs	-	-	-	-	-	571,933
Repurchase Agreements	-	-	-	-	199,545	265,176
Sovereign Governments Debt	6,852	6,727	-	9,157	93,103	1,086,504
State & Local Obligations	-	-	-	-	1,568	35,379
US Government Agency Obligations	-	-	-	-	-	19,599
Yankee/Global Bonds	-	-	-	-	-	38,447
Totals *	**$32,369**	**$6,910**	**$626**	**$10,990**	**$357,983**	**$7,465,255**

**In accordance with GASB guidelines, totals exclude US Treasury obligations and GNMA mortgage pass-throughs due to their explicit guarantee by the US Government.*

Short-term US Treasury Obligations	*$34,813*
US Treasury Obligations	*715,955*
GNMA Mortgage Pass-Throughs	*58,166*
Total	***$808,934***

***Not publicly rated.*

Custodial Credit Risk - Custodial credit risk for investments is the risk that, in the event of the failure of the counterparty, the pension trust fund will not be able to recover the value of its investment or collateral securities that are in the possession of an outside party. Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in the name of the government, and are held by either (a) the counterparty or (b) the counterparty's trust department or agent but not in the government's name. Miss. Code Ann. § 25-11-121, (1972, as amended) requires that all investments be clearly marked as to ownership, and to the extent possible, shall be registered in the name of the System.

At June 30, 2020, $3.7 million of securities purchased and lent, that were held in the name of the lending agent, were exposed to custodial credit risk while counterparty risk was mitigated by the cash and security collateral received.

	Fair Value
Securities Purchased with Cash Collateral	$2,918,010
Securities Lent for Non-Cash Collateral	740,119
Total Subject to Custodial Credit Risk	**$3,658,129**

Interest Rate Risk - Interest rate risk is the risk that changes in interest rates on securities will adversely affect the fair value of an investment. As of June 30, 2020, the System had the following debt security investments and maturities:

	Fair Value [in thousands]	Investment Maturities [in years]			
		Less Than 1	1-5	6-10	More Than 10
Asset-Backed Securities	$1,073,600	$955,835	$44,280	$22,804	$50,681
Collateralized Mortgage Obligations	713,003	313,624	15,403	20,693	363,283
Commercial Paper	703,457	703,457	-	-	-
Corporate Bonds	2,958,157	1,073,856	852,377	512,551	519,373
Mortgage Pass-Throughs	630,099	4	3,475	12,202	614,418
Repurchase Agreements	265,176	265,176	-	-	-
Sovereign Governments Debt	1,086,504	69,280	261,452	349,856	405,916
State & Local Obligations	35,379	-	3,275	7,462	24,642
US Government Agency Obligations	19,599	1,900	4,090	317	13,292
US Treasury Obligations	750,768	34,813	210,277	190,071	315,607
Yankee/Global Bonds	38,447	-	27,922	7,732	2,793
Totals	**$8,274,189**	**$3,417,945**	**$1,422,551**	**$1,123,688**	**$2,310,005**

The System's investment policy does not limit investment maturities as a means of managing its exposure to potential fair value losses arising from future changes in interest rates. Market or interest rate risk is the greatest risk faced by an investor in the debt securities market. The price of a debt security typically moves in the opposite direction of the change in interest rates. Asset-backed securities, collateralized mortgage obligations, and mortgage pass-throughs are examples of investments whose fair values may be highly sensitive to interest rate changes. These securities are reported at fair value in the Statement of Fiduciary Net Position.

Asset-backed securities (ABS) are bonds or notes backed by loan paper or accounts receivable and are originated by banks, credit card companies, or other credit providers. The originator of the loan or accounts receivable paper sells it to a specially created trust, which repackages it as securities. Asset-backed securities have been structured as pass-throughs and as structures with multiple bond classes. Of the $1.1 billion in ABS that the System held as of June 30, 2020, $8.6 million are highly sensitive to changes in interest rates. System policy prohibits ABS with leveraged structures or residual interests.

Collateralized mortgage obligations (CMOs) are bonds collateralized by whole-loan mortgages, mortgage pass-through securities, or stripped mortgage-backed securities. Income is derived from payments and prepayments of principal and interest generated from collateral mortgages. Cash flows are distributed to different investment classes or tranches in accordance with the CMO's established payment order. Some CMO tranches have more stable cash flows relative to changes in interest rates while others are significantly more sensitive to interest rate fluctuations. In a declining interest rate environment, some CMOs may be subject to a reduction in interest payments as a result of prepayments of mortgages that make up the collateral pool. A reduction in interest payments causes a decline in cash flows and a decline in the fair value of the CMO security. Rising interest rates may cause an increase in interest payments and an increase in the fair value of the security. At June 30, 2020, the System held $713.0 million in CMOs and of this amount, $137.4 million were in tranches highly sensitive to future changes in interest rates. CMOs include Interest-Only (IO) and Principal-Only (PO) strips, which are mortgage obligations separated into their interest and principal components. During periods of declining interest rates, these securities are highly sensitive to prepayments by mortgagors. At June 30, 2020, the System held only IO strips valued at $11.6 million. The System's derivatives policy limits IO and PO strips to 3.0 percent of the investment portfolio and prohibits CMO residuals.

At June 30, 2020, the System had invested $630.1 million in mortgage pass-through securities issued by the Federal National Mortgage Association, Federal Home Loan Mortgage Corporation, and Government National Mortgage Association. These investments are moderately sensitive to changes in interest rates because they are backed by mortgage loans and subject to prepayment risk.

Foreign Currency Risk - Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or deposit. The System's asset allocation policy does not limit foreign currency-denominated investments of the System. The Investment Committee of the Board evaluates the actual investment asset allocation quarterly, in accordance with its target asset allocation policy. Based on current market conditions, the Board adjusts the allocation as necessary.

The System's exposure to foreign currency risk at June 30, 2020, was as follows [in thousands]:

Currency	Cash & Equivalents	Equities & REITS	Debt Securities	Total Fair Value	Percent
Argentina Peso	$751	$-	$481	$1,232	0.02%
Australian Dollar	(19,342)	294,578	17,830	293,066	4.73
Brazil Real	4,735	132,176	843	137,754	2.22
Canadian Dollar	(49,137)	156,039	46,413	153,315	2.47
Chilean Peso	(3,242)	2,770	-	(472)	(0.01)
Chinese Yuan Renminbi	(7,028)	71,813	13,647	78,432	1.27
Colombian Peso	(3,261)	474	-	(2,787)	(0.04)
Czech Koruna	38	1,848	-	1,886	0.03
Danish Krone	(5,205)	126,846	8,715	130,356	2.10
Euro Currency Unit	(338,569)	1,468,904	361,875	1,492,210	24.08
Hong Kong Dollar	51	506,506	-	506,557	8.18
Hungarian Forint	(1,690)	16,611	1,717	16,638	0.27
Indian Rupee	8,218	117,873	-	126,091	2.04
Indonesian Rupiah	129	39,265	807	40,201	0.65
Israel Shekel	(5,591)	13,082	5,290	12,781	0.21
Japanese Yen	(92,747)	1,211,756	96,607	1,215,616	19.61
Kenyan Shilling	-	1,280	-	1,280	0.02
Malaysian Ringgit	(4,171)	1,410	4,184	1,423	0.02
Mexican New Peso	1,033	43,382	17,236	61,651	1.00
Taiwan Dollar	6,248	162,122	-	168,370	2.72
New Zealand Dollar	(3,170)	11,601	-	8,431	0.14
Norwegian Krone	1,782	20,278	-	22,060	0.36
Pakistan Rupee	72	1,237	-	1,309	0.02
Peruvian Sol	(4,079)	-	4,574	495	0.01
Philippines Peso	4	369	-	373	0.01
Polish Zloty	4,749	1,177	1,345	7,271	0.12
Pound Sterling	(97,110)	677,188	77,917	657,995	10.62
Qatari Riyal	258	1,501	-	1,759	0.03
Russian Ruble	9,560	1,085	6,260	16,905	0.27
Singapore Dollar	5,357	81,436	-	86,793	1.40
South African Rand	(11,841)	66,991	11,896	67,046	1.08
South Korean Won	(20,191)	287,163	19,223	286,195	4.62
Swedish Krona	(2,513)	164,032	3,746	165,265	2.67
Swiss Franc	4,454	362,060	-	366,514	5.92
Thailand Baht	(45)	25,290	-	25,245	0.41
Turkish Lira	3,358	39,586	-	42,944	0.69
UAE Dirham	-	284	-	284	-
Uruguayan Peso	-	-	2,368	2,368	0.04
Total	**$(618,135)**	**$6,110,013**	**$702,974**	**$6,194,852**	**100.00%**

Derivative Instruments - As of June 30, 2020, the System held derivative instruments for currency conversions related to pending foreign exchange contracts. The System's derivatives policy limits foreign currency forwards to no more than 100.0 percent of the amount needed to settle pending trades.

At June 30, 2020, the counterparties of the foreign currency forwards primarily had short-term credit ratings of A as rated by the nationally recognized statistical rating organizations. The System's general policy requires that the counterparty has a long-term credit rating of A or better and a short-term credit rating of A-1/P-1, at a minimum. More specifically, the policy requires that all over-the-counter derivatives be rated AA or better by the nationally recognized statistical rating organizations.

The foreign currency forwards are presented in the foreign currency risk table.

The following table presents the investment derivative instruments outstanding as of June 30, 2020 [in thousands]:

		Changes in Fair Value		Fair Value at June 30, 2020	
	Notional Units	Classification	Amount	Classification	Amount
Currency					
Australian Dollar	$(28,470)	Investment Income	$(123)	Investment	$123
Brazilian Real	27,319	Investment Income	481	Investment	(481)
Canadian Dollar	(71,238)	Investment Income	(912)	Investment	912
Chilean Peso	(2,659,215)	Investment Income	(814)	Investment	814
Chinese Yuan Renminbi	(52,624)	Investment Income	(119)	Investment	119
Colombian Peso	(12,209,791)	Investment Income	(350)	Investment	350
Danish Krone	(67,949)	Investment Income	(281)	Investment	281
Euro Currency Unit	(398,812)	Investment Income	(808)	Investment	808
Hong Kong Dollar	(8,676)	Investment Income	(11)	Investment	11
Hungarian Forint	(537,026)	Investment Income	(111)	Investment	111
Indian Rupee	598,819	Investment Income	4	Investment	(4)
Indonesian Rupiah	(553,101)	Investment Income	(407)	Investment	407
Israel Shekel	(17,565)	Investment Income	29	Investment	(29)
Japanese Yen	(16,601,958)	Investment Income	(649)	Investment	649
Malaysian Ringgit	(18,334)	Investment Income	212	Investment	(212)
Mexican Peso	22,927	Investment Income	138	Investment	(138)
Taiwan Dollar	191,706	Investment Income	(150)	Investment	150
Turkish Lira	21,674	Investment Income	1	Investment	(1)
New Zealand Dollar	(57)	Investment Income	(92)	Investment	92
Norwegian Krone	15,850	Investment Income	(455)	Investment	455
Peruvian Sol	(14,434)	Investment Income	152	Investment	(152)
Polish Zloty	18,001	Investment Income	(344)	Investment	344
Pound Sterling	(111,007)	Investment Income	(780)	Investment	780
Russian Ruble	670,612	Investment Income	535	Investment	(535)
Singapore Dollar	7,249	Investment Income	(37)	Investment	37
South African Rand	(206,890)	Investment Income	(416)	Investment	416
South Korean Won	(22,770,562)	Investment Income	(319)	Investment	319
Swedish Krona	(26,700)	Investment Income	(440)	Investment	440
Swiss Franc	(7,726)	Investment Income	(23)	Investment	23
	TBA Securities				
U. S. Dollar	$166,450	Investment Income	$1,408	Debt Securities	$173,382

Securities Lending Transactions - The Board has authorized the System to participate in a securities lending program. The System has contracted with its custodian to lend all long-term securities to authorized broker-dealers subject to the receipt of acceptable collateral. The types of securities on loan at June 30, 2020, are long-term US government and agency obligations, corporate bonds, REITs, and domestic and international equities. The contractual agreement with the custodian provides indemnification in the event the borrower fails to return the securities lent or fails to pay the System income distributions by the securities' issuers while the securities are on loan.

Collateral may be in the form of either cash or other securities. All cash collateral is to be in US dollars. For cash collateralized loans, in the case of loaned securities denominated in US dollars or whose primary trading market is located in the US, or sovereign debt issued by foreign governments denominated in US dollars, the amount of cash collateral required is 102.0 percent of the market value of the loaned securities. In the case of loan securities which are not denominated in US dollars or whose primary traded marketing is not located in the US, the cash collateral required is 105.0 percent of the market value of loaned securities. Higher values may be applicable dependent on the jurisdiction in which such loaned securities are customarily traded.

Loans of securities for non-cash collateral require 110.0 percent collateral from the borrowers. The System cannot pledge, lend, or sell the securities received as collateral unless the borrower defaults. Authorized non-cash securities collateral includes US and non-US government debt obligations and securities, supranational debt obligations, domestic and non-domestic equity securities listed on specified indices, domestic and non-domestic corporate bonds, and convertible securities. Securities non-cash collateral as of June 30, 2020, was in equities. As with cash collateral, the borrower must provide additional collateral to correct any deficiency. Securities held as collateral and the corresponding obligation to return the collateral to the borrower are netted in obligations under securities lending on the Statement of Fiduciary Net Position.

The custodian, as agent for the System, is authorized to reinvest cash collateral received in any investment instrument allowed by these securities lending agreement. The maturities of the loans of securities generally do not match the maturities of the investments purchased with cash collateral. All securities loans can be terminated on demand by either the System or the borrower. At June 30, 2020, the average term of these loans was three days. At June 30, 2020, cash collateral was invested in commercial paper, repurchase agreements, corporate bonds, and asset-backed securities. The weighted average effective duration and weighted average maturity of cash collateral investments were 26 days.

The following table presents the fair values of the securities on loan and the value of the collateral pledges at June 30, 2020 [in thousands]:

	Fair Value Securities Lent*	Collateral Received
Lent for Cash Collateral:		
Equity Securities	$1,991,123	$2,020,528
Debt Securities	802,956	822,110
REITS	75,766	77,174
Subtotal	**2,869,845**	**2,919,812**
Lent for Non-Cash Collateral:		
Equity Securities	611,470	685,362
Debt Securities	111,298	122,784
REITS	17,351	19,463
Subtotal	**740,119**	**827,609**
Total Securities Lent	**$3,609,964**	**$3,747,421**

** The fair values of the underlying securities loaned for cash and the collateral for the securities include accrued income and expenses.*

The fair value of securities purchased with cash collateral as of June 30, 2020, are presented by type below [in thousands]:

Securities Purchased with Cash Collateral	Fair Value
Commercial Paper	$703,457
Repurchase Agreements	259,942
Corporate Bonds	1,085,813
Asset-Backed Securities	868,798
Total	**$2,918,010**

The following table details the net income from securities lending for the year ended June 30, 2020 [in thousands]:

	PERS	MHSPRS	MRS	SLRP	TOTAL
Change in Fair Value	$(3,439)	$(45)	$(17)	$(2)	$(3,503)
Interest Income	62,072	815	305	40	63,232
Income From Securities Lending	**58,633**	**770**	**288**	**38**	**59,729**
Less:					
Interest Expense	40,382	530	199	26	41,137
Bank Fees	3,096	41	15	2	3,154
Expenses From Securities Lending	**43,478**	**571**	**214**	**28**	**44,291**
Net Income From Securities Lending	**$15,155**	**$199**	**$74**	**$10**	**$15,438**

At June 30, 2020, securities lending total assets with related accrued interest are $2,920,767,000, and total liabilities with accrued expenses are $2,920,123,000. The difference of $644,000 is due to the collateral investment fund's change in fair value, agent lender fees, and earnings receivable until the final distribution takes place the following month.

Commission Recapture Program - The Board has authorized the System to participate in a commission recapture program. This program allows the System to recapture a portion of the commissions paid to broker-dealers with which the System has entered into an agreement. Recaptures for the fiscal year ended June 30, 2020, were $119,000.

Note 4: Capital Assets

The following table shows amounts for capital assets as of June 30, 2020 [in thousands]:

Description	Amount
Land	$508
Building	18,817
Furniture & Equipment	2,867
Software	20,417
Construction in Progress	1,209
Total Capital Assets	**43,818**
Less Accumulated Depreciation:	
Building	7,241
Furniture & Equipment	2,499
Software	20,297
Total Accumulated Depreciation	**30,037**
Net Capital Assets	**$13,781**

Note 5: Net Pension Liability of Employers

The following tables present the components of the liability of the employers, or net pension liability, to plan members for benefits provided through the System's cost-sharing and single employer defined benefit pension plans at June 30, 2020 [in thousands].

	PERS	MHSPRS	SLRP
Total Pension Liability	$47,186,232	$555,149	$22,388
Less: Plan Fiduciary Net Position	27,827,394	364,102	17,995
Plan Net Pension Liability	19,358,838	191,047	4,393
Ratio of Fiduciary Net Position to Total Pension Liability	58.97%	65.59%	80.38%

SIGNIFICANT ASSUMPTIONS AND OTHER INPUTS

An actuarial survey of the mortality, service, withdrawals, compensation experience of members, and valuation of assets and liabilities is performed annually to determine the actuarial soundness of the System. To validate that the assumptions recommended by the actuary are, in aggregate, reasonably related to actual experience, the System requests the actuary to conduct an experience investigation every other year. As such, the total pension liability was determined by an actuarial valuation as of June 30, 2019 and are based on the results of an actuarial experience study for the four-year period ending June 30, 2018. The experience report is dated April 2, 2019. An expected total pension liability is determined as of the measurement date of June 30, 2020, using standard roll forward techniques. The roll forward techniques are applied to the liabilities before and after the assumption changes then compared as of June 30, 2020, to reflect the assumption gain and loss for the year. The following actuarial assumptions applied to all periods included in the measurement.

	PERS	MHSPRS	SLRP
Investment Rate of Return*	7.75%	7.75%	7.75%
Price Inflation	2.75%	2.75%	2.75%
Salary Increases	3.00-18.25%	3.00-8.56%	3.00%

** Net of investment expense, including inflation*

The long-term expected rate of return on the PERS, MHSPRS and SLRP investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected nominal returns, net of the plans' investment expense, and the assumed rate of inflation) were 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 rate of return by the target asset allocation percentage and by adding expected inflation. The target asset allocation and best estimates of arithmetic real rates of return for each major asset class are summarized in the following table:

Asset Class	Target Allocation	Long-term Expected Real Rate of Return
Domestic Equity	27.00%	4.90%
International Equity	22.00	4.75
Global Equity	12.00	5.00
Debt Securities	20.00	0.50
Real Estate	10.00	4.00
Private Equity	8.00	6.25
Cash Equivalents	1.00	-
Total	**100.00%**	**N/A**

DISCOUNT RATE

The discount rate used to measure the total pension liabilities for PERS, MHSPRS and SLRP was 7.75 percent. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at current contribution rates and that employer contributions for PERS, MHSPRS and SLRP will be made at rates set in the Board's Funding Policy. Based on those assumptions, each plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on investments was applied to all periods of projected benefit payments to determine each plan's total pension liability.

SENSITIVITY OF THE NET PENSION LIABILITY TO CHANGES IN THE DISCOUNT RATE

The following table presents the net pension liability of PERS, MHSPRS and SLRP, calculated using the discount rate of 7.75 percent, as well as what the plans' net pension liability would be if it were calculated using a discount rate that is one percentage point lower (6.75 percent) or one percentage point higher (8.75 percent) than the current rate [in thousands]:

	1% Decrease (6.75%)	Current Discount Rate (7.75%)	1% Increase (8.75%)
PERS	$25,057,637	$19,358,838	$14,655,039
MHSPRS	$259,957	$191,047	$134,144
SLRP	$6,630	$4,393	$2,482

Note 6: Contribution Requirements

Policies for PERS, MHSPRS, and SLRP provide for employer and member contributions at actuarially determined rates that, expressed as percentages of annual covered payroll, are adequate to accumulate sufficient assets to pay benefits when due. Contribution rates for PERS, MHSPRS, and SLRP are established in accordance with actuarial contribution requirements determined through actuarial valuations and adopted by the Board with respect to PERS and SLRP or the MHSPRS Administrative Board. Required contribution rates are expressed as a level percentage of covered payroll and are actuarially determined using an individual entry age normal actuarial method.

Contribution policies for MRS provide for a property tax to be levied within each municipality and deductions from salaries of members at rates sufficient to make the plans actuarially sound. An actuarial valuation is performed annually, as of June 30, to determine the necessary rates. Mississippi statutes limit any increase in the property tax levy for employer pension contributions to one-half mill per year. Given this constraint on employer contribution increases and depending upon future experience, one or more of the closed plans under MRS will possibly be exhausted at some point in the future. Such an event would lead to at least a temporary reduction in benefits paid until the affected plan's cash flow position improved. Members covered by MRS are required to contribute varying amounts of their salary, depending on the actuarial soundness of their respective plans.

CONTRIBUTION RATES

	Contribution Rates as a Percentage of Covered Payroll	
	Member	Employer
PERS	9.00%	17.40%
MHSPRS	7.25%	49.08%
MRS	7.00-10.00%	0.84-5.82 mills*
SLRP	3.00%	7.40%

** Based on assessed property values.*

Employer contributions for MHSPRS are augmented by certain additional fees. These amounts vary annually based on the level of activity. The actuarially determined contributions for MHSPRS include estimated additional fees of $3,700,000. The amount collected for the year ending June 30, 2020, was $3,077,000 for motor vehicle fees and $642,000 for driver's license reinstatement fees.

Administration of the System is financed from investment earnings. In addition, employers of MHSPRS, MRS, and SLRP contribute an administrative fee to the System equal to 2.0 percent of the plan's respective employer contributions. As of June 30, 2020, administrative fees were $328,000 from MHSPRS, $331,000 from MRS, and $10,000 from SLRP. ORP contributes administrative fees of 2.6 percent of covered wages for a total of $12,052,000.

Member contributions and accumulated interest are credited to the annuity savings reserve account. Upon retirement, the balance in the member's account is transferred to the annuity reserve account. The employer's accumulation reserve is the account to which contributions made by employers and investment income are credited, and from which employer-provided benefits under the plan are paid.

Note 7: Retirement Plan of System Employees

PERS employees are members of the System. Salaries and wages for PERS employees for the year ended June 30, 2020, were $7,942,000. PERS contributions to the system for the years ended June 30, 2020, 2019, and 2018 were $1,350,000, $1,207,000, and $1,159,000, respectively. Contributions made were 100.0 percent of required contributions. PERS contributions represent less than 1.0 percent of total contributions required for all participating employers.

Note 8: Other Postemployment Benefits

PLAN DESCRIPTION

The State and School Employees' Health Insurance Management Board administers the state's self-insured medical plan and life insurance program established by Miss. Code Ann. § 25-15-3 (1972, as amended), which may be amended only by the state Legislature. State law mandates that all state, public education, library, junior and community college, and retiring employees be offered health and life benefit coverage through the State and School Employees' Life and Health Insurance Plan (Plan).

BENEFITS PROVIDED

The Plan provides other postemployment benefits (OPEB) as a cost-sharing multiple-employer defined benefit OPEB plan. Benefits of the Plan consist of an implicit rate subsidy, which is essentially the difference between the average cost of providing healthcare benefits to retirees under age 65 and the average cost of providing healthcare benefits to all participants when premiums paid by retirees are not age-adjusted.

The Plan offers a base option and a select option for health benefits for non-Medicare participants. The Plan includes a separate level for Medicare eligible retirees, Medicare eligible surviving spouses, and Medicare eligible dependents of retirees and surviving spouses.

CONTRIBUTIONS

Employees' premiums are funded primarily by their employers. Retirees must pay their own premiums, as do active employees for spouse and dependent medical coverage. Pursuant to the authority granted by Mississippi statute, the Plan's Management Board has the authority to establish and change premium rates for the participants, employers, and the other contributing parties. If it is determined actuarially that premiums paid by participating retirees adversely affect the overall cost of the Plan to the State, a premium surcharge may be imposed on participating retired employees under the age of Medicare eligibility. For those initially employed on or after January 1, 2006, a premium surcharge may be imposed in an amount determined actuarially to cover the full cost of insurance, while the surcharge for those employed before that date may not exceed 15%.

OPEB LIABILITY, OPEB EXPENSE, DEFERRED OUTFLOWS OF RESOURCES RELATED TO OPEB, AND DEFERRED INFLOWS OF RESOURCES RELATED TO OPEB

At June 30, 2020, the System reported a liability of $1,130,000 for its proportionate share of the net OPEB liability. The liability was measured as of June 30, 2019, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of that date. The System's portion of the OPEB liability was based on a projection of the long-term share of contributions to the OPEB plan relative to the projected contributions of all participating employers, actuarially determined. At the measurement date, the System's proportion was 0.13 percent.

For the year ended June 30, 2020, the System recognized OPEB expense of $25,000. At June 30, 2020, the System reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources [in thousands]:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference Between Expected and Actual Experience	$2	$16
Changes in Proportion	21	2
Changes in Assumptions	84	59
Contributions Subsequent to the Measurement Date	41	-
Total	**$148**	**$77**

Contributions subsequent to the measurement date of $41,000 will be recognized as a reduction of the net OPEB liability in the year ended June 30, 2021. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows [in thousands]:

Year Ended June 30	Net Outflows & Inflows Of Resources
2021	$2
2022	2
2023	2
2024	5
2025	12
Thereafter	7
Total	$30

ACTUARIAL ASSUMPTIONS

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

Valuation Date	June 30, 2019
Measurement Date	June 30, 2019
Actuarial Assumptions:	
Cost Method	Entry age normal
Inflation Rate	2.75%
Salary Increases, Including Wage Inflation	3.00-18.20%
Long-Term Investment Rate of Return	4.50%
Healthcare Cost Trends	7.00% for 2019 decreasing to an ultimate rate of 4.75% by 2028

Both pre-retirement and post-retirement mortality rates were based on the PubS.H-2010(B) Retiree Table with male rates adjusted to 112.0 percent of male rates from ages 18 to 75 scaled down to 105.0 percent for ages 80 to 119, and female rates adjusted to 85.0 percent of the female rates from ages 18 to 65 scaled up to 102.0 percent for ages 75 to 119. Projection scale MP-2018 will be used to project future improvements in life expectancy generationally. Post-disability mortality rates were based on the PubT.H-2010 Disabled Retiree Table for disabled retirees, with male rates adjusted to 137.0 percent and female rates adjusted to 115.0 percent. Projection scale MP-2018 will be used to project future improvements in life expectancy generationally.

The demographic actuarial assumptions used in the June 30, 2019 valuation were based on the results of the last actuarial experience study dated April 2, 2019. The remaining actuarial assumptions (e.g., initial per capita costs, healthcare cost trends, rate of plan participation, rates of plan election, etc.) used in the June 30, 2019 valuation were based on a review of recent plan experience done concurrently with the June 30, 2019 valuation.

CHANGES IN ACTUARIAL ASSUMPTIONS & METHODS

The discount rate was changed from 3.89 percent to 3.50 percent for the current measurement date.

DISCOUNT RATE

The discount rate used to measure the total OPEB liability was 3.50 percent. The discount rate determination was based on an average of the Bond Buyer General Obligation 20-year Municipal Bond Index Rates during the month of June published at the end of each week by the Bond Buyer. Since the trust was set up as of June 28, 2018, with an initial contribution of $1,000,000, the Plan was projected to be depleted immediately.

SENSITIVITY OF SYSTEM'S PROPORTIONATE SHARE OF THE COLLECTIVE OPEB LIABILITY TO CHANGES IN THE DISCOUNT RATE

The following table presents the System's proportionate share of the net OPEB liability using the discount rate of 3.50 percent, as well as what the System's proportionate share of the net OPEB liability would be if it were calculated using a discount rate that is one percentage point lower (2.50 percent) or one percentage point higher (4.50 percent) than the current rate [in thousands].

	1% Decrease (2.50%)	Current Discount (3.50%)	1% Increase (4.50%)
System Proportionate Share of Net OPEB Liability	$1,255	$1,130	$1,023

SENSITIVITY OF SYSTEM'S PROPORTIONATE SHARE OF THE COLLECTIVE OPEB LIABILITY TO CHANGES IN THE HEALTHCARE COST TREND RATE

The following table presents the System's proportionate share of the net OPEB liability using the healthcare trend rate of 7.00 percent decreasing to 4.75 percent by 2028, as well as what the System's proportionate share of the net OPEB liability would be if it were calculated using a healthcare trend that is one percentage point lower (6.00 percent decreasing to 3.75 percent) or one percentage point higher (8.00 percent decreasing to 5.75 percent) than the current rate [in thousands].

	1% Decrease (6.00% Decreasing to 3.75%)	Current Discount Rate (7.00% Decreasing to 4.75%)	1% Increase (8.00% Decreasing to 5.75%)
System Proportionate Share of Net OPEB Liability	$1,047	$1,130	$1,224

The audited financial report for the Plan can be found at knowyourbenefits.dfa/ms.gov.

Schedule of Changes in the Net Pension Liability & Related Ratios
Year Ended June 30, 2020

[in thousands] [unaudited]

	PERS						
Changes in the Net Pension Liability	2020	2019	2018	2017	2016	2015	2014
Total Pension Liability:							
Service Cost	$712,354	$696,445	$702,559	$754,552	$734,545	$673,626	$681,778
Interest	3,433,801	3,330,054	3,239,471	3,154,382	3,032,131	2,867,679	2,754,573
Difference Between Actual & Expected Experience	224,426	-	21,361	(172,476)	413,494	325,351	257,464
Assumption Changes	-	231,354	-	24,141	(66,606)	1,821,236	-
Benefit Payments	(2,878,073)	(2,747,397)	(2,609,415)	(2,477,914)	(2,367,709)	(2,219,240)	(2,099,843)
Refunds to Terminated Employees	(104,851)	(108,042)	(124,306)	(113,707)	(112,926)	(119,356)	(121,532)
Net Change in Total Pension Liability	**1,387,657**	**1,402,414**	**1,229,670**	**1,168,978**	**1,632,929**	**3,349,296**	**1,472,440**
Total Pension Liability - Beginning	**45,798,575**	**44,396,161**	**43,166,491**	**41,997,513**	**40,364,584**	**37,015,288**	**35,542,848**
Total Pension Liability - Ending (A)	**$47,186,232**	**$45,798,575**	**$44,396,161**	**$43,166,491**	**$41,997,513**	**$40,364,584**	**$37,015,288**
Plan Fiduciary Net Position:							
Contributions - Employer	$1,171,805	$1,038,108	$1,018,163	$1,019,084	$1,021,261	$996,478	$969,674
Contributions - Member	594,711	580,941	570,807	570,066	572,574	557,909	549,528
Net Investment Income	856,935	1,701,321	2,385,913	3,436,144	130,900	827,666	3,905,728
Pension Benefits	(2,878,073)	(2,747,397)	(2,609,415)	(2,477,914)	(2,367,709)	(2,219,240)	(2,099,843)
Refunds to Terminated Employees	(104,851)	(108,042)	(124,306)	(113,707)	(112,926)	(119,356)	(121,532)
Administrative Expenses	(19,757)	(16,905)	(16,264)	(17,056)	(15,166)	(13,523)	(12,837)
Other	22	(4,614)	(4,805)	(8,536)	(474)	(497)	(510)
Net Change in Fiduciary Net Position	**(379,208)**	**443,412**	**1,220,093**	**2,408,081**	**(771,540)**	**29,437**	**3,190,208**
Plan Fiduciary Net Position - Beginning	**28,206,602**	**27,763,190**	**26,543,097**	**24,135,016**	**24,906,556**	**24,877,119**	**21,686,911**
Plan Fiduciary Net Position - Ending (B)	**27,827,394**	**28,206,602**	**27,763,190**	**26,543,097**	**24,135,016**	**24,906,556**	**24,877,119**
Net Pension Liability - Ending (A-B)	**$19,358,838**	**$17,591,973**	**$16,632,971**	**$16,623,394**	**$17,862,497**	**$15,458,028**	**$12,138,169**
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	**58.97%**	**61.59%**	**62.54%**	**61.49%**	**57.47%**	**61.70%**	**67.21%**
Covered Payroll	**$6,287,441**	**$6,144,916**	**$5,999,231**	**$6,038,229**	**$6,022,533**	**$5,904,827**	**$5,834,687**
Net Pension Liability as a Percentage of Covered Payroll	**307.90%**	**286.29%**	**277.25%**	**275.30%**	**296.59%**	**261.79%**	**208.03%**

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available. See notes to Required Supplementary Information.

Schedule of Changes in the Net Pension Liability & Related Ratios

Year Ended June 30, 2020

[in thousands] [unaudited]

	MHSPRS						
Changes in the Net Pension Liability	2020	2019	2018	2017	2016	2015	2014
Total Pension Liability:							
Service Cost	$8,104	$7,372	$7,205	$7,328	$6,858	$6,361	$6,461
Interest	40,624	39,532	37,338	37,086	35,869	34,503	33,396
Difference Between Actual & Expected Experience	(7)	-	17,311	(5,780)	3,536	1,013	2,652
Assumption Changes	-	2,286	-	(3,598)	-	19,176	-
Benefit Payments	(35,455)	(34,671)	(32,315)	(31,001)	(29,913)	(28,909)	(28,220)
Refunds to Terminated Employees	(48)	(16)	(103)	(144)	(52)	(163)	(42)
Net Change in Total Pension Liability	**13,218**	**14,503**	**29,436**	**3,891**	**16,298**	**31,981**	**14,247**
Total Pension Liability - Beginning	**541,931**	**527,428**	**497,992**	**494,101**	**477,803**	**445,822**	**431,575**
Total Pension Liability - Ending (A)	**$555,149**	**$541,931**	**$527,428**	**$497,992**	**$494,101**	**$477,803**	**$445,822**
Plan Fiduciary Net Position:							
Contributions - Employer	$20,144	$19,375	$15,128	$14,809	$14,755	$13,695	$13,500
Contributions - Member	2,428	2,340	2,271	2,147	2,128	1,938	1,963
Net Investment Income	11,196	22,144	30,855	44,499	1,704	10,812	51,575
Pension Benefits	(35,455)	(34,671)	(32,315)	(31,001)	(29,913)	(28,909)	(28,220)
Refunds to Terminated Employees	(48)	(16)	(103)	(144)	(52)	(163)	(42)
Administrative Expenses	(328)	(312)	(250)	(203)	(217)	(198)	(200)
Other	-	-	-	-	-	-	-)
Net Change in Fiduciary Net Position	**(2,063)**	**8,860**	**15,586**	**30,107**	**(11,595)**	**(2,825)**	**38,576**
Plan Fiduciary Net Position - Beginning	**366,165**	**357,305**	**341,719**	**311,612**	**323,207**	**326,032**	**287,456**
Plan Fiduciary Net Position - Ending (B)	**364,102**	**366,165**	**357,305**	**341,719**	**311,612**	**323,207**	**326,032**
Net Pension Liability - Ending (A-B)	**$191,047**	**$175,766**	**$170,123**	**$156,273**	**$182,489**	**$154,596**	**$119,790**
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	**65.59%**	**67.57%**	**67.74%**	**68.62%**	**63.07%**	**67.64%**	**73.13%**
Covered Payroll	**$32,346**	**$31,811**	**$29,555**	**$28,845**	**$27,380**	**$25,505**	**$25,554**
Net Pension Liability as a Percentage of Covered Payroll	**590.64%**	**552.53%**	**575.61%**	**541.77%**	**666.50%**	**606.14%**	**468.77%**

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available. See notes to Required Supplementary Information.

Schedule of Changes in the Net Pension Liability & Related Ratios

Year Ended June 30, 2020

[in thousands] [unaudited]

	SLRP						
Changes in the Net Pension Liability	2020	2019	2018	2017	2016	2015	2014
Total Pension Liability:							
Service Cost	$589	$590	$431	$433	$420	$406	$404
Interest	1,638	1,595	1,557	1,593	1,586	1,569	1,549
Difference Between Actual & Expected Experience	(37)	-	(58)	(204)	(468)	(333)	(453)
Assumption Changes	-	31	-	(868)	(6)	588	-
Benefit Payments	(1,857)	(1,442)	(1,410)	(1,397)	(1,454)	(1,220)	(1,216)
Refunds to Terminated Employees	(20)	-	(18)	(17)	(32)	(37)	(22)
Net Change in Total Pension Liability	313	774	502	(460)	46	973	262
Total Pension Liability - Beginning	22,075	21,301	20,799	21,259	21,213	20,240	19,978
Total Pension Liability - Ending (A)	$22,388	$22,075	$21,301	$20,799	$21,259	$21,213	$20,240
Plan Fiduciary Net Position:							
Contributions - Employer	$512	$525	$513	$522	$514	$511	$514
Contributions - Member	207	214	207	212	208	207	208
Net Investment Income	554	1,287	1,412	2,264	86	552	2,605
Pension Benefits	(1,857)	(1,442)	(1,410)	(1,397)	(1,454)	(1,220)	(1,216)
Refunds to Terminated Employees	(20)	-	(18)	(17)	(32)	(37)	(22)
Administrative Expenses	(10)	(11)	(10)	(10)	(10)	(10)	(10)
Other	-	-	-	-	-	-	-
Net Change in Fiduciary Net Position	**(614)**	**573**	**694**	**1,574**	**(688)**	**3**	**2,079**
Plan Fiduciary Net Position - Beginning	**18,609**	**18,036**	**17,342**	**15,768**	**16,456**	**16,453**	**14,374**
Plan Fiduciary Net Position - Ending (B)	**17,995**	**18,609**	**18,036**	**17,342**	**15,768**	**16,456**	**16,453**
Net Pension Liability - Ending (A-B)	**$4,393**	**$3,466**	**$3,265**	**$3,457**	**$5,491**	**$4,757**	**$3,787**
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	**80.38%**	**84.30%**	**84.67%**	**83.38%**	**74.17%**	**77.58%**	**81.29%**
Covered Payroll	**$6,891**	**$6,937**	**$6,833**	**$6,928**	**$6,862**	**$6,861**	**$6,918**
Net Pension Liability as a Percentage of Covered Payroll	**63.75%**	**49.96%**	**47.78%**	**49.90%**	**80.02%**	**69.33%**	**54.74%**

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available. See notes to Required Supplementary Information.

Schedule of Employer Contributions
Last 10 Fiscal Years

[in thousands] [unaudited]

	2020	2019	2018	2017	2016
Public Employees' Retirement System					
Contractually Required Employer Contribution	$1,107,847	$967,824	$944,879	$ 951,021	$948,549
Actual Employer Contribution	1,171,805	1,038,108	1,018,163	1,019,084	1,021,261
Annual Contribution Deficiency (Excess)	(63,958)	(70,284)	(73,284)	(68,063)	(72,712)
Covered Payroll	6,287,441	6,144,916	5,999,231	6,038,229	6,022,533
Actual Contributions as a Percentage of Covered Payroll	18.64%	16.89%	16.97%	16.88%	16.96%
MS Highway Safety Patrol Retirement System					
Contractually Required Employer Contribution	$19,594	$19,383	$14,430	$14,431	$14,025
Actual Employer Contribution	20,144	19,375	15,128	14,809	14,755
Annual Contribution Deficiency (Excess)	(550)	8	(698)	(378)	(730)
Covered Payroll	32,346	31,811	29,555	28,845	27,380
Actual Contributions as a Percentage of Covered Payroll	62.28%	60.91%	51.19%	51.34%	53.89%
Supplemental Legislative Retirement System					
Contractually Required Employer Contribution	$510	$513	$506	$513	$508
Actual Employer Contribution	512	525	513	522	514
Annual Contribution Deficiency (Excess)	(2)	(12)	(7)	(9)	(6)
Covered Payroll	6,891	6,937	6,833	6,928	6,862
Actual Contributions as a Percentage of Covered Payroll	7.43%	7.57%	7.51%	7.53%	7.49%

	2015	2014	2013	2012	2011
Public Employees' Retirement System					
Contractually Required Employer Contribution	$930,010	$921,872	$835,321	$735,022	$687,016
Actual Employer Contribution	996,478	969,674	881,847	768,914	723,836
Annual Contribution Deficiency (Excess)	(66,468)	(47,802)	(46,526)	(33,892)	(36,820)
Covered Payroll	5,904,827	5,834,667	5,823,578	5,857,789	5,684,624
Actual Contributions as a Percentage of Covered Payroll	16.88%	16.62%	15.14%	13.13%	12.73%
MS Highway Safety Patrol Retirement System					
Contractually Required Employer Contribution	$13,226	$13,595	$13,098	$12,257	$11,385
Actual Employer Contribution	13,695	13,500	13,366	12,044	11,494
Annual Contribution Deficiency (Excess)	(469)	95	(268)	213	(109)
Covered Payroll	25,505	25,554	25,816	25,670	24,872
Actual Contributions as a Percentage of Covered Payroll	53.70%	52.83%	51.77%	46.92%	46.21%
Supplemental Legislative Retirement System					
Contractually Required Employer Contribution	$508	$519	$509	$504	$464
Actual Employer Contribution	511	514	503	490	457
Annual Contribution Deficiency (Excess)	(3)	5	6	14	7
Covered Payroll	6,861	6,918	6,695	6,872	6,810
Actual Contributions as a Percentage of Covered Payroll	7.45%	7.43%	7.51%	7.13%	6.71%

There are no nonemployer contributing entities in the plan reporting entity. See notes to Required Supplementary Information.

Schedule of Investment Returns
Last 10 Fiscal Years

[unaudited]

	2020	2019	2018	2017	2016	2015	2014
Annual Money-weighted Rate of Return, Net of Investment Expense	3.06%	6.27%	9.17%	14.53%	0.69%	3.05%	18.37%

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available. See notes to Required Supplementary Information.

Schedule of Proportionate Share of the Net OPEB Liability

[in thousands] [unaudited]

	2020	2019	2018
State Life & Health Insurance OPEB Plan			
System's Proportion of the Net OPEB Liability	0.13%	0.13%	0.13%
System's Proportionate Share of the Net OPEB Liability	$1,130	$1,013	$1,031
System's Covered-Employee Payroll*	$7,295	$7,648	$7,431
System's Proportionate Share of the Net OPEB Liability as a Percentage of its Covered-Employee Payroll	15.49%	13.25%	13.87%
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	0.13%	0.13%	-%

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available. See notes to Required Supplementary Information.

Schedule of Employer Contributions for OPEB

[in thousands] [unaudited]

	2020	2019	2018
State Life & Health Insurance OPEB Plan			
Actuarially Required Contribution	$41	$45	$44
Contributions in Relation to Contractually Required Contribution	$41	$45	$44
Contribution Deficiency (Excess)	-	-	-
System's Covered-Employee Payroll*	$7,295	$7,648	$7,431
Actual Contributions as a Percentage of Covered-Employee Payroll	0.56%	0.59%	0.59%

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available. See notes to Required Supplementary Information.

** The OPEB plan is not based on a measure of pay.*

Note 1: Net Pension Liability

SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY & RELATED RATIOS

The total pension liabilities presented in these schedules were provided by the System's actuarial consultants, Cavanaugh Macdonald Consulting, LLC. The net pension liability is measured as the total pension liability less the amount of the fiduciary net position for PERS, MHSPRS and SLRP.

SCHEDULE OF EMPLOYER CONTRIBUTIONS

The required employer contributions and amount of those contributions actually made are presented in this 10-year schedule.

» PERS

In fiscal year 2014, the Board implemented a revised funding policy aimed at stabilizing the employer contribution rate, which was set at 15.75 percent. At its June 26, 2018 meeting, the Board voted to increase the employer contribution rate from 15.75 percent to 17.40 percent effective July 1, 2019. Along with this increase, the Board revised its funding policy described in greater detail in Note 6 of the Financial Section.

» MHSPRS

Effective July 1, 2018, the employer contribution rate was increased by the MHSPRS Administrative Board from 37.00 percent to 49.08 percent. Motor vehicle and driver's license reinstatement fees augment employer contributions. The amount of fees vary each year depending on activity, with $3.7 million collected for fiscal year 2020.

An actuarial contribution deficiency occurred for fiscal year 2012 due to a delay in the implementation of a contribution rate increase. The increase took place January 1, 2012, bringing the contribution rate from 30.30 percent to 35.21 percent. In 2014, a deficiency occurred due to actual collections of motor vehicle fees being lower than anticipated.

» SLRP

The employer contribution rate is 7.40 percent. The employee contribution rate has remained at 3.00 percent since plan inception. An excess of actual employer contributions over contractually required contributions has existed since 2015. SLRP is a small plan with a relatively fixed number of members.

ACTUARIAL ASSUMPTIONS

The information presented in the required supplementary schedules was used in the actuarial valuation for purposes of determining the contractually required employer contribution rates. The assumptions and methods used for the June 30, 2019, actuarial valuation were recommended by the actuary and adopted by the Board.

FACTORS SIGNIFICANTLY AFFECTING TRENDS IN REPORTED AMOUNTS

Plan requirements may be affected by changes in actuarial assumptions, benefit provisions, plan provisions, actuarial funding methods, or other significant factors.

CHANGES IN ASSUMPTIONS

» The investment rate of return was reduced from 8.00 percent to 7.75 percent in fiscal year 2015.

» Price inflation was reduced from 3.50 percent to 3.00 percent in fiscal year 2015, and to 2.75 percent in 2019.

» The wage inflation assumption was reduced from 3.75 percent to 3.25 percent in fiscal year 2017, and to 3.11 percent in 2019.

» The percentage of active member disabilities assumed to be in the line of duty was increased in 2017 from 6.00 percent to 7.00 percent. The assumed rate was increased again in 2019 to 9.00 percent.

» Assumed rates of salary increase were adjusted in 2015, 2017, and 2019 to more closely reflect actual and anticipated experience.

» The assumed rate of interest credited to employee contributions was changed from 3.50 percent to 3.00 percent in 2016.

» Withdrawal rates, pre-retirement mortality rates, disability rates, and service retirement rates were adjusted to more closely reflect actual experience in 2015, 2017, and 2019.

» In 2015, the mortality table for retired life mortality was changed from the RP-2000 Mortality Table to the RP-2014 Healthy Annuitant Blue Collar Table projected to 2016 using Scale BB. In 2017 the expectation of retired life mortality was changed to the RP-2014 Healthy Annuitant Blue Collar Mortality Table projected with Scale BB to 2022. In 2019, the expectation of retired life mortality was changed to the PubS.H-2010(B) Retiree Table with male rates adjusted to 112.0 percent of male rates from ages 18 to 75 scaled down to 105.0 percent for ages 80 to 119, and female rates adjusted to 85.0 percent of the female rates from ages 18 to 65 scaled up to 102.0 percent for ages 75 to 119. Projection scale MP-2018 will be used to project future improvements in life expectancy generationally.

» The expectation of disabled mortality was changed from the RP-2000 Disabled Mortality Table to the RP-2014 Disabled Retiree Table in 2015. Small adjustments were also made to the mortality table in 2017. In 2019 the expectation of disabled mortality was changed to the PubT.H-2010 Disabled Retiree Table for disabled retirees, with male rates adjusted to 137.0 percent and female rates adjusted to 115.0 percent. Projection scale MP-2018 will be used to project future improvements in life expectancy generationally.

CHANGES IN BENEFIT PROVISIONS

In fiscal year 2016, the interest rate on employee contributions was changed to the money market rate as published by the Wall Street Journal on December 31 of each preceding year with a minimum rate of 1.0 percent and a maximum rate of 5.0 percent.

The contractually required employer contribution rates in the Schedules of Employer Contributions are calculated as of June 30, 2018, two years prior to the end of the fiscal year in which contributions are reported.

The following actuarial methods and assumptions were used to determine contribution rates reported in that schedule:

	PERS	MHSPR	SLRP
Actuarial Cost Method	Entry age	Entry age	Entry age
Amortization Method	Level percentage of payroll, open	Level percentage of payroll, open	Level percentage of payroll, open
Remaining Amortization Period	30.9 years	18.3 years	20.1 years
Asset Valuation Method	5-year Smoothed Market	5-year Smoothed Market	5-year Smoothed Market
Actuarial Assumptions:			
Investment Rate of Return*	7.75%	7.75%	7.75%
Salary Increase	3.25-18.50%	3.25-8.81%	3.25%
Price Inflation	3.00%	3.00%	3.00%

* Net of pension plan investment expense, including inflation.

Note 2: Investment Returns

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. The investment assets of the defined benefit plans administered by the System are combined in a comingled investment pool. Each plan owns an equity position in the pool in accordance with its ownership percentage. The annual money-weighted rate of return is, therefore, approximately the same for PERS, MHSPRS and SLRP.

Note 3: Net OPEB Liability

SCHEDULE OF PROPORTIONATE SHARE OF THE NET OPEB LIABILITY

This schedule presents historical trend information about the System's proportionate share of the net OPEB liability for its employees who participate in the Plan. The net OPEB liability is measured as the total OPEB liability less the amount of fiduciary net position of the Plan. Only three fiscal years information is available; therefore, trend information will be accumulated to display a ten-year presentation.

SCHEDULE OF EMPLOYER CONTRIBUTIONS FOR OPEB

The required contributions and percentage of those contributions actually made are presented in the schedule. Only three fiscal years information is available; therefore, trend information will be accumulated to display a ten-year presentation.

CHANGES IN ACTUARIAL ASSUMPTIONS AND METHODS:

The discount rate was changed from 3.56 percent to 3.89 percent in 2018, and to 3.50 percent in 2019.

CHANGES IN BENEFIT TERMS

Amounts reported for fiscal year 2020 reflect no changes in benefit terms.

METHODS & ASSUMPTIONS USED IN CALCULATIONS OF ACTUARIALLY DETERMINED CONTRIBUTIONS:

The actuarially determined contribution rates, as a percentage of payroll, used to determine the actuarially determined contribution amounts in the schedule of employer contributions are calculated as of the most recent valuation date. The following actuarial methods and assumptions (from the June 30, 2018 actuarial valuation) were used to determine contribution rates reported in that schedule for the year ending June 30, 2019:

Actuarial Cost Method	Entry age
Amortization Method	Level dollar
Amortization Period	30 years, open
Asset Valuation Method	Market value of assets
Price Inflation	3.00%
Salary Increases, Including Wage Inflation	3.25% to 18.50%
Initial health care cost trend rates: Medicare Supplement Claims – Pre Medicare	7.25%
Ultimate health care cost trend rates: Medicare Supplement Claims – Pre Medicare	4.75%
Year of ultimate trend rates: Medicare Supplement Claims – Pre Medicare	2028
Long-term investment rate of return, net of pension plan investment expense, including price inflation	3.89%

Schedule 1
Schedule of Administrative Expenses & Depreciation
For the Year Ended June 30, 2020

[in thousands]

Administrative Expense	Amount
Personal Services:	
Salaries & Wages	$7,942
Employee Benefits	2,657
Employee Travel	58
Total Personal Services	**10,657**
Contractual Services:	
Employee Training	31
Communications, Transportation, & Utilities	192
Rentals	135
Repair & Maintenance	220
Professional Services (See Schedule 2)	1,702
Other Fees & Services	529
Memberships, Subscriptions, & Insurance	156
Data Processing	1,862
Bank Charges	152
Total Contractual Services	**4,979**
Commodities:	
Printing & Office Supplies	139
Equipment & Repair Parts	153
Other Supplies & Materials	11
Total Commodities	**303**
Depreciation:	
Building	263
Furniture & Equipment	140
Software	4,084
Total Depreciation	**4,487**
Total Administrative Expenses & Depreciation	**$20,426**

Schedule 2
Schedule of Investment Managers' Fees, Investment Global Out-of-Pocket Fees & Professional Service Fees
For the Year Ended June 30, 2020

[in thousands]

	Amount
Investment Managers' Fees:	
Acadian Asset Management, LLC	$3,219
AEW Capital Management, LP - Fund VII	153
AEW Capital Management, LP - Fund VIII	360
AllianceBernstein, LP	1,619
Angelo Gordon & Company - Fund III	128
Angelo Gordon & Company - Fund IV	635
Angelo Gordon & Company - Fund X	658
Arrowstreet Capital, LP	3,257
Artisan Partners, LP - MC Equity	2,539
Baillie Gifford & Company	2,820
CenterSquare Investment Management	749
Cohen & Steers Capital Management, Inc.	1,139
Dimensional Fund Advisors, Inc.	1,057
Eagle Capital Management, LLC	6,647
Epoch Investment Partners, Inc.	4,261
Fisher Investments	3,327
Hancock Natural Resource Group, Inc.	1,104
Harding Loevner, LP	3,620
Heitman, LLC - Fund III	125
Heitman, LLC - Fund IV	189
Invesco, LP - Fund IV	399
Invesco, LP - Fund V	408
J.P. Morgan Investment Management, Inc.	3,689
Lazard Asset Management, LLC	1,918
Longview Partners, LLC	4,097
Loomis Sayles & Company, LP	1,798
Manulife Asset Management, LLC	862
Marathon Asset Management, LLP	3,709
Mondrian Investment Partners Limited	2,078
Northern Trust Investments, Inc. - BB.AGG	110
Northern Trust Investments, Inc. - EAFE	179
Northern Trust Investments, Inc. - Russell MC	22
Northern Trust Investments, Inc. - S&P 500	226
Pacific Investment Management Company - Domestic Fixed Income	864
Pacific Investment Management Company - Global Fixed Income	1,684

	Amount
Investment Managers' Fees:	
Principal Global Investors, LLC - SC Equity	$1,415
Principal Global Investors, LLC - Real Estate	6,212
Prudential Investment Management, Inc.	1,401
Riverbridge Partners, LLC	2,412
T.A. Associates Realty - Fund X	16
T.A. Associates Realty - Fund XI	792
T.A. Associates Realty - Fund XII	1,017
UBS Realty Investors, LLC - Core Real Estate	2,443
UBS Realty Investors, LLC - Value Added Real Estate	2,179
Wellington Management Company, LLP - Emerging Markets Debt	2,581
Wellington Management Company, LLP - MC Equity	1,951
Wellington Management Company, LLP - SC Equity	2,106
Westbrook Partners - Fund X	441
Private Equity Managers: GCM Grosvenor Diversified Partners, LP & Pathway Capital Management, LLC	14,428
Total Investment Managers' Fees	$99,043
Bank of New York Mellon - Global Out-of-Pocket Fees	498
Total Investment Managers Fees & Global Out-of-Pocket Fees*	**$99,541**
Securities Lending Fees:	
Bank of New York Mellon	**$3,154**
Professional Service Fees:	
Actuary - Cavanaugh MacDonald Consulting, LLC	$276
Audit - Eide Bailly, LLC	249
Building Refresh - JBHM Architects, PA, McGuffie Painting and Waterproofing	239
Investment Management Consultant - Callan LLC; FactSet Research Systems, Inc.; & KlarityFX, Inc.	667
Legal - Outside - Chapman & Cutler, LLP; Ice Miller, LLP	71
Medical Fees - Clinics Labs	154
Voting Services - Election America, Inc.	46
Total Professional Service Fees	**$1,702**

* Fees are subject to estimation.

Schedule 3
Schedule of Investments Due to MRS from PERS
June 30, 2020

[in thousands]

	Amount
Due To MRS:	
Biloxi Municipal	$7,680
Biloxi Fire & Police	313
Clarksdale Fire & Police	1,095
Clinton Fire & Police	8,635
Columbus Fire & Police	1,019
Greenville Fire & Police	2,501
Greenwood Fire & Police	2,542
Gulfport Fire & Police	7,993
Hattiesburg Fire & Police	19,094
Jackson Fire & Police	46,419
Laurel Fire & Police	4,240
McComb Fire & Police	938
Meridian Municipal	2,926
Meridian Fire & Police	8,647
Natchez Fire & Police	1,704
Pascagoula Fire & Police	7,044
Tupelo Fire & Police	4,724
Vicksburg Fire & Police	8,948
Yazoo City Fire & Police	319
Total Investment Due to MRS	**$136,781**

Excludes certain accrued amounts.

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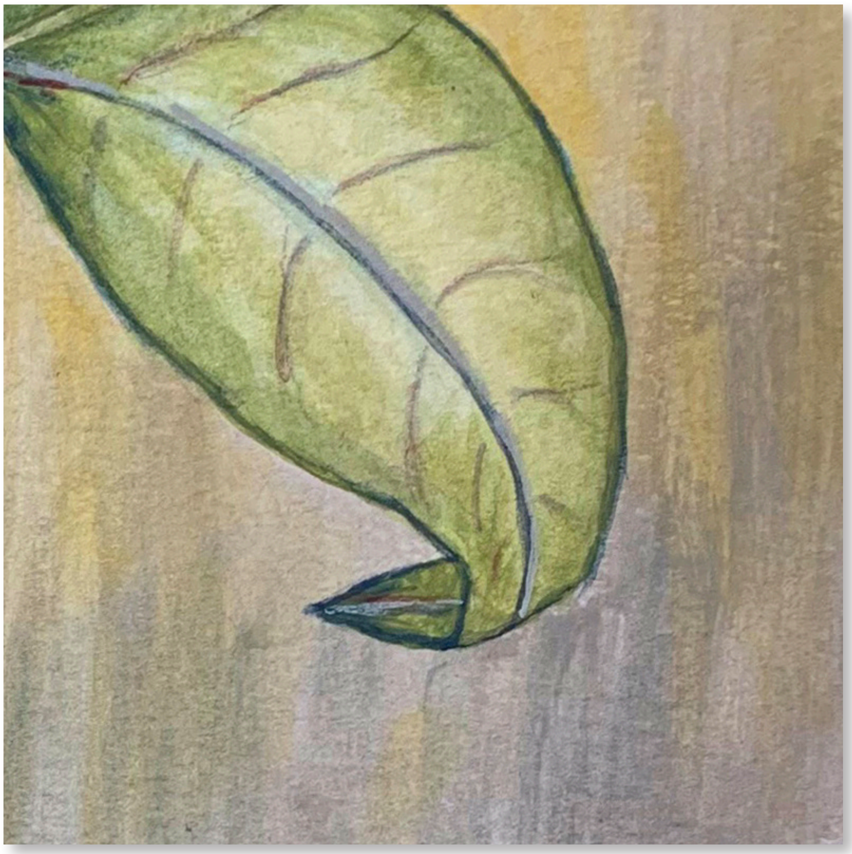


ADAPTABLE

Willingness and readiness are keys to being adaptable to outside influences.

PERS
of MISSISSIPPI

Providing Benefits for Life

October 2, 2020

Dear Members,

Fiscal year 2020 certainly was quite a year, with the worldwide pandemic, temporary shutdowns of the world's economies, an almost unprecedented equity market selloff in the third quarter of FY 2020, and a sharp rebound in fourth quarter of FY 2020 after economies reopened. These almost unprecedented events greatly affected financial markets, especially the second half of the fiscal year.

Investment Results:

- For the year ending June 30, 2020, the portfolio returned 3.35%, trailing the System's 7.75% return target;
- Longer term, the portfolio had 3-, 5-, and 10-year returns of 6.53%, 7.05% and 9.44%, respectively;
- The 1-year return of 3.35% placed in the 3rd quartile of the System's peer group comprised of public pension plans with assets greater than $10 billion;
- Assets of the System totaled $28.2 billion as of June 30;
- The System ranked as the 70th largest pension and retirement savings plan in the country; and
- FY 2020 investment fees and expenses paid totaled 0.35% of assets, which equates to $0.35 paid for every $100 of assets managed. The 1-year return net of fees was 2.97%.

As of June 30, 2020, the System's portfolio was positioned to match its strategic target asset allocation of 61% US and non-US public equities, 8% private equity, 20% fixed income, 10% real estate, and 1% dedicated cash equivalent investments, within acceptable target ranges.

FY2020 Financial Market Highlights:

Fiscal year 2020 started off the first quarter on July 1, 2019 with a surprise to the upside from GDP growth, extending the longest economic expansion on record to 124 months. Even though the first quarter growth of 1.9% seems muted, it was strong compared to developed economies around the world. The Federal Reserve instituted two rate cuts while the expansion continued, signaling a change from previous Fed preemptive rate hikes late in an expansion. The headline economic news continued to be the trade war with China. Inflation remained subdued at 1.7% (below the Federal Reserve's target of 2%).

The U.S. economy closed the calendar year 2019 with the unemployment rate at a 50-year low of 3.5%. The final reading for third quarter GDP showed a 2.1% gain which brought the GDP growth for the calendar year to 2.3%. The Federal Reserve cut rates in October of 2019. Persistent low inflation continued and allowed the Federal Reserve to continue its supportive policy.

Public Employees' Retirement System of Mississippi
429 Mississippi Street, Jackson, MS 39201-1005 601.359.3589 800.444.PERS www.pers.ms.gov

Equity markets were propelled to record highs at the end of calendar year 2019 and fixed income investors were also rewarded with strong gains; an amazing feat given the sector's low yields. December welcomed a 129-month bull market for the S&P 500 Index, the longest ever and a cumulative return of nearly 500% since March 9, 2009. The technology sector was up a cumulative 840% since the market low in March 9, 2009. The stock market rally in calendar year 2019 was fueled largely by expansions in share price multiples. This represented a change from the rest of the decade, when returns were driven mostly by earnings growth. As a result, some termed the market "overvalued" by several metrics and a narrow market given that returns were increasingly derived from a smaller set of tech stocks.

Going into calendar year-end 2019 (second quarter FY 2020), perceived progress in U.S./China trade negotiations and expectations for the Fed to remain on hold from raising interest rates for the foreseeable future overcame several concerns including protests in Hong Kong and tensions in the Middle East and North Korea. Outside of the U.S., rate cuts were prevalent across developed markets. GDP growth across developed markets remained weak but largely positive.

Also, in the second quarter of the fiscal year, fixed income markets posted strong returns fueled both by falling interest rates and strong investor demand, especially for higher-yielding sectors. Worries over an inverted yield curve dissipated — the spread between the 2-year and 10-year Treasury obligations was 34 basis points at year-end.

For the third quarter ending March 31,2020, the unprecedented response to the COVID-19 pandemic affected every area of the global economy. The worldwide lockdown caused spending to collapse, tax revenues to plunge, and steep job losses. The Federal Reserve stepped in to provide liquidity and support for financial markets, and governments offered massive fiscal stimulus. The U.S. stock market hit a bear market (decline of 20%) in 16 days, the second fastest drop in history (dating back to the Great Depression). The market hit a bottom on March 23rd, when the U.S. market was down almost 34%. Fortunately, the System conducted a tactical rebalance of assets from fixed income to equities a few days later when the equity markets started to recover, which helped overall performance by outperforming over 70% of our peers for the fourth quarter FY 2020.

Stock markets around the world staged spectacular recoveries in the fourth quarter of the fiscal year, providing investors with what appeared to be a V-shaped recovery. The staggered reopening of states within the U.S. drove a sharp increase in economic activity, as well as a sharp recovery in equity markets (providing double-digit returns). The technology sector continued to lead the increase, while growth led value stocks. The S&P 500 index was up over 20% for the quarter, with some sectors such as technology and energy up over 30%. As of the end of June, the System's total investments stood at $28.2 billion, an increase of approximately $2.9 billion from the quarter ending March 31,2020.

While the System's investments have posted strong returns over recent fiscal years, the investment environment ahead will likely remain a challenging one in which to achieve such levels of performance. The focus remains on evaluating how best to position the portfolio to deliver strong risk adjusted returns. Together with the PERS Board of Trustees, the Investments Staff and I will continue to work diligently to ensure the assets of the System are positioned to achieve its target return over the long term. The financial stability of the System is at the forefront of every investment decision we make.

Given all the events of this fiscal year, especially the second half selloff from the effects of the pandemic, and the subsequent rebound, we are reminded to continue being prudent in our allocation of the assets of the fund, and to remain diligent in our efforts to closely monitor and improve the portfolio. To quote Shelby M.C. Davis, "History provides a crucial insight regarding market crises; they are inevitable, painful and ultimately surmountable." Our intent is to stay the course long term even through various market cycles.

Respectfully,

L. Robert Clark

L. Robert Clark
Chief Investment Officer

Callan

Callan LLC
120 North LaSalle Street
Suite 2400
Chicago, IL 60602

Main 312.346.3536
Fax 312.346.1356

www.callan.com

September 29, 2020

Members of the Board:

Callan LLC is pleased to present the Public Employees' Retirement System of Mississippi (PERS) results for fiscal year ended June 30, 2020. After the pandemic-induced market volatility in the first quarter of 2020, markets rebounded to post positive performance for the fiscal year.

During the fiscal year, the U.S. economy continued its record expansion through February when markets experienced steep declines as a result of the COVID-19 pandemic. Non-U.S. markets were not immune as the pandemic impacted domestic and global markets alike. Unprecedented containment measures to control the spread of the virus inflicted considerable amounts of economic damage, yet markets climbed higher with the support of significant government and central bank stimulus.

In the U.S., the S&P 500 had reached a record high on February 19 before plummeting almost 34% by March 23. While the decline registered in the top five declines in the past 70 years, it ranked first in terms of how quickly the S&P 500 index went from peak to trough. The rebound in the second quarter was also dramatic as historic levels of accommodative fiscal and monetary policies helped fuel the market recovery for global equities. During the last 12 months:

- Domestic equity markets advanced overall in a period of extreme volatility. The Russell 3000 Index, an index of domestic stocks covering all capitalizations, increased 6.53%.
- International equity markets trailed the U.S. markets as the MSCI ACWI ex US IMI Index (All Country World Index ex United States) generated a negative 4.74% return.
- U.S. fixed Income markets posted another strong year as the Bloomberg Aggregate Bond Index was up 8.74%. Global markets were also positive, but trailed as the Bloomberg Global Bond Index (hedged) was up 6.07%.
- Private real estate returned 2.69% as measured by the NCREIF Property Index return. In contrast, publicly traded real estate (REITS) posted a negative 15.46% return as measured by the EPRA/NAREIT Developed REIT Index.

As of June 30, 2020, the Fund's investments produced a positive fiscal year return, yet the total market value totaled $28.25 billion, a net decrease in assets during the fiscal year after taking distributions into account. Within this volatile environment, the Fund produced a positive return of 3.35% for the fiscal year, yet trailed its benchmark by 0.92%.

Over the trailing five- and ten-year periods, the Fund exceeded its benchmark with annualized returns of 7.05% and 9.44%, respectively. The Fund has finished in line or above its benchmark in seven of the last ten fiscal years.

The Fund continues to progress through an ongoing review of the asset allocation and asset class components. An asset-liability study is scheduled for the upcoming year.

The Public Employees' Retirement System of Mississippi (PERS) maintains an appropriately diversified strategy, designed to maximize return with an acceptable risk level. Callan supports the Fund's ongoing efforts to enhance investment and its continued due diligence activities.

Sincerely,

John P. Jackson

John P. Jackson, CFA
Senior Vice President
Callan LLC

The System is committed to ensuring secure retirement benefits are available for its current and future retirees through the prudent investment of its assets.

The Board is responsible for directing the investment program in accordance with the laws of the State. As fiduciaries, the Board relies on the following principles to guide them in making investment-related decisions.

Facing each year's unique investment challenges and opportunities, the Board and investment staff remain clearly focused on the fundamental principle that investing for the future of our membership is a long-term commitment, and the prudent management of the System's assets demands constant attention and specialized expertise. The Board is committed to maintaining a well-diversified portfolio designed to minimize risks and maximize returns over the long term. The goal of the investment program is to ensure adequate funding is available to meet all current and future pension obligations.

Investment Policy Summary

INVESTMENT OBJECTIVES

The primary objective of the investment program is to ensure that the System meets its financial responsibility to provide stable benefits for its members. As such, the investment program strives to:

» achieve an annual real rate of return of at least 4.75 percent and a nominal return that meets or exceeds the actuarial assumed rate of return on investments. Currently that rate is 7.75 percent;

» protect the investment portfolio from severe extended declines in asset value during periods of adverse market conditions by prudent diversification of assets;

» ensure adequate liquidity is available to meet all benefit payments and other cash requirements; and

» ensure total portfolio risk is controlled through diversification by asset class, investment approach, and by individual investments within each asset class.

INVESTMENT CONSTRAINTS

» Laws and Regulations - The specific types of investments in which the System is authorized to invest are enumerated in Section 25-11-121 of the Mississippi Code, Annotated (1972, as amended).

» Time Horizon - Acknowledging the impact of annual investment returns on the actuarial evaluation, the System views the appropriate investment time horizon for a public pension plan to be thirty (30) years.

» Liquidity Requirements - Annual liquidity requirements must be considered when designing the portfolio structure.

RISK CONTROLS

The System's greatest risk is that plan assets will not support liabilities over the long term. To help mitigate this concern and evaluate the funded status of the System, the Board conducts annual actuarial valuations and projection reports, as well as periodic experience studies. Additionally, at least every five years, an independent external audit of the actuary is conducted to ensure the assumptions and calculation methods used are appropriate for properly computing the liabilities of the System.

STRATEGIC OBJECTIVE

The Board's strategic investment objectives are to maximize total return on assets, preserve principal, and to attain competitive investment results. By achieving the strategic objectives, the Board seeks to be able to provide adequate benefits and maintain stable contribution rates.

IMPLEMENTATION

The strategic asset allocation is the primary tool for reaching the investment objectives. The asset allocation decision is based on an evaluation of both expected returns and risk levels for the allowable asset classes. In making the asset allocation decision, the Board must strike a balance between the desired level of risk and return. The result of the asset allocation decision should be a well-diversified portfolio that reflects both the Board's desired level of return and the Board's risk tolerance level for the portfolio.

REBALANCING

The Board's investment policy includes a provision for rebalancing the asset allocation any time the current allocation is not in alignment with the long-term target. The investment staff is responsible for implementing the rebalancing activity as contained in the policy.

ROLES AND RESPONSIBILITIES

Board of Trustees

The Systems' investment activities are governed by a ten-member Board responsible for directing the investment program in accordance with the laws of the State. As fiduciaries of a pension fund, the board members rely heavily on internal staff, consultants, actuaries, and other contracted service providers to assist them in this process.

The Board is responsible for:

» approval of long-term risk tolerance and asset allocation decisions;

» approval of all formal investment policies;

» approval of the investment structure within the asset allocation policy structure;

» retention and termination of external managers, consultants, and custodial banks; and

» periodically approving the System's Investment Policy Statement.

Information and recommendations related to all investment program activities and policies are provided to the Board by the investment staff and consultant to aid the decision-making process.

Executive Director

The Board employs the Executive Director who is responsible for, among other duties, ensuring the System has in place the appropriate resources, training opportunities, and compensation structures to attract and retain a competent and qualified investment staff.

Investment Staff

The Chief Investment Officer (CIO), as head of the investment staff, is charged with maintaining the integrity of the investment program. This responsibility includes working directly with the Board on the development of investment policy, asset allocation decisions, portfolio structure, investment manager/consultant selection and termination, and custodian selection. The CIO is charged with providing advice and recommendations to the Board on all investment related matters. It is the responsibility of the CIO to make all necessary information available to the board members to assist them in making prudent informal investment decisions.

The investment staff is responsible for ensuring the Board's investment policies are implemented and for oversight of the external investment managers. Investment staff is charged with discharging their investment duties solely in the interest of the members and benefit recipients of the System.

The investment staff will ensure appropriate performance reporting schedules are in place to facilitate the Board's monitoring of the investment program. The staff's primary responsibilities include:

» monitoring investment managers' compliance to the guidelines established in their Investment Management Agreements (IMA);

» meeting and/or communicating with external managers regularly to review investment strategies and results;

» managing the short-term account assets to ensure monthly benefit payrolls are funded;

» recommending investment program enhancements; and

» implementing the adopted rebalancing policy.

Investment Consultant

The investment consultant is charged with assisting the investment staff in providing advice and recommendations to the Board on all investment matters and to discharge their investment duties solely in the interest of the System's members and benefit recipients. The consultant's responsibility is to work with the Board and staff to assist in the prudent management of the investment process.

The consultant attends all investment related meetings of the Board and provides an independent perspective on investment goals, structure, performance, and managers. The consultant reviews asset allocation, manager structure and performance, and makes recommendations to the Board as appropriate. The consultant assists in the manager search process and in keeping the Board informed as to changes within the pension and investment communities that could affect the System.

Investment Managers
External investment managers are retained for their skill and expertise within a specialized part of the System's portfolio. Investment managers are charged with managing the assets in compliance with the policies, guidelines, and objectives included in their IMAs with the System.

Investment managers construct and manage investment portfolios, which are consistent with the investment philosophy and disciplines for which they were hired. All investment managers provide periodic reporting as directed by the investment staff.

Each investment manager acts as a fiduciary to the System. Further, each manager is responsible for achieving best execution in all trades including foreign exchange transactions. Trades must meet the test of best execution as defined under Section 28(e) of the Securities and Exchange Act of 1934.

Custodial Bank
The custodial bank is responsible for settling all security trades as authorized by the investment managers. The custodial bank maintains accurate records of all transactions related to investment activity and serves as trustee of all assets within its control. It is responsible for capturing and recording all monies due to the System from investment activities and investment income. The custodial bank also is responsible for all securities lending activities, income collection, and record keeping.

PORTFOLIO REVIEW AND EVALUATION

Periodically, the Board reviews and evaluates reports on the investment performance of the System's portfolio. These reviews also include the performance of each investment manager portfolio and at the total fund level. Performance reports are generated by the investment consultant and include performance data, asset allocation, and peer group comparison information. The Board places greater emphasis on long-term rather than short-term results.

The Board recognizes that though its investments are subject to short-term volatility, it is critical that a long-term investment focus be maintained. This prevents ad hoc revisions to its philosophy and policies in reaction to either speculation or short-term market fluctuations.

To maintain this long-term view, the Board utilizes the following formal review schedule:

Formal Review Agenda Item	Review Schedule
Total Fund Performance	Quarterly
Broad Asset Allocation	At least every five years
Manager Structure	At least every three years
Investment Policy	Periodically

Standard of Care
The standard of care which governs members of the Board is the prudent person standard. This standard requires fiduciaries to discharge their duties solely in the interests of participants and their beneficiaries with such care, skill, prudence, and diligence as a person acting in like circumstances would exercise in the conduct of an enterprise of similar character and with similar aims.

Ethics and Conflicts of Interest
As it pertains to ethics and conflicts of interest, it is understood that:

» all Board members are fund fiduciaries with a duty of loyalty and responsibility to observe the exclusive benefit rule;

» all members of the Board, Executive Director, and investment staff will disclose any conflict of interest related to investments;

» all investment managers, consultants, and custodial banks shall be required to disclose all third-party relationships, which in any way involve payment of fees, shared fees, or any "soft dollar" exchanges not otherwise disclosed; and

» upon request, each investment manager and consultant will disclose its ethics policy to the Board.

Investment Management Fees

Investment management fees are closely monitored by the investment staff for reasonableness. Comparative fee information is obtained from various sources including the investment consultant and other annual fee surveys in which the System participates. Fees paid to each external investment management firm are presented to the Board periodically.

Proxy Voting

The Board charges its investment managers with the responsibility of voting proxies on the System's behalf and in its best interest. It is the intent of the Board to have proxies voted in a manner solely to protect the interest of its participants. As a rule, proxies should be voted in such a manner as to avoid activity which would:

- be detrimental to the long-term interests of the System's holdings;
- excessively insulate present management from take-over or stockholder rejection;
- reduce investment liquidity; and
- reduce shareholder interests.

Proxies are to be voted and submitted in adequate time for the proxy to be received by the appropriate corporate official. A record of the proxy voting positions taken by each investment manager should be reported to the investment staff by the 30th calendar day following the end of each quarter.

Securities Lending

Lending securities to qualified borrowers enables the System to realize incremental income on assets currently in the portfolio. This represents an opportunity to increase the return on the fund by reinvesting the income generated.

The custodial bank, as lending agent for the System, is responsible for the lending and cash collateral reinvestment activities. Cash loans will have an initial collateral margin of 102.00 percent for loaned securities denominated in US dollars or whose primary trading market is located in the US, or sovereign debt issued by foreign governments denominated in US dollars and 105.00 percent for loaned securities which are not in denominations of US dollars or whose primary trading market is not located in the US, with the potential of higher values dependent on the jurisdiction in which such loaned securities are customarily traded. Non-cash collateral is at 110.00 percent of the market value of loaned securities, or potentially higher, dependent on the jurisdiction in which the loaned securities are customarily traded.

Manager Watch List or Termination Guidelines

Managers may be placed on a Watch List for either qualitative or quantitative factors.

Qualitative Factors - Qualitative factors that may be grounds for being placed on a Watch List or terminated include, but are not limited to the following:

- violation of investment guidelines;
- deviation from stated investment style;
- turnover of key personnel;
- change in ownership;
- litigation; and
- failure to disclose significant information including potential conflicts of interest, regulatory agency investigations and/or sanctions, and any other such pertinent occurrences.

The Board can place a manager on the Watch List at any time based on qualitative factors. Watch List status, based on qualitative factors, mandates closer monitoring of the manager's organization. The Board will notify the manager of its decision to place the firm on a Watch List. At the end of six months the Board will reevaluate and decide what action, if any, to take.

Quantitative Factors

Quantitative factors pertain primarily to performance. The performance of the Plan's investment managers is reviewed by the Board on a continuing basis. Below are some of the factors to be considered in determining the appropriateness of placing an investment manager on a Watch List.

Performance Test	Benchmark	Fail Criteria
Test 1 – Performance relative to market index, for 4 consecutive quarters of rolling 3-year period returns	Annualized performance relative to the agreed upon market index or appropriate benchmark	Managers fail if they underperform their index or benchmark over 4 quarters of rolling 3-year periods
Test 2 – Performance relative to a peer group for 4 consecutive quarters of rolling 3-year period returns	Performance compared to that of an appropriate peer group	Managers fail if their performance is below the 50th percentile over 4 quarters of rolling 3-year periods

The Board will notify a manager of its decision to place them on a Watch List. The investment manager will be informed that failure to show steady improvement in performance could result in termination or a reduction of the assets managed for the System. The Board, at its discretion, can place an investment manager on a Watch List, or terminate an investment manager at any time with a 30-day notice.

Strategic Asset Allocation Policy
The primary method utilized in achieving the investment return objectives is the allocation of assets. The Board adopts an asset allocation policy as the framework to ensure the assets are invested in a prudently managed and well diversified portfolio designed to meet the established return targets. The strategic target allocation below is intended to accomplish the Board's objectives over time. In addition to the target allocations, the Board has established target ranges for each asset class. These ranges provide the Board and staff the latitude to exercise management discretion in a tactical manner as appropriate.

Strategic Asset Allocation	Targets	Rebalancing Ranges
Equity Securities	61%	±5%
Debt Securities	20%	±5%
Real Estate	10%	±5%
Private Equity	8%	±5%
Cash Equivalents	1%*	±1%

** Cash equivalents will consist of the assets in the short-term account used for benefit payments.*

The current long-term performance measurement for each asset class is as follows:

Asset Class	Benchmark
Equity Securities	MSCI ACWI IMI Index
Debt Securities	Bloomberg Barclays US Aggregate Index
Real Estate	NCREIF Property Index
Private Equity	S&P 500 Index + 3%
Cash Equivalents	30-day US T-bills

Investment Summary

As of June 30, 2020, the System's portfolio value as reported by the investment consultant totaled $28.2 billion. This represents a decrease of approximately $400 million compared to fiscal year 2019. As is common in mature pension plans, the System's annual distributions again surpassed contributions made by employees and employers. For fiscal year 2020, contributions totaled $1.81 billion, while the System paid out approximately $2.95 billion to members and beneficiaries.

ASSET ALLOCATION
One of the most important decisions made by the Board is that of determining the long-term asset allocation policy for the investment portfolio. The System's investment consultant conducts periodic asset/liability allocation studies that include consideration of projected future liabilities, expected risk, return, correlations for various asset classes, and the System's statutory investment restrictions. The strategic asset allocation targets currently consist of 61.00 percent for equity securities, a 20.00 percent target allocation for debt investments, and a 1.00 percent allocation to cash equivalents. Real estate investments are targeted at 10.00 percent, while the target allocation for private equity is 8.00 percent.

The asset allocation at year end, excluding investments purchased with securities lending cash collateral, was 62.09 percent public equities, 18.60 percent debt securities, 9.54 percent public and private real estate investments, 8.76 percent private equity, and 1.01 percent cash equivalents.

It is important to note that the asset allocation decision for a public pension system is unique to the individual plan and is based on that plan's specific liability requirements, as well as any statutory investment restrictions under which the investment program must operate. As a result, the System's allocation could be somewhat different than that of other public pension plans. From time to time, these differences can result in significant differences in investment returns.

SECURITIES LENDING

The System's securities lending program is managed by its custodial bank, BNY Mellon. This program generates ancillary income by lending securities from the System's portfolio to securities dealers in return for a premium payment on loans collateralized by securities and earnings generated by the investment of cash collateral. All cash loans are secured by the receipt of collateral valued at 102.00 or 105.00 percent of the value of the loaned security, while non-cash loans are collateralized at 110.00 percent. In fiscal year 2020, the securities lending program generated approximately $17.9 million* in additional revenue for the investment program.

** $17.9 million were the earnings distributed for the fiscal year; $15.4 million was the reported net income as required by Governmental Accounting Standards Board Statement No. 28.*

Portfolio Performance

All returns for periods greater than one year are annualized.

Callan LLC is employed by the Board of Trustees as the System's investment consultant. Their services include calculating investment returns both for the total fund and for each of the investment managers retained to invest the System's assets. All returns are calculated by Callan using a time-weighted rate of return methodology based on portfolio market values determined by the System's custodial bank.

Fiscal 2020 was a year of extreme volatility. A decline in US stocks of over 30.00 percent and near full recovery all within the span of 60 days marked one of the most unprecedented market environments in history. With a well-diversified portfolio and by a timely rebalance from fixed income to equities (at near bottom) positive results were still achieved. The total portfolio gross return of 3.35 percent ranked just 0.92 percent below the System's customized Target Policy benchmark's 4.27 percent return and ranked in the 59th percentile of the funds in the Callan Public Very Large Defined Benefit (DB) universe. The System's three-year total return of 6.53 percent beat the peer-universe median return of 6.50 percent, and the five-year return of 7.05 percent outpaced its policy benchmark and the returns of 73.00 percent of the funds in the peer universe. For the 10 years ended June 30, 2020, the portfolio returned 9.44 percent, outperforming the Target Policy benchmark return of 8.91 percent and the peer-universe median return of 8.65 percent.

The System's portfolio structure is designed to achieve success over the long term. Even with the challenges brought on by Covid-19 and the effects it had on the global financial markets, and the portfolio's shorter-term returns, longer-term results are still strong, as evidenced by the 25-year and 30-year returns of 7.53 and 8.05 percent, respectively.

PUBLIC EQUITY PORTFOLIO

The System's domestic equity portfolio returned 4.52 percent for the fiscal year, while the benchmark Russell 3000 Index returned 6.53 percent, ranking PERS in the 34th percentile of the Callan Public Plan domestic equity universe. While disappointing in absolute terms, in relative terms, the international equity portfolio returns of negative 2.64 percent beat the MSCI All Country World Index - Investable Markets Index (MSCI ACWI - IMI) ex US return of negative 4.74 percent, placing it in the top quartile Callan Public Plan international equity universe for the year. Global equities posted returns of 3.02 percent, exceeding the custom benchmark return of 1.17 percent.

Combining all segments of the public equity portfolio, the program returned 1.68 percent for the fiscal year outperforming the 1.17 percent return of the benchmark MSCI ACWI - IMI. The total public equity portfolio returns for the three-year period ended June 30 was 6.05 percent, and the five-year return was 6.80 percent. These gains also exceeded the benchmark MSCI ACWI-IMI returns of 5.55 and 6.11 percent for the three-year and five-year periods, respectively. For the 10 years ended June 30, the public equity portfolio's return of 10.54 percent exceeded the benchmark index return of 9.10 percent.

As of June 30, the System had allocated 28.76 percent of the total portfolio to domestic equities, 20.61 percent to international markets, and 12.70 percent to global equities. Within the domestic equity portfolio 69.42 percent was invested in large-capitalization (cap), 18.34 percent in mid-cap, and 12.24 percent in small-cap securities.

The total public equity was divided into approximately 60.00 percent active and 40.00 percent passive management.

DEBT PORTFOLIO

At the close of the year, the debt portfolio included both active and passive core US portfolios, core-plus strategies that incorporate high-yield debt, non-US debt, as well as US core debt exposures, global bond portfolios, and a dedicated emerging market debt portfolio.

The total debt portfolio's 7.38 percent return for the year trailed the Bloomberg Aggregate Index benchmark's performance of 8.74 percent. For the three-year and five-year periods ended June 30, debt portfolio returns were 5.54 and 5.16 percent, respectively, topping the Index's 5.32 and 4.30 percent returns for the same periods. The ten-year performance for the portfolio was 5.01 percent, while the Index returned 3.82 percent.

The System ended the year with 18.60 percent of the total portfolio invested in debt securities. The debt portfolio allocations consisted of 29.61 percent in both active and passive core US mandates, 35.31 percent core-plus, and 24.74 percent hedged global bond strategies. The remaining 10.34 percent was invested in emerging market debt.

REAL ESTATE PORTFOLIO

At June 30, the real estate investment program consisted of investments in core and value-added real estate funds, timber, and public REITs. The total real estate portfolio returned 1.17 percent for the fiscal year, trailing its custom benchmark return of 2.69 percent. The longer-term three-year return of 5.72 percent exceeded the benchmark return of 5.44 percent. The five-year and ten-year portfolio returns of 7.40 and 10.06 percent also topped the benchmark's 6.77 and 9.85 percent respective returns.

The core real estate portfolio returned 0.89 percent for the year, underperforming the benchmark NFI-ODCE Equal Weighted Net Index return of 1.70 percent. Core real estate saw a three-year return of 4.28 percent, while the Index returned 5.09 percent for the same period. For the five-years ending June 2020, the core real estate portfolio's return of 6.02 percent lagged the 6.72 percent return of the Index.

The System's value-added real estate portfolio consisting of 18 limited partnerships continued to post strong returns with a 11.25 percent return for the year to beat the benchmark NCREIF Total Index return of 2.69 percent. For longer periods the program's returns posted three-year, five-year, and ten-year gains of 13.25, 13.51, and 13.58 percent, respectively. For the same periods, the Index had returns of 5.44, 6.77, and 9.70 percent.

The System's timber portfolio, comprised of both US and non-US timber investments, returned 8.65 percent for the fiscal year. NCREIF Timberland Index returns for the same period were 0.34 percent. Longer term, with the help of a near term recovery in Timber, the portfolio's three-year, five-year, and ten-year return of 7.78, 8.46, and 7.61 percent topped the respective 2.28, 2.71, and 4.39 percent returns of the NCREIF Timberlands Index.

The public REIT portfolio, comprised of both US and non-US REIT investments, returned a negative 10.20 percent for the year and 2.32 percent for three-year period ended June 30. The custom REIT portfolio benchmark returned a negative 16.58 and a negative 1.31 percent for the same periods. The five-year return of 4.90 percent outpaced the 2.36 percent return of the benchmark. Additionally, the portfolio's ten-year return of 8.78 percent outpaced the benchmark return of 7.77 percent.

PRIVATE EQUITY PORTFOLIO

The System's private equity program consists of six separate fund-of-funds limited partnership commitment series investing in buyouts, venture capital/growth, distressed opportunity, and special situation opportunities. On a time-weighted basis, the System's private equity investments returned 3.35 percent for the fiscal year, underperforming the 11.11 percent benchmark, the S&P 500 Index plus 3.00 percent. The private equity program saw returns of 11.87, 13.22, and 12.24 percent for the three-year, five-year, and ten-year periods, respectively, while the benchmark returns were 14.04, 13.93, and 17.69* percent for the same periods.

** Prior to 2013 the private equity benchmark was the S&P 500 Index plus 5 percent.*

SHORT-TERM PORTFOLIO

Cash flows generated by employee and employer contributions to the System and from ancillary income-generating activities, including securities lending and the System's commission recapture program, are invested by the System's investment staff. These assets are used to fund monthly benefits, refunds, and annual Cost-of-Living-Adjustment (COLA) payments. As interest rates at the short end of the yield curve remained low throughout the fiscal year, the return on the short-term investment program was a modest 1.29 percent. The cash portion of the accounts managed by external investment managers is invested in interest-earning cash equivalents. All short-term investments are made in accordance with state law and policies set by the Board.

Defined Benefit Plans
For Fiscal Year Ended June 30, 2020

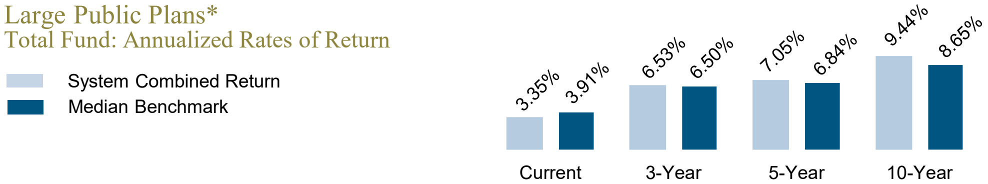
	Asset Allocation at Fair Value	Long-Term Target Asset Allocation
Equity Securities	62.1%	61.0%
Debt Securities	18.6	20.0
Real Estate	9.5	10.0
Private Equity	8.8	8.0
Cash & Equivalents	1.0	1.0

Defined Benefit Plans:
Performance Summary
For Fiscal Year Ended June 30, 2020

	Annualized			
	Current	3-year	5-year	10-year
Total Fund:				
System Combined Return*	3.35%	6.53%	7.05%	9.44%
Callan Public Funds Very Lg DB Plan Benchmark	4.27	6.66	6.89	8.91
Public Funds>$10 Billion Median Benchmark	3.91	6.50	6.84	8.65
Total Equity Securities:				
Total Equity Managers Composite*	1.68	6.05	6.80	10.54
Total Equity Custom Benchmark	1.32	5.85	6.49	9.83
Domestic Equity:				
Domestic Equity Managers Composite*	4.52	9.20	9.09	13.39
Russell 3000 Index	6.53	10.04	10.03	13.72
Domestic Equity Custom Benchmark	3.85	8.78	9.13	13.27
International Equity Securities:				
International Equity Managers Composite*	(2.64)	1.58	3.36	5.96
International Equity Benchmark	(4.74)	0.96	2.30	5.07
International Equity Custom Benchmark	(3.34)	2.04	3.27	5.57
Global Equity Securities:				
Global Equity Managers Composite*	3.02	7.26	7.48	10.84
Global Equity Benchmark	1.17	5.55	6.14	9.20
Debt Securities:				
Debt Securities Managers Composite*	7.38	5.54	5.16	5.01
Fixed Income Custom Benchmark	7.39	5.17	4.43	4.11
Real Estate:				
Commingled Funds and REITS Composite*	1.17	5.72	7.40	10.06
Real Estate Benchmark	2.69	5.44	6.77	9.85
Private Equity:				
Private Equity Composite*	3.35	11.87	13.22	12.24
Private Equity Benchmark	11.11	14.04	13.93	17.69

** Calculations for the System are prepared using a time-weighted rate of return methodology based upon fair values.*

Large Public Plans*
Total Fund: Annualized Rates of Return



** Public funds >$10 billion median.*

Defined Benefit Plans:
Non-US Investments by Country
Fair Value at June 30, 2020

Angola	0.05%	Ghana	0.09%	New Zealand	0.22%
Argentina	0.14%	Greece	0.23%	Nigeria	0.05%
Armenia	0.05%	Guatemala	0.02%	Norway	0.38%
Australia	4.19%	Guernsey CI	0.13%	Oman	0.11%
Austria	0.28%	Honduras	0.02%	Pakistan	0.04%
Azerbaijan	0.15%	Hong Kong	2.11%	Panama	0.35%
Bahrain	0.10%	Hungary	0.30%	Paraguay	0.16%
Belarus	0.01%	Iceland	0.04%	Peru	0.10%
Belgium	0.47%	India	1.76%	Philippines	0.08%
Bermuda	0.75%	Indonesia	0.85%	Poland	0.03%
Brazil	2.14%	Ireland	3.78%	Portugal	0.42%
British Virgin Islands	0.11%	Isle Of Man	0.06%	Puerto Rico	0.03%
Cambodia	0.01%	Israel	0.60%	Qatar	0.36%
Canada	8.00%	Italy	1.56%	Romania	0.11%
Cayman Islands	2.85%	Jamaica	0.03%	Russia	1.39%
Chile	0.40%	Japan	13.45%	Saudi Arabia	0.33%
China	3.95%	Jersey CI	0.27%	Senegal	0.10%
Colombia	0.24%	Jordan	0.11%	Serbia	0.05%
Costa Rica	0.04%	Kazakhstan	0.04%	Singapore	0.78%
Cote d’Ivoire	0.06%	Kenya	0.11%	Slovenia	0.05%
Croatia	0.12%	Kuwait	0.04%	South Africa	0.87%
Curacao	0.04%	Lebanon	0.01%	South Korea	3.34%
Cyprus	0.07%	Liberia	0.02%	Spain	1.33%
Czech Republic	0.02%	Lithuania	0.02%	Sri Lanka	0.10%
Denmark	1.71%	Luxembourg	1.07%	Supranational Geographic Focus	0.24%
Dominican Republic	0.22%	Macau	0.06%	Sweden	2.30%
Ecuador	0.06%	Macedonia	0.06%	Switzerland	4.37%
Egypt	0.24%	Malaysia	0.12%	Taiwan	1.82%
El Salvador	0.02%	Malta	0.02%	Thailand	0.37%
Ethiopia	0.02%	Marshall Islands	0.01%	Tunisia	0.03%
Finland	0.73%	Mauritius	0.03%	Turkey	0.50%
France	4.64%	Mexico	1.30%	Ukraine	0.17%
Gabon	0.05%	Mongolia	0.03%	United Arab Emirates	0.37%
Georgia	0.03%	Morocco	0.12%	United Kingdom	8.99%
Germany	4.90%	Netherlands	4.69%	Uruguay	0.03%
				Venezuela	0.01%

Defined Benefit Plans:
Equity Portfolio

Equity Portfolio Summary

Total Equity Securities:	Total Number of Shares of Equity Securities Held:	Total Number of Issues of Equity Securities Held:
$17,279,325,237	3,745,443,531	4,382

Equity Portfolio by Industry Type
Fair Value at June 30, 2020

Industry	Percent
Basic Industries	3.61%
Communications	15.73
Consumer Cyclical	9.34
Consumer Non-Cyclical	22.72
Diversified	0.20
Energy	2.56
Financial Services	16.23
Industrial	10.74
Technology	16.80
Utilities	2.07
Totals	**100.00%**

Ten Largest Equity Holdings

	Shares	Fair Value
Microsoft Corporation	2,368,601	$482,033,990
Amazon.com, Inc.	144,892	399,730,947
Apple, Inc.	887,032	323,589,274
Facebook, Inc.	904,418	205,366,195
Alphabet Inc-Class C	133,307	188,444,108
Alphabet Inc-Class A	126,120	178,844,466
UnitedHealth Group, Inc.	523,675	154,457,941
Berkshire Hathaway, Inc.	697,312	124,477,165
Comcast Corporation	2,690,997	104,895,063
Alibaba Group Holding Ltd	470,255	101,434,004
Totals	**8,946,609**	**$2,263,273,153**

A complete list of portfolio holdings is available upon written request.

Defined Benefit Plans:
Private Equity Portfolio

Private Equity Portfolio Summary

Total Private Equity Investments:
$2,393,241,701

Private Equity Portfolio By Strategy
June 30, 2020

Strategy	Percent
Buyouts	64.53%
Special Situations	20.72
Venture Capital	14.75
Total	**100.00%**

Defined Benefit Plans:
Bond Portfolio

Bond Portfolio Summary*

Total Bond Investments:	Total Par of Bond Investments Held:	Total Number of Bond Issues Held:
$7,205,393,558	$51,860,577,588	5,247

Corporate Bond Investments by Industry Type*
Fair Value at June 30, 2020

Industry	Percent
Communications	5.39%
Consumer	17.05
Energy	6.89
Financial	56.53
Industrial	6.19
Technology	3.18
Utilities	4.64
Miscellaneous	0.13
Totals	**100.00%**

** Includes investments purchased with cash collateral received in the securities lending program.*

Ten Largest Long-term Corporate Bond Holdings*

	PAR	Fair Value
New York Life Global Funding	64,797,000	$64,808,454
Australia & New Zealand Banking Group Ltd.	59,100,000	59,100,000
Metropolitan Life Global Funding I	51,400,000	51,451,528
Principal Life Global Funding II	48,900,000	48,930,786
Massachusetts Mutual Global Funding	48,200,000	48,142,979
ABN AMRO Bank Netherlands	47,950,000	48,039,470
Citibank NA	46,555,000	46,617,013
Loomis Sayles Senior Loan Fund	41,764,902	41,764,902
Metropolitan Life Global Funding I	38,905,000	38,930,043
Cooperative Rabobank UA/NY	37,996,000	38,106,342
Totals	**485,567,902**	**$485,891,517**

A complete list of portfolio holdings is available upon written request.

Real Estate Investment Portfolio Summary

Total Real Estate Investments:	Total Number of Shares* of Real Estate Investments Held:	Total Number of Issues of REITs Held:
$2,666,789,002	462,650,937	113

** Includes units of commingled funds and shares of REITs.*

Portfolio Distribution by Property Type
Fair Value at June 30, 2020

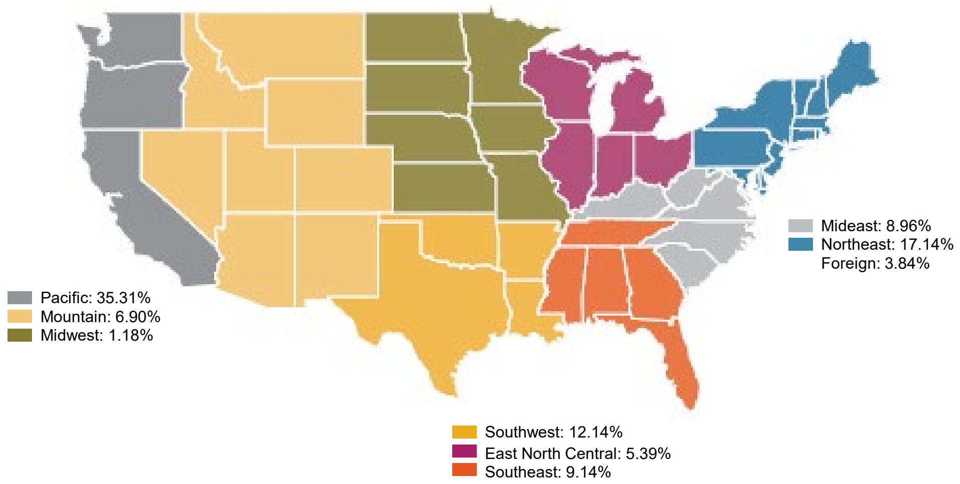
Property Type	Fair Value
Apartments	22.02%
Health Care	2.01
Hotels	0.91
Industrial	17.83
Office	30.61
Residential	6.28
Retail	12.49
Self-Storage	1.29
Timber	3.51
Other	3.05
Totals	**100.00%**

Ten Largest REIT Holdings

	Shares	Fair Value
Prologis, Inc.	303,180	$28,295,789
Equinix, Inc.	32,742	22,994,707
Invitation Homes, Inc.	530,616	14,607,858
Ventas, Inc.	328,815	12,041,205
Welltower, Inc.	227,401	11,768,002
Public Storage	60,148	11,541,800
Healthpeak Properties, Inc.	389,948	10,746,967
UDR, Inc.	243,000	9,083,340
Digital Realty Trust, Inc.	60,070	8,536,548
Equity Residential	127,380	7,492,492
Totals	**2,303,300**	**$137,108,708**

A complete list of portfolio holdings is available upon written request

Portfolio Distribution By Geographic Location
Fair Value at June 30, 2020



Defined Benefit Plans:
Net Investment Income by Source
Last 10 Fiscal Years

[in thousands]

Fiscal Year	Bond Interest Income	Dividend Income	Short-term Income	Realized Gain on Investments	Appreciation (Depreciation) in Fair Value of Investments
2011	$185,818	$326,174	$14,001	$1,200,877	$2,560,115
2012	186,038	323,610	9,460	585,346	(1,016,522)
2013	184,775	339,386	12,390	920,422	1,198,511
2014	176,286	392,423	8,627	1,264,402	2,213,619
2015	183,456	365,567	8,045	1,450,502	(1,087,742)
2016	177,516	346,655	14,723	574,260	(909,931)
2017	173,692	351,444	14,411	1,136,714	1,900,834
2018	181,409	368,696	19,638	1,907,081	38,573
2019	195,358	380,435	29,032	957,634	260,730
2020	185,298	356,415	19,798	921,453	(525,979)

Fiscal Year	Net Income from Securities Lending	Total Income	Manager* and Trading Fees	Net Income from Investments
2011	$18,107	$4,305,092	$(42,765)	$4,262,327
2012	17,293	105,225	(44,299)	60,926
2013	14,645	2,670,129	(50,210)	2,619,919
2014	16,453	4,071,810	(83,449)	3,988,361
2015	13,778	933,606	(88,884)	844,722
2016	19,429	222,652	(89,116)	133,536
2017	22,333	3,599,428	(95,916)	3,503,512
2018	17,151	2,532,548	(105,462)	2,427,086
2019	15,535	1,838,724	(104,675)	1,734,049
2020	15,438	972,423	(99,541)	872,882

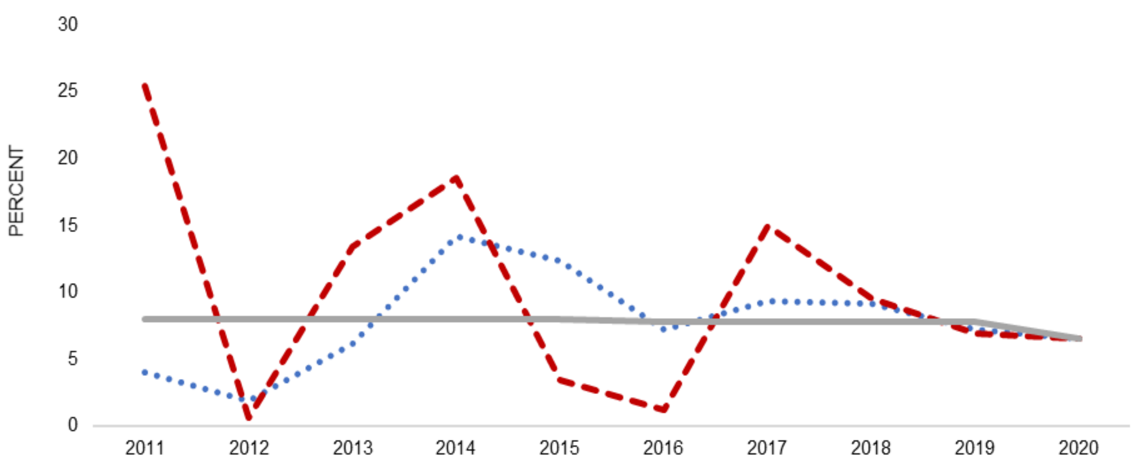
** Manager fees are subject to estimation.*

Defined Benefit Plans:
Ten-Year Total Pension Investment Rates of Return

[fair value in millions]

Fiscal Year	Investments before Lending Activities	Smoothed Rate of Return	Fair Value Rate of Return	Actuarial Assumed Rate of Return
2011	$20,314	4.00%	25.40%	8.00%
2012	19,578	1.90	0.59	8.00
2013	21,947	6.10	13.37	8.00
2014	24,600	14.20	18.58	8.00
2015	24,735	12.30	3.40	8.00
2016	23,938	7.21	1.15	7.75
2017	26,592	9.31	14.96	7.75
2018	28,280	9.16	9.48	7.75
2019	28,645	7.19	6.87	7.75
2020	27,957	6.72	3.35	7.75

Ten-year Total Pension Investment Rates of Return



Smoothed Rate of Return *consists of investment income in a surplus or deficit of the assumed 7.75 percent on fair value smoothed over a five-year period with 20.00 percent of a year's surplus or deficit being recognized each year beginning with the current year. PERS, MHSPRS, and SLRP smoothed rates have been averaged. MRS is excluded as an agent multi-employer plan.*

Fair Value Rate of Return *consists of cash income plus gains and losses due to changes in fair value, whether realized or unrealized (before deduction of investment fees).*

Actuarial Assumed Rate *is the assumed rate of return on the fair value of assets and is used in establishing retirement contribution rates and in determining current benefit reserve requirements.*

Defined Benefit Plans:
Portfolio Detail Illustrated by Investment Manager
At June 30, 2020

Investment Manager	Fund Type	Date Initiated	Fair Value Percent of Total Portfolio*
Equity Securities:			
Northern Trust Investments, Inc.	Passive Large Cap (S&P 500 Index)	July 1985	16.10%
Northern Trust Investments, Inc.	EAFE (Index)	December 2017	6.48
Eagle Capital Management, LLC	Large Cap	January 2005	4.12
Harding Loevner, LP	Global	February 2012	3.57
Acadian Asset Management, LLC	Global	July 2005	3.29
Epoch Investment Partners, Inc.	Global	February 2012	3.07
Baillie Gifford & Company	ACWI Ex-US	August 2014	2.98
Longview Partners, LLC	Global	August 2015	2.91
Arrowstreet Capital, LP	ACWI Ex-US	June 2013	2.84
Artisan Partners, LP	Domestic Mid Cap Growth	September 2002	2.33
Marathon Asset Management, LLP	ACWI Ex-US	May 2016	2.30
Fisher Investments	Emerging Markets	April 2016	2.18
Lazard Asset Management, LLC	Emerging Markets	April 1998	1.82
Northern Trust Investments, Inc.	Passive Mid Cap (Russell Index)	May 2019	1.57
Wellington Management Company, LLP	Domestic Mid Cap Value	October 2001	1.45
Riverbridge Partners, LLC	Small Cap Growth	November 2013	1.38
Wellington Management Company, LLP	Domestic Small Cap Core	July 2002	1.37
Principal Global Investors, LLC	International Small Cap	September 2018	1.10
Mondrian Investment Partners Limited	International Small Cap	May 2011	1.05
Dimensional Fund Advisors, Inc.	Small Cap Value	July 2002	0.82
Subtotal			**62.73%**
Debt Securities:			
Loomis Sayles & Company, LP	Core Plus	August 2009	3.31%
Prudential Investment Management, Inc.	Core Plus	January 2012	3.30
Pacific Investment Management Company	Global	February 2013	2.32
AllianceBernstein, LP	Global	February 2013	2.31
Manulife Asset Management, LLC	Domestic Core	March 2017	1.93
Wellington Management Company, LLP	Emerging Market	May 2010	1.92
Pacific Investment Management Company	Domestic Core	August 1983	1.84
Northern Trust Investments, Inc.	Passive Domestic Core (BB Agg Index)	December 2017	1.79
Subtotal			**18.72%**

** Includes cash and cash equivalents.*

Investment Manager	Fund Type	Date Initiated	Fair Value Percent of Total Portfolio*
Real Estate:			
Principal Global Investors, LLC	Core	June 2003	3.00%
J.P. Morgan Investment Management, Inc.	Core	July 2012	1.53
UBS Realty Investors, LLC	TPF Core	June 2003	1.44
UBS Realty Investors, LLC	TPG Core Plus	January 2011	0.75
CenterSquare Investment Management	Domestic REITs	June 2017	0.74
Cohen & Steers Capital Management, Inc.	Global REITs	October 2010	0.73
Hancock Natural Resource Group, Inc.	Timber	March 2008	0.34
Angelo Gordon & Company	Fund IV – value added	August 2015	0.18
T.A. Associates Realty	Fund XI – value added	April 2016	0.18
Invesco, LP	Fund V – value added	February 2019	0.12
AEW Capital Management, LP	Fund VIII – value added	July 2016	0.11
Westbrook Partners	Fund X – value added	March 2016	0.11
Invesco, LP	Fund IV – value added	April 2015	0.09
Heitman, LLC	Fund IV – value added	September 2017	0.08
Angelo Gordon & Company	Fund X – value added	July 2018	0.08
AEW Capital Management, LP	Fund VII – value added	June 2013	0.05
Heitman, LLC	Fund III – value added	November 2013	0.04
Angelo Gordon & Company	Fund III – value added	January 2012	0.03
T.A. Associates Realty	Fund XII – value added	March 2020	0.02
T.A. Associates Realty	Fund X – value added	January 2013	0.02
Subtotal			**9.64**
Private Equity:			
Pathway Capital Management, LLC	Series 2013 Diversified	April 2013	2.67%
GCM Grosvenor Diversified Partners, LP	Series 2014 Diversified	February 2014	1.77
Pathway Capital Management, LLC	Series 2016 Diversified	July 2016	1.75
Pathway Capital Management, LLC	Series 2008 Diversified	December 2008	1.45
GCM Grosvenor Diversified Partners, LP	Series 2009 Diversified	June 2009	1.11
GCM Grosvenor Diversified Partners, LP	Series 2018 Diversified	July 2018	0.16
Subtotal			**8.91**
Total			**100.00%**

** Includes cash and cash equivalents.*

Note: AEW Capital Management, LP Fund V, AEW Capital Management, LP Fund VI, and Angelo Gordon & Company Fund II are not shown due to small residual balances.

In addition to the cash equivalent portfolio managed in-house, 35 firms managed 57 different investment portfolios for the System at year end.

Defined Benefit Plans:
Investment Fees & Commissions
For the Year Ended June 30, 2020

	Assets Under Management	Fees*
Investment Managers:		
Equity Securities	$17,483,650,569	$50,860,024
Debt Securities	5,216,965,109	10,920,340
Real Estate	2,688,762,156	22,835,583
Private Equity	2,484,400,502	14,427,345
Totals	**$27,873,778,336**	**$99,043,292**

Other Investment Service Fees:	
Securities Lending Agent/Cash Management Fees	$3,154,236
Investment Consultant Fees	666,555
Custodial & Global Out-of-Pocket Expenses	498,294
Totals	**$4,319,085**

** Management fees are subject to estimation.*

Defined Benefit Plans:
Brokerage Commissions Paid*
For the Year Ended June 30, 2020

	Number of Shares Traded	Commissions	Commissions Per Share
Brokerage Firm, Including Subsidiaries:			
J.P. Morgan Securities	335,925,953	$405,101	$0.001
Merrill Lynch & Company	59,565,786	349,658	0.006
Morgan Stanley & Company	50,329,081	302,841	0.006
Goldman Sachs & Company	48,457,313	281,039	0.006
Citigroup, Inc.	85,992,981	228,382	0.003
Credit Suisse	43,358,700	212,964	0.005
HSBC Securities, Inc.	194,906,147	211,151	0.001
Jefferies & Company, Inc.	40,577,365	204,610	0.005
UBS AG	59,554,163	189,330	0.003
Instinet, Inc.	88,176,514	144,999	0.002
Sanford C. Bernstein Company, LLC	132,940,420	139,182	0.001
Cowen & Company	15,768,526	122,868	0.008
Liquidnet, Inc.	7,481,061	121,891	0.016
Barclays Capital	6,399,521	91,711	0.014
Macquarie Securities	42,903,997	89,449	0.002
Daiwa Securities Group, Inc.	6,022,751	82,502	0.014
Investment Technology Group	13,569,273	73,928	0.005
Credit Lyonnais SA	53,747,848	63,799	0.001
Jones Trading Institutional Services, LLC	1,325,796	62,956	0.047
Wells Fargo Securities	2,200,270	57,810	0.026
Exane SA	13,359,316	57,640	0.004
Others (less than $55,000)	140,838,173	858,832	0.006
Commission Recapture Income	n/a	(118,687)	-
Totals	**1,443,400,955**	**$4,233,956**	**$0.003**

** Approximate figures provided by Bank of New York Mellon.*

Defined Benefit Plans:
Investment Summary
For the Year Ended June 30, 2020

[in thousands]

	July 1, 2019 Beginning Fair Value *	Purchases	Sales & Maturities	Increase (Decrease) in Fair Value	June 30, 2020 Ending Fair Value **	Percent of Total Fair Value
Equities	$16,974,061	$5,793,455	$5,181,646	$(306,545)	$17,279,325	55.96%
Long-term Debt Securities	8,030,986	7,877,074	8,735,621	32,955	7,205,394	23.34
Private Equity	2,323,258	376,928	191,969	(114,975)	2,393,242	7.75
Real Estate	2,893,098	544,419	630,874	(139,854)	2,666,789	8.64
Short-term Investments	1,422,200	51,334,150	51,426,424	(81)	1,329,845	4.31
Totals	**$31,643,603**	**$65,926,026**	**$66,166,534**	**$(528,500)**	**$30,874,595**	**100.00%**

** Includes investment securities on loan to broker-dealers with a fair value of $4,380,408. It also includes the securities purchased with the cash collateral received in the lending program with a fair value of $3,417,160. As of June 30, 2019, 13.84 percent of the total fair value of investments were on loan to broker-dealers. To arrive at the net asset value of investments of $28.6 billion, the fair value total must be adjusted by $(3.0 billion), which represents the fair value of cash, sweep investments, accrued interest and dividends, net receivables and payables for pending trades, and the securities lending obligations.*

*** Includes investment securities on loan to broker-dealers with a fair value of $3,609,964. It also includes the securities purchased with the cash collateral received in the lending program with a fair value of $2,918,010. As of June 30, 2020, 11.69 percent of the total fair value of investments were on loan to broker-dealers. To arrive at the net asset value of investments of $28.2 billion, the fair value total must be adjusted by $(2.7 billion), which represents the fair value of cash, sweep investments, accrued interest and dividends, net receivables and payables for pending trades, and the securities lending obligations.*

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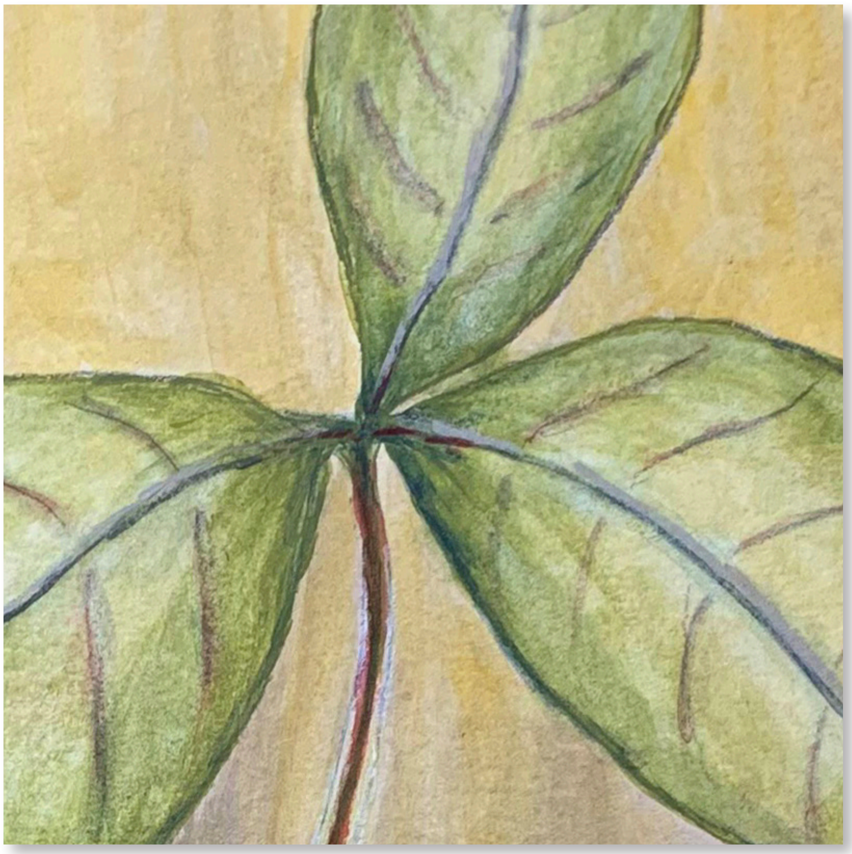

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CONSULTING, LLC
The experience and dedication you deserve

September 30, 2020

Board of Trustees
Public Employees' Retirement System
of Mississippi
429 Mississippi Street
Jackson, MS 39201-1005

Dear Board Members:

The basic financial objective of the Public Employees' Retirement System of Mississippi (PERS) is to establish and receive contributions which:

(1) When expressed in terms of the percents of active member payroll will remain approximately level from generation to generation of Mississippi citizens, and which

(2) When combined with present assets and future investment return will be sufficient to meet the present and future financial obligations of PERS.

In addition, PERS maintains a funding policy that was revised in 2019. In order to meet the objectives listed above, the System will strive to meet the following funding goals:

(1) To maintain an increasing trend in the funded ratio over the projection period with an ultimate goal of being approximately 100% funded;

(2) Require clear reporting and risk analysis of metrics used by the actuary;

(3) Provide contribution stability as a percentage of payroll.

In order to measure progress toward this fundamental objective and funding policy, PERS has an annual actuarial valuation performed. The valuation (i) measures present financial position, and (ii) establishes contribution requirements that provide for the current cost and level percent of payroll amortization of unfunded actuarial accrued liability over a reasonable period. The Board adopted a new funding policy which sets the funding goals, objectives and metrics for possible changes in the contribution rate for future valuations. The funding policy also establishes a methodology to reduce the long-term investment return assumption to a rate recommended by the actuary by using investment gains in future valuations.

The latest completed actuarial valuation was based upon data and assumptions as of June 30, 2019. This valuation indicates that the current contribution rates of 17.40% of payroll for employers and 9.00% of payroll for active members, for benefits then in effect, meet the basic financial objective and the goals of the funding policy as listed above. There are 150,651 active members as of June 30, 2019.

The total pension liabilities for the Governmental Accounting Standards Board Statement No. 67 (GASB 67) are based on the June 30, 2019 actuarial valuation and are rolled forward using actuarial techniques to the measurement date of June 30, 2020.

3550 Busbee Pkwy, Suite 250, Kennesaw, GA 30144
Phone (678) 388-1700 • Fax (678) 388-1730
www.CavMacConsulting.com
Offices in Kennesaw, GA • Bellevue, NE

Board of Trustees
September 30, 2020
Page 2

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 PERS 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 Trustees and were based upon actual experience of PERS during the years 2014 to 2018. Assets are valued according to a market related method that recognizes 20% of the previously unrecognized and unanticipated gains and losses. The actuarial cost method used in valuation and financial disclosure reports is the Entry Age Normal cost method. The Entry Age Normal cost method is the most, commonly used cost method by public plans, and it develops a normal cost rate that tends to be stable and less volatile. The assumptions and methods utilized in this valuation and disclosure reports, in our opinion, are consistent and meet the parameters established by the Actuarial Standards of Practice.

The current benefit structure is outlined in the Actuarial Section. There were no changes in the benefit structure since the last valuation.

The following supporting schedules in the Actuarial Section are prepared by Cavanaugh Macdonald Consulting, LLC:

- Summary of Actuarial Assumptions & Methods
- Summary of Main System Provisions as Interpreted for Valuation Purposes
- Valuation Assets & Funding Progress
- Schedules of Funding Progress – Last 10 Fiscal Years
- Solvency Tests
- Analysis of Financial Experience
- Schedule of Active Member Valuation Data
- Schedule of Retirants Added to and Removed from Rolls

We also provided the Schedule of Changes in Net Pension Liability and related ratios, as well as the Schedule of Employer Contributions in the Financial Section.

Based upon the valuation results, annual projection forecasting 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 Public Employees' Retirement System of Mississippi continues in sound condition in accordance with the actuarial principles of level percent of payroll financing.

Respectfully submitted,

Edward J. Koebel

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

Cavanaugh Macdonald
CONSULTING, LLC
The experience and dedication you deserve

September 30, 2020

Board of Trustees
Public Employees' Retirement System
of Mississippi
429 Mississippi Street
Jackson, MS 39201-1005

Dear Board Members:

The basic financial objective of the Mississippi Highway Safety Patrol Retirement System (HSPRS) is to establish and receive contributions which:

(1) When expressed in terms of the percents of active member payroll will remain approximately level from generation to generation of Mississippi citizens, and which

(2) When combined with present assets and future investment return will be sufficient to meet the present and future financial obligations of HSPRS.

In addition, HSPRS maintains a funding policy that was revised in 2012. In order to meet the objectives listed above, the System will strive to meet the following funding goals:

(1) To maintain an increasing ratio of system assets to accrued liabilities and reach an 80 percent minimum funded ratio in 2042;

(2) To maintain adequate asset levels to finance the benefits promised to members;

(3) To develop a pattern of stable contribution rates when expressed as a percentage of member payroll as measured by valuations prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board, with a minimum employer contribution equal to the normal cost determined under the Entry Age Normal funding method.

In order to measure progress toward this fundamental objective, HSPRS has an annual actuarial valuation performed. The valuation (i) measures present financial position, and (ii) establishes contribution requirements that provide for the current cost and level percent of payroll amortization of unfunded actuarial accrued liability over a reasonable period.

The latest completed actuarial valuation was based upon data and assumptions as of June 30, 2019. This valuation indicates that contribution rates of 49.08% of payroll for employers and 7.25% of payroll for active members, along with anticipated contributions as provided by Senate Bill No. 2659 (effective July 1, 2004) and House Bill No. 1015 (effective July 1, 2013), for benefits then in effect, meet the basic financial objective and the goals of the funding policy as listed above. There are 522 active members as of June 30, 2019.

The total pension liabilities for the Governmental Accounting Standards Board Statement No. 67 (GASB 67) are based on the June 30, 2019 actuarial valuation and are rolled forward using actuarial techniques to the measurement date of June 30, 2020.

3550 Busbee Pkwy, Suite 250, Kennesaw, GA 30144
Phone (678) 388-1700 • Fax (678) 388-1730
www.CavMacConsulting.com
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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 HSPRS 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 Trustees and were based upon actual experience of HSPRS during the years 2014 to 2018. Assets are valued according to a market related method that recognizes 20% of the previously unrecognized and unanticipated gains and losses. The actuarial cost method used in valuation and financial disclosure reports is the Entry Age Normal cost method. The Entry Age Normal cost method is the most, commonly used cost method by public plans, and it develops a normal cost rate that tends to be stable and less volatile. The assumptions and methods utilized in this valuation and disclosure reports, in our opinion, are consistent and meet the parameters established by the Actuarial Standards of Practice.

The current benefit structure is outlined in the Actuarial Section. There were no changes in the benefit structure since the last valuation.

The following supporting schedules in the Actuarial Section are prepared by Cavanaugh Macdonald Consulting, LLC:

- Summary of Actuarial Assumptions & Methods
- Summary of Main System Provisions as Interpreted for Valuation Purposes
- Valuation Assets & Funding Progress
- Schedules of Funding Progress – Last 10 Fiscal Years
- Solvency Tests
- Analysis of Financial Experience
- Schedule of Active Member Valuation Data
- Schedule of Retirants Added to and Removed from Rolls

We also provided the Schedule of Changes in Net Pension Liability and related ratios, as well as the Schedule of Employer Contributions in the Financial Section.

Based upon the valuation results, annual projection forecasting 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 Mississippi Highway Safety Patrol Retirement System continues in sound condition in accordance with the actuarial principles of level percent of payroll financing.

Respectfully submitted,

Edward J. Koebel

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

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September 30, 2020

Board of Trustees
Public Employees' Retirement System
of Mississippi
429 Mississippi Street
Jackson, MS 39201-1005

Dear Board Members:

The basic financial objective of the Municipal Retirement System of Mississippi (MRS) is to establish and receive contributions (expressed as a tax on assessed property valuations) which:

(1) Will be in amounts sufficient, but not more than necessary, to maintain the actuarially soundness of the Funds for all future years (the tax may be increased but not by more than one-half mill per year), and which

(2) When combined with present assets and future investment return will be sufficient to meet the present and future financial obligations of MRS.

In addition, MRS maintains a funding policy that was revised in 2011. In this funding policy, contributions are extended past 2020 and an employer contribution rate, expressed as a millage rate tax applied to assessed property values, is established beginning in the 2011-2012 fiscal year that will generate an ultimate reserve level equal to a reasonable percentage (initially 100% - 150%) of the next year's projected benefit payment. At that point, employer contributions will be set equal to the fiscal year's projected benefit payments and adjusted as necessary to maintain the assets at the established reserve level.

In order to measure progress toward this fundamental objective, MRS has an annual actuarial valuation performed. The valuation (i) measures present financial position, and (ii) establishes contribution rates that provide for the amortization of unfunded total actuarial liabilities over a closed period.

The latest completed actuarial valuations were based upon data and assumptions as of June 30, 2019. These valuations indicate that the current contribution rates, for benefits then in effect, meet the basic financial objective. The employee contribution rates vary by participating City and are 7% - 10% of payroll for active members. There were 2 active members as of June 30, 2019.

The total pension liabilities for the Governmental Accounting Standards Board Statement No. 68 (GASB 68) are based on the June 30, 2019 actuarial valuation and are rolled forward using actuarial techniques to the measurement date of June 30, 2020.

3550 Busbee Pkwy, Suite 250, Kennesaw, GA 30144
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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 MRS 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 Trustees and were based upon actual experience of MRS during the years 2014 to 2018. Assets are valued according to a market related method that recognizes 20% of the previously unrecognized and unanticipated gains and losses. The actuarial cost method used in valuation and financial disclosure reports is the Entry Age Normal cost method. The Entry Age Normal cost method is the most commonly used cost method by public plans, and it develops a normal cost rate that tends to be stable and less volatile. The assumptions and methods utilized in this valuation and disclosure reports, in our opinion, are consistent and meet the parameters established by the Actuarial Standards of Practice.

The current benefit structure is outlined in the Actuarial Section.

The following supporting schedules in the Actuarial Section are prepared by Cavanaugh Macdonald Consulting, LLC:

- Summary of Actuarial Assumptions & Methods
- Summary of Main System Provisions as Interpreted for Valuation Purposes
- Valuation Assets & Funding Progress
- Schedules of Funding Progress – Last 10 Fiscal Years
- Solvency Tests
- Analysis of Financial Experience
- Schedule of Retirants Added to and Removed from Rolls

We also pronounced the Schedule of Changes in Net Pension Liability and related ratios, as well as the Schedule of Employer Contributions in the Financial Section.

Based upon the valuation results annual projection forecasting 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 Municipal Retirement Systems of Mississippi continue in sound condition in accordance with the actuarial principles and requirements of State law.

Respectfully submitted,

Edward J. Koebel

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

Cavanaugh Macdonald
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September 30, 2020

Board of Trustees
Public Employees' Retirement System
of Mississippi
429 Mississippi Street
Jackson, MS 39201-1005

Dear Board Members:

The basic financial objective of the Mississippi Supplemental Legislative Retirement Plan (SLRP) is to establish and receive contributions which:

(1) When expressed in terms of the percents of active member payroll will remain approximately level from generation to generation of Mississippi citizens, and which

(2) When combined with present assets and future investment return will be sufficient to meet the present and future financial obligations of SLRP.

In addition, SLRP maintains a funding policy that was revised in 2012. In order to meet the objectives listed above, the System will strive to meet the following funding goals:

(1) To maintain an increasing ratio of system assets to accrued liabilities and reach an 80 percent minimum funded ratio in 2042;

(2) To maintain adequate asset levels to finance the benefits promised to members;

(3) To develop a pattern of stable contribution rates when expressed as a percentage of member payroll as measured by valuations prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board, with a minimum employer contribution equal to the normal cost determined under the Entry Age Normal funding method.

In order to measure progress toward this fundamental objective and funding policy, SLRP has an annual actuarial valuation performed. The valuation (i) measures present financial position, and (ii) establishes contribution rates that provide for the current cost and level percent of payroll amortization of unfunded actuarial accrued liability over a reasonable period.

The latest completed actuarial valuation was based upon data and assumptions as of June 30, 2019. This valuation indicates that contribution rates of 7.40% of payroll for employers and 3.00% of payroll for active members, for benefits then in effect, meet the basic financial objective and the goals of the funding policy as listed above. There are 170 active members as of June 30, 2019.

The total pension liabilities for the Governmental Accounting Standards Board Statement No. 67 (GASB 67) are based on the June 30, 2019 actuarial valuation and are rolled forward using actuarial techniques to the measurement date of June 30, 2020.

3550 Busbee Pkwy, Suite 250, Kennesaw, GA 30144
Phone (678) 388-1700 • Fax (678) 388-1730
www.CavMacConsulting.com
Offices in Kennesaw, GA • Bellevue, NE

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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 SLRP 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 Trustees and were based upon actual experience of SLRP during the years 2014 to 2018. Assets are valued according to a market related method that recognizes 20% of the previously unrecognized and unanticipated gains and losses. The actuarial cost method used in valuation and financial disclosure reports is the Entry Age Normal cost method. The Entry Age Normal cost method is the most, commonly used cost method by public plans, and it develops a normal cost rate that tends to be stable and less volatile. The assumptions and methods utilized in this valuation and disclosure reports, in our opinion, are consistent and meet the parameters established by the Actuarial Standards of Practice.

The current benefit structure is outlined in the Actuarial Section. There were no changes in the benefit structure since the last valuation.

The following supporting schedules in the Actuarial Section are prepared by Cavanaugh Macdonald Consulting, LLC:

- Summary of Actuarial Assumptions & Methods
- Summary of Main System Provisions as Interpreted for Valuation Purposes
- Valuation Assets & Funding Progress
- Schedules of Funding Progress – Last 10 Fiscal Years
- Solvency Tests
- Analysis of Financial Experience
- Schedule of Active Member Valuation Data
- Schedule of Retirants Added to and Removed from Rolls

We also provided the Schedule of Changes in Net Pension Liability and related ratios, as well as the Schedule of Employer Contributions in the Financial Section.

Based upon the valuation results, annual projection forecasting 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 Mississippi Supplemental Legislative Retirement Plan continues in sound condition in accordance with the actuarial principles of level percent of payroll financing.

Respectfully submitted,

Edward J. Koebel

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

Actuarial valuations are performed annually to measure the funding progress of the plans and the total pension liabilities used for accounting purposes. Total pension liabilities are based on the June 30, 2019 valuation rolled forward to the June 30, 2020 measurement date. The net pension liability is equal to the rolled forward total pension liability less the plan's fiduciary net position as of the measurement date.

To validate that the assumptions used to determine the total pension liability are reasonably related to experience, the System requests the actuary to conduct an experience investigation every other year on a rolling four-year period. The investigation considers mortality, retirement, withdrawals and compensation of members, and economic forecasts for inflation and investment rate of return. In August 2019, the System adopted new actuarial assumptions based on the experience investigation for the four-year period ending June 30, 2018.

Significant methods and assumptions were as follows:

	PERS	MHSPRS	MRS	SLRP
Valuation Date	June 20, 2019	June 30, 2019	June 30, 2019	June 30, 2019
Measurement Date	June 20, 2020	June 30, 2020	June 30, 2020	June 30, 2020
Actuarial cost Method	Entry age	Entry age	Entry age	Entry age
Amortization Method	Level percent open	Level percent open	Level dollar closed	Level percent open
Remaining Amortization Period	36.2 years	17.7 years	15.0 years	22.9 years
Asset Valuation Method	5-year Smoothed Market	5-year Smoothed Market	5-year Smoothed Market	5-year Smoothed Market
Actuarial Assumptions:				
Investment Rate of Return	7.75%	7.75%	7.75%	7.75%
Salary Increase	3.00-18.25%	3.00-8.56%	3.00-4.50%	3.00%
Wage Inflation Rates	3.00%	3.00%	3.00%	3.00%
Increase in Benefits after Retirement	3.00%*	3.00%**	Various***	3.00%*

** Calculated 3.0 percent simple interest to age 55, or to age 60 if hired after June 30, 2011, compounded each year thereafter.*

*** Calculated 3.0 percent simple interest to age 60, compounded each year thereafter.*

**** Varies depending on municipality.*

All assumptions used in the actuarial valuation were adopted by the Board when the *Experience Investigation for the Four-Year Period Ending June 30, 2018*, was adopted August 27, 2019. Following are the assumptions adopted by the Board for this program.

INTEREST RATE: 7.75 percent per annum, compounded annually (net of investment expense only). The expected return on assets consists of 2.75 percent price inflation and 5.00 percent real rate of return.

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed rates of separation from active service are as follows:

	Annual Rates of					
	Withdrawal & Vesting*		Death**		Disability***	
Age	Male	Female	Male	Female	Male	Female
20	26.50%	32.50%	0.0483%	0.0126%	0.010%	0.009%
25	18.50	18.50	0.0567	0.0189	0.012	0.011
30	11.75	12.00	0.0630	0.0259	0.017	0.014
35	8.50	8.75	0.0714	0.0350	0.036	0.017
40	6.75	7.00	0.0893	0.0483	0.110	0.070
45	6.25	6.00	0.1218	0.0665	0.230	0.140
50	6.25	6.00	0.1764	0.0917	0.290	0.220
55	6.25	6.00	0.2594	0.1274	0.500	0.380
60	6.25	6.00	0.3980	0.1757	0.530	0.410
65	6.25	6.00	0.6353	0.2429	0.200	0.150
70	6.25	6.00	1.1655	0.4739	0.200	0.150
74	6.25	6.00	1.8942	0.8092	0.200	0.150

** For all ages, rates of 33.5 percent for first year of employment and 24.0 percent for second year.*
*** 94.0 percent are presumed to be non-duty related, and 6.0 percent are assumed to be duty related.*
**** 91.0 percent are presumed to be non-duty related, and 9.0 percent are assumed to be duty related.*

	Annual Rates of Service Retirements			
	Male		Female	
Age	Under 25 Years of Service*	25 Years of Service & Over*	Under 25 Years of Service*	25 Years of Service & Over*
45	-%	22.50%	-%	18.00%
50	-	15.00	-	13.00
55	-	18.25	-	19.00
60	10.50	19.50	13.25	22.25
62	20.75	32.00	19.00	37.50
65	25.00	29.50	29.25	42.50
70	20.00	25.00	24.00	25.50
75	100.00	100.00	100.00	100.00

** For Tier 4 members, 30 years of service.*

SALARY INCREASES: Representative values of the assumed annual rates of salary increases are as follows:

	Annual Rates of Salary Increases		
Service	Merit & Seniority	Base (Economy)	Increase Next Year
0	15.25%	3.00%	18.25%
1	5.25	3.00	8.25
2	2.75	3.00	5.75
3	1.75	3.00	4.75
4	1.25	3.00	4.25
5-7	0.75	3.00	3.75
8-27	0.25	3.00	3.25
28 & over	-	3.00	3.00

PAYROLL GROWTH: 3.00 percent per annum, compounded annually.

ADMINISTRATIVE EXPENSES: 0.25 percent of payroll.

TIMING OF DECREMENTS AND PAY INCREASES: Middle of year.

DEATH AFTER RETIREMENT: The table for post-retirement mortality used in evaluating allowances to be paid is the PubS.H-2010(B) Retiree Table with males adjusted by 112.0 percent for ages less than 76 then scaled down to 105.0 percent for ages 80 to 119. Females are adjusted by 85.0 percent for ages less than 66 then scaled up to 102.0 percent for ages 75 to 119. The PubT.H-2010 Disabled Retiree Table is used for disabled retirees with the following adjustments: 137.0 percent of male rates at all ages and 115.0 percent of female rates at all ages. The projection scale MP-2018 will be used to project future improvements in life expectancy generationally.

MARRIAGE ASSUMPTION: 85.0 percent married with the husband three years older than wife.

UNUSED SICK LEAVE: 0.5 years at retirement.

MILITARY SERVICE: 0.25 years at retirement.

DEFERRED VESTED: Benefits are assumed to commence at age 60 for Tiers 1, 2, and 3 and at age 65 for Tier 4.

ASSUMED INTEREST RATE ON EMPLOYEE CONTRIBUTIONS: 2.0 percent.

ASSET VALUATION METHOD: Market value of assets, five-year smoothed.

VALUATION METHOD: 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, disability, 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 7.75 percent). 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 current benefit recipients to obtain the present value of all expected benefits payable to the present group of members and survivors.

The employer contributions required to support the benefits of PERS are determined following a level funding approach and consist of a normal contribution and an accrued liability contribution.

The normal contribution is determined using the "entry age normal" method. Under this method, a calculation is made for pension benefits to determine the uniform and constant percentage rate of employer contribution that, if applied to the compensation of the average new member during the entire period of his or her anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his or her behalf.

The unfunded actuarial accrued liability is determined by subtracting the current assets and the present value of prospective employer normal contributions and member contributions from the present value of expected benefits to be paid from PERS. The accrued liability contribution amortizes the balance of the unfunded accrued liability over a period of years from the valuation date.

Assumptions used in the actuarial valuation were adopted by the MHSPRS Advisory Board when the *Experience Investigation for the Four-Year Period Ending June 30, 2018*, was adopted August 27, 2019. Following are the assumptions adopted by the PERS Board for this program.

INTEREST RATE: 7.75 percent per annum, compounded annually (net of investment expenses only). The expected return on assets consists of 2.75 percent price inflation and 5.00 percent real rate of return.

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of separation from active service are as follows:

	Annual Rates of						
		Death		Disability			
Age	Withdrawal & Vesting	Males	Females	Non-Duty	Duty	Service	Service Retirement*
25	5.60%	0.06%	0.02%	0.07%	-%	5	5.00%
30	4.00	0.06	0.03	0.09	0.01	10	5.00
35	3.00	0.07	0.04	0.12	0.04	15	5.00
40	2.00	0.09	0.05	0.15	0.05	20	5.00
45	1.00	0.12	0.07	0.22	0.05	25	10.00
50	1.00	0.18	0.09	0.38	0.04	30	25.00
55	-	0.26	0.13	0.68	0.01	35	25.00
60	-	0.40	0.18	1.16	-	40+	100.00

** The annual rate of service retirement is 100.0 percent at age 61.*

It is assumed that a member will be granted one and three-quarter years of service credit for unused leave at termination of employment. In addition, it is assumed that, on average, one quarter year of service credit for peace-time military service will be granted to each member.

SALARY INCREASES: Representative values of the assumed annual rates of salary increases are as follows:

	Annual Rates of		
Age	Merit & Seniority	Base (Economy)	Increase Next Year
20	5.56%	3.00%	8.56%
25	2.31	3.00	5.31
30	1.49	3.00	4.49
35	1.49	3.00	4.49
40	1.49	3.00	4.49
45	1.00	3.00	4.00
50	0.50	3.00	3.50
55	0.50	3.00	3.50
60	-	3.00	3.00

PAYROLL GROWTH: 3.00 percent per annum, compounded annually.

ADMINISTRATIVE EXPENSES: 0.25 percent of payroll.

TIMING OF DECREMENT AND PAY INCREASES: Middle of year.

ASSUMED INTEREST RATE ON EMPLOYEE CONTRIBUTIONS: 2.0 percent.

DEATH AFTER RETIREMENT: The table for post-retirement mortality used in evaluating allowances to be paid is the PubS.H-2010(B) Retiree Table with males adjusted by 112.0 percent for ages less than 76 then scaled down to 105.0 percent for ages 80 to 119. Females are adjusted by 85.0 percent for ages less than 66 then scaled up to 102.0 percent for ages 75 to 119. The PubT.H-2010 Disabled Retiree Table is used for disabled retirees with the following adjustments: 137.0 percent of male rates at all ages and 115.0 percent of female rates at all ages. The projection scale MP-2018 will be used to project future improvements in life expectancy generationally.

MARRIAGE ASSUMPTION: 100.0 percent married with the husband three years older than wife.

ASSET VALUATION METHOD: Market value of assets, five-year smoothed.

VALUATION METHOD: 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, disability, 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 7.75 percent). 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 current benefit recipients to obtain the present value of all expected benefits payable to the present group of members and survivors.

The employer contributions required to support the benefits of MHSPRS are determined following a level funding approach and consist of a normal contribution and an accrued liability contribution.

The normal contribution is determined using the "entry age normal" method. Under this method, a calculation is made for pension benefits to determine the uniform and constant percentage rate of employer contribution that, if applied to the compensation of the average new member during the entire period of his or her anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his or her behalf.

The unfunded actuarial accrued liability is determined by subtracting the current assets and the present value of prospective employer normal contributions and member contributions from the present value of expected benefits to be paid from the MHSPRS. The accrued liability contribution amortizes the balance of the unfunded accrued liability over a period of years from the valuation date.

Statement of Actuarial Assumptions & Methods

Assumptions used in the actuarial valuation were adopted by the PERS Board of Trustees when the *Experience Investigation for the Four-Year Period Ending June 30, 2018*, was adopted on August 27, 2019. Following are the assumptions adopted by the PERS Board for this program.

INTEREST RATE: 7.75 percent per annum, compounded annually (net after investment expenses) for prior funding policy rate determination and GASB disclosure.

6.25 percent per annum, compounded annually (net after investment expenses) for current funding policy rate determination.

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of separation from active service are as follows:

	Annual Rates of		
Age	Withdrawal	Death	Disability
20	10.65%	0.06%	0.14%
25	8.64	0.08	0.24
30	6.87	0.12	0.44
35	4.86	0.16	0.76
40	2.97	0.22	0.96
45	1.44	0.31	1.18
50	0.24	0.48	1.98
55	-	0.64	2.76
60	-	0.83	3.50
64	-	0.99	4.24

Years of Service	Service Retirement
20	45.00%
21-28	17.50
29-33	35.00
34 & over	20.00
65	100.00

SALARY INCREASES: 3.00 percent for wage inflation, plus the following chart:

Age	Merit & Seniority Salary Increase
Under 43	1.50%
43-47	1.00
48-52	0.50
53 & over	-

DEATH AFTER RETIREMENT: The table for post-retirement mortality used in evaluating allowances to be paid is the PubS.H-2010(B) Retiree Table with males adjusted by 112.0 percent for ages less than 76 then scaled down to 105.0 percent for ages 80 to 119. Females are adjusted by 85.0 percent for ages less than 66 then scaled up to 102.0 percent for ages 75 to 119. The PubT.H-2010 Disabled Retiree Table is used for disabled retirees with the following adjustments: 137.0 percent of male rates at all ages and 115.0 percent of female rates at all ages. The projection scale MP-2018 will be used to project future improvements in life expectancy generationally.

MARRIAGE ASSUMPTION: 85.0 percent married with the husband three years older than the wife.

VALUATION METHOD: Unfunded employer liabilities are amortized over a closed 30-year period from September 30, 1990, as a level percent of each municipality's assessed property valuation.

ASSESSED PROPERTY VALUE RATE OF INCREASE: No increase, assessed value will remain level over time (used in determining the millage rate under the prior funding policy).

ASSET VALUATION METHOD: Market value five-year smoothing is the method used for asset valuation. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20.0 percent of the difference between market value and expected market value. Actuarial assets were allocated to individual cities in the same proportion that their market value of assets was to the total market value of assets for all cities.

All assumptions used in the actuarial valuation were adopted by the PERS Board of Trustees when the *Experience Investigation for the Four-Year Period Ending June 30, 2018*, was adopted August 27, 2019. Following are the assumptions adopted by the PERS Board for this program.

INTEREST RATE: 7.75 percent per annum, compounded annually (net of investment expenses only). The expected return on assets consists of 2.75 percent price inflation and 5.00 percent rate of return.

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed rates of separation from active service are as follows:

	Annual Rates of		
	Death		
Age	Male	Female	Disability*
20	0.05%	0.01%	0.04%
25	0.06	0.02	0.05
30	0.06	0.03	0.07
35	0.07	0.04	0.11
40	0.09	0.05	0.17
45	0.12	0.07	0.23
50	0.18	0.09	0.30
55	0.26	0.13	0.35
60	0.40	0.18	0.40
65	0.64	0.24	-
70	1.17	0.47	-
75	2.14	0.92	-

** 93.0 percent are presumed to be non-duty related, and 7.0 percent are assumed to be duty related.*

WITHDRAWAL AND VESTING: 20.0 percent in an election year, none in a non-election year.

SERVICE RETIREMENT: 30.0 percent in an election year, none in a non-election year. All members are assumed to retire no later than age 80. It is assumed that a member will be granted two and a half years of service credit for unused leave at termination of employment.

PAYROLL GROWTH: 3.00 percent per annum, compounded annually.

ADMINISTRATIVE EXPENSES: 0.25 percent of payroll.

TIMING OF DECREMENTS AND PAY INCREASES: Middle of year.

DEATH AFTER RETIREMENT: The table for post-retirement mortality used in evaluating allowances to be paid is the PubS.H-2010(B) Retiree Table with males adjusted by 112.0 percent for ages less than 76 then scaled down to 105.0 percent for ages 80 to 119. Females are adjusted by 85.0 percent for ages less than 66 then scaled up to 102.0 percent for ages 75 to 119. The PubT.H-2010 Disabled Retiree Table is used for disabled retirees with the following adjustments: 137.0 percent of male rates at all ages and 115.0 percent of female rates at all ages. The projection scale MP-2018 will be used to project future improvements in life expectancy generationally.

MARRIAGE ASSUMPTION: 85.0 percent married with the husband three years older than the wife.

ASSUMED INTEREST RATE ON EMPLOYEE CONTRIBUTIONS: 2.0 percent.

ASSET VALUATION METHOD: Market value of assets, five-year smoothed.

VALUATION METHOD: 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, disability, 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 7.75 percent). 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 current benefit recipients to obtain the present value of all expected benefits payable to the present group of members and survivors.

The employer contributions required to support the benefits of SLRP are determined following a level funding approach and consist of a normal contribution and an accrued liability contribution.

The normal contribution is determined using the "entry age normal" method. Under this method, a calculation is made for pension benefits to determine the uniform and constant percentage rate of employer contribution that, if applied to the compensation of the average new member during the entire period of his or her anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his or her behalf.

The unfunded actuarial accrued liability is determined by subtracting the current assets and the present value of prospective employer normal contributions and member contributions from the present value of expected benefits to be paid from SLRP. The accrued liability contribution amortizes the balance of the unfunded accrued liability over a period of years from the valuation date.

SUMMARY OF MAIN BENEFIT AND CONTRIBUTION PROVISIONS

The following summary presents the main benefit and contribution provisions of the plan in effect June 30, 2019, as interpreted in preparing the actuarial valuation and as of June 30, 2020, in determining the rollforward of the total pension liability to the measurement date. As used in the summary, "average compensation" means the average annual covered earnings of an employee during the four highest years of service.

To determine the member's four highest years, PERS considers these scenarios:

» Four highest fiscal years of earned compensation;

» Four highest calendar years of earned compensation;

» Combination of the four highest fiscal and calendar years of earned compensation that do not overlap; or

» Final 48 months of earned compensation prior to termination of employment.

"Covered earnings" means gross salary not in excess of the maximum amount on which contributions were required. "Fiscal year" means a year commencing July 1 and ending June 30. "Credited service" means service while a contributing member plus additional service as described below. "Unused sick and vacation leave" means service credit is provided at no charge to members for unused sick and vacation time that has accrued at the time of retirement. A payment of up to 240 hours leave may be used in the average compensation definition. "Additional service" means additional service credit may be granted for service prior to February 1, 1953, active-duty military service, out-of-state service, professional leave, and non-covered and retroactive service.

The maximum covered earnings for employers and employees over the years are as follows:

Fiscal Date From	Fiscal Date To	Employer Rate	Maximum Covered Earnings	Employee Rate	Maximum Covered Earnings
2/1/1953	6/30/1958	2.50%	$6,000	4.00%	$4,800*
7/1/1958	6/30/1960	2.50	9,000	4.00	7,800*
7/1/1960	6/30/1966	2.50	15,000	4.00	13,800*
7/1/1966	6/30/1968	3.00	15,000	4.50	13,800*
7/1/1968	3/31/1971	4.50	15,000	4.50	15,000
4/1/1971	6/30/1973	4.50	35,000	4.50	35,000
7/1/1973	6/30/1976	5.85	35,000	5.00	35,000
7/1/1976	6/30/1977	7.00	35,000	5.00	35,000
7/1/1977	6/30/1978	7.50	35,000	5.50	35,000
7/1/1978	6/30/1980	8.00	35,000	5.50	35,000
7/1/1980	6/30/1981	8.00	53,000	5.50	53,000
7/1/1981	12/31/1983	8.75	53,000	6.00	53,000
1/1/1984	6/30/1988	8.75	63,000	6.00	63,000
7/1/1988	6/30/1989	8.75	75,600	6.00	75,600
7/1/1989	12/31/1989	8.75	75,600	6.50	75,600
1/1/1990	6/30/1991	9.75	75,600	6.50	75,600
7/1/1991	6/30/1992	9.75	75,600	7.25	75,600
7/1/1992	6/30/2002	9.75	125,000	7.25	125,000
7/1/2002	6/30/2005	9.75	150,000	7.25	150,000
7/1/2005	6/30/2006	10.75	150,000	7.25	150,000
7/1/2006	6/30/2007	11.30	150,000	7.25	150,000
7/1/2007	6/30/2008	11.85	150,000	7.25	150,000
7/1/2008	6/30/2009	11.85	230,000	7.25	230,000
7/1/2009	6/30/2010	12.00	245,000	7.25	245,000
7/1/2010	6/30/2011	12.00	245,000	9.00	245,000
7/1/2011	12/31/2011	12.00	245,000	9.00	245,000
1/1/2012	6/30/2012	12.93	245,000	9.00	245,000
7/1/2012	6/30/2013	14.26	250,000	9.00	250,000
7/1/2013	6/30/2014	15.75	255,000	9.00	255,000
7/1/2014	6/30/2015	15.75	260,000	9.00	260,000
7/1/2015	6/30/2017	15.75	265,000	9.00	265,000
7/1/2017	6/30/2018	15.75	270,000	9.00	270,000
7/1/2018	6/30/2019	15.75	275,000	9.00	275,000
7/1/2019	6/30/2020	17.40	280,000	9.00	280,000

** From February 1, 1953, through June 30, 1968, the first $100 in monthly earnings or $1,200 in annual earnings were not covered earnings for the employee.*

SUPERANNUATION RETIREMENT

Condition for Retirement

a) A retirement allowance is paid upon the request of any member who retires and has attained age 60 and completed at least eight years* of membership service. A retirement allowance may also be paid upon the completion of 25 years of creditable service for members hired prior to July 1, 2011, or upon the completion of 30 years of creditable service for members hired on or after July 1, 2011.

b) Any member who withdraws from service prior to his or her attainment of age 60 and who has completed at least eight years* of membership service is entitled to receive, in lieu of a refund of his or her accumulated contributions, a retirement allowance commencing at age 60.

**Four years for those who entered the System before July 1, 2007.*

Amount of Allowance

The annual retirement allowance payable to a member who retires under condition (a) above is equal to:

1. A member's annuity which is the actuarial equivalent of the member's accumulated contributions at the time of his or her retirement, plus

2. For a member hired prior to July 1, 2011, an employer's annuity which, together with the member's annuity, is equal to 2.0 percent of his or her average compensation for each of the first 25 years of creditable service plus 2.5 percent for each year of creditable service over 25 years.

3. For a member hired on or after July 1, 2011, an employer's annuity which, together with the member's annuity, is equal to 2.0 percent of his or her average compensation for each of the first 30 years of creditable service plus 2.5 percent for each year of creditable service over 30 years. An actuarial reduction will be made for each year of creditable service below 30 or for each year of age below 65, whichever is less.

For members hired prior to July 1, 2011, the minimum allowance is $120 for each year of creditable service.

For members hired on or after July 1, 2011, an actuarially reduced retirement allowance is paid upon the request of any member who retires with less than 30 years of creditable service. The annual actuarially reduced retirement allowance is equal to the benefit in the previous section but reduced for each year of creditable service below 30 or for each year in age below age 65, whichever is less.

DISABILITY RETIREMENT

Condition for Retirement

A retirement allowance is paid to a member who is totally and permanently disabled, as determined by the Board of Trustees, and who has accumulated eight or more years* of membership service.

**Four years for those who entered the System before July 1, 2007.*

Amount of Allowance

For those who were active members prior to July 1, 1992, and did not elect the benefit structure outlined below, the annual disability retirement allowance payable is equal to a superannuation retirement allowance if the member has attained age 60; otherwise it is equal to a superannuation retirement allowance calculated as follows:

1. A member's annuity equal to the actuarial equivalent of his or her accumulated contributions at the time of retirement, plus

2. An employer's annuity equal to the amount that would have been payable had the member continued in service to age 60.

For those who became active members after June 30, 1992, and for those who were active members prior to July 1, 1992, who so elected, the following benefits are payable:

1. A temporary allowance equal to the greater of (a) 40.00 percent of average compensation plus 10.00 percent for each dependent child up to a maximum of two, or (b) the member's accrued allowance. This temporary allowance is paid for a period of time based on the member's age at disability, as follows:

Age At Disability	Duration
60 & earlier	to age 65
61	to age 66
62	to age 66
63	to age 67
64	to age 67
65	to age 68
66	to age 68
67	to age 69
68	to age 70
69 & later	one year

For members hired prior to July 1, 2011, the minimum allowance is $120 per year of creditable service.

2. A deferred allowance commencing when the temporary allowance ceases equal to the greater of (a) the allowance the member would have received based on service to the termination age of the temporary allowance, but not more than 40.0 percent of average compensation, or (b) the member's accrued allowance.

   For members hired prior to July 1, 2011, the minimum allowance is $120 per year of creditable service.

Effective July 1, 2004, a temporary benefit can be paid out of a member's accumulated contribution balance while the member is awaiting a determination for eligibility for disability benefits. Future disability payments, if any, would be offset by advanced payments made from the member's accumulated contributions.

ACCIDENTAL DISABILITY RETIREMENT

Condition for Retirement

A retirement allowance is paid to a member who is totally and permanently disabled in the line of performance of duty.

Amount of Allowance

The annual accidental disability retirement allowance is equal to the allowance payable on disability retirement but not less than 50.0 percent of average compensation. There is no minimum benefit.

ACCIDENTAL DEATH BENEFIT

Condition for Benefit

A retirement allowance is paid to a spouse and/or dependent children upon the death of an active member in the line of performance of duty.

Amount of Allowance

The annual retirement allowance is equal to 50.0 percent of average compensation payable to the spouse and 25.0 percent of average compensation payable to one dependent child or 50.0 percent to two or more children until age 19 (23 if a full-time student). There is no minimum benefit.

ORDINARY DEATH BENEFIT

Condition for Benefit

Upon the death of a member who has completed at least eight years* of membership service, a benefit is payable (in lieu of a refund of the member's accumulated contributions) to his or her spouse, if said spouse has been married to the member for not less than one year.

** Four years for those who entered the System before July 1, 2007.*

Amount of Allowance

The annual retirement allowance payable to the lawful spouse of a vested member who dies is equal to the greater of:

1. The allowance that would have been payable had the member retired and elected Option 2, reduced by an actuarially determined factor based on the number of years the member lacked in qualifying for unreduced retirement benefits, or

2. A lifetime benefit equal to 20.0 percent of the deceased member's average compensation, but not less than $50 per month.

In addition, a benefit is payable to dependent children until age 19 (23 if a full-time student). The benefit is equal to the greater of 10.0 percent of average compensation or $50 per month for each dependent child up to three.

RETURN OF CONTRIBUTIONS

Upon the withdrawal of a member without a retirement benefit, his or her contributions are returned to him or her, together with accumulated regular interest thereon.

Upon the death of a member before retirement, his or her contributions, together with the full accumulated regular interest thereon, are paid to his or her designated beneficiary, if any, otherwise, to his or her estate provided no other survivor benefits are payable.

Effective July 1, 2016, the interest rate on employee contributions shall be calculated based on the money market rate as published by *The Wall Street Journal* on December 31 of each preceding year with a minimum rate of 1.0 percent and a maximum rate of 5.0 percent.

NORMAL FORM OF BENEFIT

The normal form of benefit (modified cash refund) is an allowance payable during the life of the member with the provision that upon his or her death the excess of his or her total contributions at the time of retirement over the total retirement annuity paid to him or her will be paid to his or her designated beneficiary.

OPTIONAL BENEFITS

A member upon retirement may elect to receive his or her allowance in one of the following forms, which are computed to be actuarially equivalent to the applicable retirement allowance.

Option 1. Reduced allowance with the provision that if the pensioner dies before he or she receives the value of his or her annuity as it was at the time of retirement, the balance shall be paid to his or her beneficiary.

Option 2. Upon his or her death, his or her reduced retirement allowance shall be continued throughout the life of, and paid to, his or her beneficiary.

Option 3. Upon his or her death, 50.0 percent of his or her reduced retirement allowance shall be continued throughout the life of, and paid to, a designated beneficiary and the other 50.0 percent of his or her reduced retirement allowance to some other designated beneficiary.

Option 4. Upon his or her death, 75.0 percent of his or her reduced retirement allowance shall be continued throughout the life of, and paid to, a designated beneficiary.

Option 4A. Upon his or her death, 50.00 percent of his or her reduced retirement allowance shall be continued throughout the life of, and paid to, a designated beneficiary.

Option 4B. A reduced retirement allowance shall be continued throughout the life of the pensioner, but with the further guarantee of payment to the pensioner or his or her beneficiary for a specified number of years certain.

Option 4C. A member may elect any option with the added provision that he or she shall receive, so far as possible, the same total amount annually (considering both PERS and Social Security benefits) before and after the earliest age at which the member becomes eligible for a Social Security benefit. This option was only available to those who retired prior to July 1, 2004.

A member who elects Option 2, Option 4, or Option 4A at retirement may revert to the normal form of benefit if the designated beneficiary predeceases the retired member or if the retired member divorces the designated beneficiary. A member who elects the normal form of benefit or Option 1 at retirement may select Option 2, Option 4, or Option 4A to provide beneficiary protection to a new spouse if married after retirement.

A member hired prior to July 1, 2011, and who has at least 28 years of creditable service* or a member hired on or after July 1, 2011, who has at least 33 years of creditable service may select the Partial-Lump-Sum Option (PLSO) at retirement. Under this option, the retiree has the option of taking a partial-lump-sum distribution equal to 12, 24, or 36 times the base maximum monthly benefit. With each lump-sum amount, the base maximum monthly benefit will be actuarially reduced. A member selecting the PLSO may also select any of the regular options except Option 1, the prorated single-life annuity, and Option 4C, the Social Security- leveling provision. The benefit is then calculated using the new reduced maximum benefit as a starting point in applying the appropriate option factors for the reduction.

** Or at least age 63 with four years of membership service for those who entered the System before July 1, 2007.*

POST-RETIREMENT ADJUSTMENTS IN ALLOWANCES

The allowances of retired members are adjusted annually by an amount equal to:

a) 3.00 percent of the annual retirement allowance for each full fiscal year of retirement prior to the year in which the member reaches age 55*, plus

b.) 3.00 percent compounded for each year thereafter beginning with the fiscal year in which the member turns age 55*.

** Age 60 for members hired on or after July 1, 2011.*

A prorated portion of the annual adjustment will be paid to the member, beneficiary, or estate of any member or beneficiary who is receiving the annual adjustment in a lump sum, but whose benefits are terminated between July 1 and December 1.

CONTRIBUTIONS

Members contribute 9.00 percent of compensation. The Board sets employer contribution rates for PERS, as per Mississippi statute. The adequacy of these rates is checked annually by actuarial valuation. Refer to Note 6 of the basic financial statements for additional information.

SUMMARY OF MAIN BENEFIT AND CONTRIBUTION PROVISIONS

The following summary presents the main benefit and contribution provisions of the plan in effect June 30, 2019, as interpreted in preparing the actuarial valuation and as of June 30, 2020, in determining the rollforward of the total pension liability as of the measurement date. As used in the summary, "average compensation" means the average annual covered earnings of an employee during the four highest consecutive years of service. "Covered earnings" means gross salary not in excess of the maximum amount on which contributions were required. "Fiscal year" means a year commencing on July 1 and ending June 30. "Credited service" means service while a contributing member plus additional service as described below. "Unused sick and vacation leave" means service credit is provided at no charge to members for unused sick and vacation time that has accrued at the time of retirement. A payment of up to 240 hours leave may be used in the average compensation definition. "Additional service" means additional service credit may be granted for service prior to July 1, 1958, active-duty military service, and retroactive service.

The maximum covered earnings for employers and members over the years are as follows:

Date From	Date To	Employer Rate	Maximum Covered Earnings*	Member Rate	Maximum Covered Earnings*
7/1/1958	6/30/1968	13.33%	$-	5.00%	$-
7/1/1968	6/30/1971	15.33	-	5.00	-
7/1/1971	6/30/1973	18.59	-	5.00	-
7/1/1973	6/30/1975	20.77	-	5.00	-
7/1/1975	6/30/1978	24.65	-	5.00	-
7/1/1978	6/30/1980	26.16	-	6.00	-
7/1/1980	6/30/1989	26.16	-	6.50	-
7/1/1989	6/30/1990	27.97	-	6.50	-
7/1/1990	6/30/2003	26.16	-	6.50	-
7/1/2003	6/30/2006	28.16	-	6.50	-
7/1/2006	6/30/2008	30.30	-	6.50	-
7/1/2008	12/31/2011	30.30	-	7.25	-
1/1/2012	6/30/2012	35.21	-	7.25	-
7/1/2012	6/30/2018	37.00	-	7.25	-
7/1/2018	6/30/2020	49.08	-	7.25	-

** Maximum covered earnings equal wages paid, not to exceed wages paid to the Commissioner of the Department of Public Safety (currently $146,850).*

Effective July 1, 2019, additional contributions from Senate Bill No. 2659 and House Bill No. 1015 are estimated to be $3,700,000 combined.

Benefits

SUPERANNUATION RETIREMENT

Condition for Retirement

a) A retirement allowance is payable to any member who retires and has attained age 55 and completed at least five years of membership service, or has attained age 45 and completed at least 20 years of creditable service, or has completed 25 years of creditable service regardless of age.

   Any member who has attained age 63 shall be retired forthwith. Effective July 1, 2011, the Commissioner of Public Safety is authorized to allow a member who has attained age 63 to continue in active service. Such continued service may be authorized annually until the member attains age 65.

b) Any member who withdraws from service prior to his or her attainment of age 55 but after having completed five or more years of creditable service is entitled to receive, in lieu of a refund of his or her accumulated contributions, a retirement allowance commencing at age 55.

Amount of Allowance

The annual retirement allowance payable to a retired member is equal to:

1. A member's annuity which is the actuarial equivalent of the member's accumulated contributions at the time of his or her retirement; plus

2. An employer's annuity which, together with the member's annuity, is equal to 2.5 percent of his or her average compensation for each year of membership service; plus

3. A prior service annuity equal to 2.5 percent of average compensation for each year of prior service.

The aggregate amounts of (2) and (3) above shall not exceed 100.0 percent of average compensation, regardless of service, for retirements on or after January 1, 2000, while it shall not exceed 85.0 percent for retirements prior to January 1, 2000.

The minimum allowance for both service and disability retirement is based on the following table for each year of creditable service, reduced if necessary, as indicated below.

Years of Service	Monthly Benefit
Less than 10	$250
10-15	300
15 or more	500

The annual retirement allowance payable to a member who retires under condition (a) above prior to age 55 is computed in accordance with the above formula except that the employer's annuity and prior service annuity are reduced by 3.0 percent for each year of age below age 55, or 3.0 percent for each year of service below 25 years of creditable service, whichever is less.

DISABILITY RETIREMENT

Non-duty related disability benefits are available to vested members under the age of 55. Vested members age 55 or older are not eligible for disability benefits but may apply for service retirement benefits. For purposes of disability benefits, average annual compensation is calculated using the last two years of salary before retirement.

If a member becomes permanently disabled due to sickness or injury caused or sustained as a direct result of duty, he or she may be eligible for duty-related disability retirement. He or she is covered for this benefit from the first day of employment if he or she has not reached age 55, regardless of his or her years of service. Duty-related disability retirement benefits are calculated at either 50.0 percent of average compensation of the last two years of salary before retirement (this portion is not taxable) or the non-duty-related disability retirement amount, whichever provides the higher benefit.

DEATH PRIOR TO RETIREMENT

If a member is vested, the spouse and dependent children may be eligible to receive certain statutory benefits. Claims for non-duty-related death benefits are calculated at 2.5 percent of average compensation for each year of service credit, as calculated under Option 9, Maximum Benefit. Under this option, 50.0 percent of the accrued benefit is payable to the spouse until death, with 25.0 percent of the accrued benefit payable to one dependent child and 50.0 percent of the accrued benefit payable for two or more dependent children (under age 19 and never married or under age 23 if a full-time student and never married). Upon application and approval by the Medical Board, benefits to a physically or mentally disabled child may continue as long as the disability exits.

Coverage for duty-related death benefits begins on the first day of employment and is available to the spouse and dependent children regardless of the the member's vesting status. If the member is vested, the spouse and dependent children may be eligible to receive benefits under either non-duty or duty-related death benefit provisions, whichever provided the higher benefit.

Claims for duty-related death benefits are calculated at 50.0 percent of average compensation, payable to the spouse until death, with 25.0 percent of average compensation payable to one dependent child and 50.0 percent of average compensation payable for two or more dependent children (under age 19 and never married or under age 23 if a full-time student and never married). Upon application and approval by the Medical Board, benefits to a physically or mentally disabled child may continue as long as the disability exists.

DEATH AFTER RETIREMENT

Upon the death of a highway patrol officer who has retired for service or disability and who has not elected any other optional form of benefit, his widow or her widower is eligible for a benefit equal to 50.0 percent of his or her retirement allowance and each child (but not more than two) who has not attained age 19 (23 if a full-time student) is eligible for a benefit equal to 25.0 percent of his or her retirement allowance. The benefit to the widow or widower is payable for life and to children until they attain age 19 (23 if a full-time student) or for life if they are totally and permanently disabled.

REFUND OF CONTRIBUTIONS

Upon a member's termination of employment for any reason before retirement, his or her accumulated contributions, together with regular interest thereon, are refunded. Upon the death of a member who is not eligible for any other death benefit, his or her accumulated contributions, together with regular interest thereon, are paid to his or her beneficiary.

Effective July 1, 2016, the interest rate on employee contributions shall be calculated based on the money market rate as published by *The Wall Street Journal* on December 31 of each preceding year with a minimum rate of 1.0 percent and a maximum rate of 5.0 percent.

NORMAL FORM OF BENEFIT

The normal form of benefit is an allowance payable during the life of the member. Upon death the benefits described above are payable.

OPTIONAL BENEFITS

A member upon retirement may elect to receive his or her allowance in one of the following forms, which are computed to be actuarially equivalent to the applicable retirement allowance.

Option 1. Reduced allowance with the provision that, if the pensioner dies before he or she receives the value of his or her annuity as it was at the time of retirement, the balance shall be paid to his or her beneficiary.

Option 2. Upon his or her death, his or her reduced retirement allowance shall be continued throughout the life of, and paid to, his or her beneficiary.

Option 3. Upon his or her death, 50.0 percent of his or her reduced retirement allowance shall be continued throughout the life of, and paid to, a designated beneficiary and the other 50.0 percent of his or her reduced retirement allowance to some other designated beneficiary.

Option 4. Upon his or her death, 75.0 percent of his or her reduced retirement allowance shall be continued throughout the life of, and paid to, a designated beneficiary.

Option 4A. Upon his or her death, 50.0 percent of his or her reduced retirement allowance shall be continued throughout the life of, and paid to, a designated beneficiary.

Option 4B. A reduced retirement allowance shall be continued throughout the life of the pensioner, but with the further guarantee of payment to the pensioner or his or her beneficiary for a specified number of years certain.

Option 4C. A member may elect any option with the added provision that he or she shall receive, so far as possible, the same total amount annually (considering both MHSPRS and Social Security benefits) before and after the earliest age at which the member becomes eligible for a Social Security benefit. This option was only available to those who retired prior to July 1, 2004.

Option 9. Upon his or her death, the spouse will receive 50.0 percent of the benefit the member was receiving for life. Each dependent child (under age 19 and never married or under age 23 if a full-time student and never married) will receive 25.0 percent of the benefit the member was receiving with a maximum of 50.0 percent for the support and care of two or more children. Any contribution and interest remaining after the member's death and after all monthly benefits due to the spouse and children have been paid will be refunded to designated beneficiaries. If the member marries after retirement while receiving benefits under this option, he or she may apply to Pop-Down to Option 2 to provide 100.0 percent beneficiary protection to the new spouse, or Pop-Down to Option 4 or Option 4A for other beneficiary protections for the new spouse. PLSO is available with this option, if eligible.

A member who elects Option 2, Option 4, or Option 4A at retirement may revert to the normal form of benefit if the designated beneficiary predeceases the retired member or if the retired member divorces the designated beneficiary. A member who elects the normal form of benefit or Option 1 at retirement may select Option 2, Option 4, or Option 4A to provide beneficiary protection to a new spouse if married after retirement.

A member who qualifies for an unreduced retirement allowance may select the PLSO at retirement. Under this option, the retiree has the option of taking a partial-lump-sum distribution equal to 12, 24, or 36 times the base maximum monthly benefit. With each lump-sum amount, the base maximum monthly benefit will be actuarially reduced. A member selecting this option may also select any of the regular options except Option 1, the prorated single-life annuity, and Option 4C, the Social Security-leveling provision. The benefit is then calculated using the new reduced maximum benefit as a starting point in applying the appropriate option factors for the reduction.

POST-RETIREMENT ADJUSTMENTS IN ALLOWANCES

The allowances of retired members are adjusted annually by an amount equal to:

a) 3.0 percent of the annual retirement allowance for each full fiscal year of retirement prior to the year in which the member reaches age 60*, plus

b) 3.0 percent compounded for each year thereafter beginning with the fiscal year in which the member turns age 60*.

A prorated portion of the annual adjustment will be paid to the member, beneficiary, or estate of any member or beneficiary who is receiving the annual adjustment in a lump sum, but whose benefits are terminated between July 1 and December 1.

Those members who retired on or before July 1, 1999, received an ad hoc benefit increase in the amount of $3.50 per month for each full fiscal year of retirement through June 30, 1999, plus $1 per month for each year of credited service. The benefits were increased July 1, 1999.

** This age will be reduced in five phases to age 55 if the actuary certifies that reducing the age will not result in the amortization period of the unfunded accrued liability exceeding 20 years.*

CONTRIBUTIONS

Members contribute 7.25 percent of compensation and the employer contributes 49.08 percent of compensation. Funds from SB2659 and HB1015 are also provided.

SUMMARY OF BENEFIT PROVISIONS EVALUATED

The following summary presents the main provisions of the plans in effect June 30, 2019, as interpreted in preparing the actuarial valuation. As used in the summary, “average compensation” means the average compensation of a member during the six-month period prior to receipt of an allowance.

Benefits

SERVICE RETIREMENT

Condition for Retirement

A retirement allowance is payable to any member who retires and has completed at least 20 years of creditable service, regardless of age.

Any general employee member who has attained age 70 and any firefighter or police officer who has attained age 65 shall be retired forthwith.

Amount of Allowance

The annual retirement allowance payable to a retired member is equal to:

1. 50.0 percent of average compensation, plus

2. 1.7 percent of average compensation for each year of credited service over 20.

The aggregate amount of (1) and (2) above shall not exceed 66.67 percent (87.0 percent for the city of Clinton) of average compensation, regardless of service.

DISABILITY RETIREMENT

Condition for Retirement

A retirement allowance is payable to any member who is not eligible for a service retirement benefit but who becomes totally and permanently disabled, either physically or mentally, regardless of creditable service, if the disability is due to causes in the performance of duty. If the disability is not due to causes in the performance of duty, the member must have completed at least five years of creditable service to be eligible for retirement.

Amount of Allowance

The annual disability retirement allowance payable is equal to 50.0 percent of his or her salary at the time of retirement, if the disability is due to causes in the performance of duty.

If the disability is not due to causes in the performance of duty, the allowance is equal to 2.5 percent times credited service, not in excess of 20, times his or her salary at the time of retirement for firefighters and police officers, and average compensation for general employees.

DEATH BENEFIT

Condition for Benefits

A benefit is payable upon the death of a member under the following conditions:

a) The member has retired;

b) The member is eligible to retire;

c) The death is in the line of duty; or

d) The death is not in the line of duty but occurs after the member has five years of credited service.

The benefit is payable to the surviving spouse until remarriage and to children under age 18, to dependent children through age 23 when full-time students, and to dependent children of any age if handicapped. For the cities of Clarksdale, Columbus, Gulfport, Hattiesburg, Jackson, McComb, Meridian, Vicksburg, and Yazoo City, benefits payable to spouses do not cease upon remarriage.

Amount of Benefits

The annual benefit payable, under all conditions in the case of firefighters and police officers and under other than condition (c) in the case of general employees is equal to 2.5 percent of average compensation for each year of credited service up to 20 and 1.7 percent of average compensation for each year over 20, with a maximum benefit of 66.67 percent (87.0 percent for the city of Clinton) of average compensation.

For general employee members under condition (c), the annual benefit payable is equal to 50.0 percent of salary at the time of death.

REFUND OF CONTRIBUTIONS

Upon a member's termination of employment for any reason before retirement, his or her accumulated contributions are refunded. Upon the death of a member who is not eligible for any other death benefit, his or her accumulated contributions are paid to his or her beneficiary.

MINIMUM ALLOWANCES

The minimum monthly allowance paid to members from the following municipalities, for all retirement and death benefits, are:

Biloxi	$600
Columbus	500
Gulfport	500
Hattiesburg	750
Jackson	500
Meridian	600
Tupelo	750
Vicksburg	1,515

POST-RETIREMENT ADJUSTMENTS IN ALLOWANCES

The allowances of certain retired members are adjusted annually by a COLA on the basis of the annual percentage change in each fiscal year of the Consumer Price Index.

Those cities adjustments are limited as follows:

Biloxi: 3.0 percent per year (not to exceed 64.4 percent) for each full fiscal year of retirement after June 30, 2000, for all retirees and beneficiaries with the COLA being compounded beginning with the state fiscal year in which the retired member turns age 55. This is in addition to the previously granted maximum of 3.0 percent per year (not to exceed 9.0 percent) for all members who retired on or before December 31, 1995.

Clarksdale: Maximum of 2.5 percent per year for all retirees and beneficiaries.

Clinton: Maximum of 2.5 percent per year (not to exceed 10.0 percent) for service retirements only.

Columbus: Maximum of 2.5 percent per year (not to exceed 25.0 percent) for all retirees and beneficiaries.

Greenville: Maximum of 2.5 percent per year (not to exceed 25.0 percent) for all retirees and beneficiaries.

Gulfport: Maximum of 3.0 percent per year (not to exceed 27.0 percent) for each fiscal year of retirement after June 30, 2002, for all retirees and beneficiaries. This is in addition to the previously granted COLA of 2.0 percent per year (not to exceed 6.0 percent) for those retiring before July 1, 2001. All Gulfport retirees and beneficiaries who were receiving a retirement allowance as of June 30, 2002, were granted a monthly ad hoc benefit increase of $2 per month for each year of service plus $2 per month for each full fiscal year retired.

Hattiesburg: 2.5 percent per year for all retirees and beneficiaries (not to exceed 32.0 percent).

Jackson: Maximum aggregate increase of 19.5 percent for service and disability retirements only.

Laurel: 2.0 percent per year, compounded annually (maximum of three years) for each fiscal year of retirement after June 30, 2002, for all retirees and beneficiaries. COLA increases begin at the later of age 60 or after one full fiscal year of retirement.

McComb: Maximum of 2.5 percent per year for all retirees and beneficiaries (not to exceed 10.0 percent).

Meridian: All Meridian retirees and beneficiaries who were receiving a retirement allowance as of June 30, 1999, were granted a 3.9 percent ad hoc benefit increase.

Pascagoula: Maximum of 2.5 percent per year for all retirees and beneficiaries (not to exceed 15.0 percent).

Tupelo: All Tupelo retirees and beneficiaries received an increase of 5.0 percent in allowances effective December 1, 1991. Additionally, ad hoc increases were granted as follows, provided the member had been retired for at least one full fiscal year.

09/30/1995	3.00%
09/30/1997	3.00
09/30/1998	3.00
09/30/1999	2.00
09/30/2000	3.00
09/30/2001	2.34
09/30/2010	2.00
09/30/2014	2.00
09/30/2015	3.00
09/30/2016	3.00
09/30/2017	2.00
09/30/2018	3.00

Vicksburg: 3.0 percent per year for all retirees and beneficiaries.

Yazoo City: Maximum of 2.5 percent per year (not to exceed 25.0 percent) for all retirees and beneficiaries.

Post-retirement adjustments are included in System liabilities for future increases for the cities of Biloxi, Clinton, Columbus, Greenville, Gulfport, Hattiesburg, Jackson, Laurel, McComb, Pascagoula, Vicksburg, and Yazoo City.

CONTRIBUTIONS

Funding policies established by Mississippi statutes provide the rates of employer contributions for MRS. The adequacy of these rates are checked annually by actuarial valuation. The following table provides a comparison of employer required contributions to actual contributions received for MRS [dollars in thousands]:

Fiscal Year 10/1 - 9/30	Valuation Date 9/30	Annual Required Contribution (A)	Actual Contribution (B)	Difference (B-A)	Percentage Contributed
1996-97	1996	$20,674	$71,350	$50,676	345.10%
1997-98	1997	14,727	14,200	(527)	96.40
1998-99	1998	13,803	13,770	(33)	99.80
1999-00	1999	12,364	14,162	1,798	114.50
2000-01	2000	11,276	14,201	2,925	125.90
2001-02	2001	10,823	14,338	3,515	132.50
2002-03	2002	11,989	13,979	1,990	116.60
2003-04	2003	13,286	13,890	604	104.50
2004-05	2004	14,091	14,173	82	100.60
2005-06	2005	15,397	15,635	238	101.50
2006-07	2006	15,426	14,976	(450)	97.10
2007-08	2007	15,219	16,132	913	106.00
2008-09	2008	14,765	16,892	2,127	114.40
2009-10	2009	17,739	21,426	3,687	120.80
2010-11	2010	18,576	22,791	4,215	122.70
2011-12	2011	18,751	23,823	5,072	127.00
2012-13	2012*	19,512	20,017	505	102.60
2013-14	2013*	19,344	20,395	1,051	105.40
2014-15	2014*	18,338	19,346	1,008	105.50
2015-16	2015*	18,034	18,542	508	102.80
2016-17	2016*	17,694	17,731	37	100.20
2017-18	2017*	17,393	17,610	217	101.20
2018-19	2018*	16,695	-	-	N/A
2019-20	2019*	16,778	-	-	N/A

** Municipal Retirement Systems' plan year changed from September 30 to June 30 beginning in fiscal year 2013.*

SUMMARY OF MAIN BENEFIT AND CONTRIBUTION PROVISIONS

The following summary presents the main benefit and contribution provisions of the plan in effect June 30, 2019, as interpreted in preparing the actuarial valuation and as of June 30, 2020, in determining the rollforward of the total pension liability to the measurement date. As used in the summary, "average compensation" means the average annual covered earnings of an employee during the four highest years of service.

To determine the member's four highest years, PERS considers these scenarios:

» Four highest fiscal years of earned compensation;

» Four highest calendar years of earned compensation;

» Combination of four highest fiscal and calendar years of earned compensation that do not overlap; or

» Final 48 months of earned compensation prior to termination of employment.

"Covered earnings" means gross salary not in excess of the maximum amount on which contributions were required. "Fiscal year" means a year commencing July 1 and ending June 30. "Eligibility service" means service while a contributing member of PERS plus additional service as described below. "Credited Service" means service while a contributing member of SLRP plus additional service as described below. "Unused sick and vacation leave" means service credit is provided at no charge to members for unused sick and vacation time that has accrued at the time of retirement. A payment of up to 240 hours of leave may be used in the average compensation definition. "Additional service" means additional service credit may be granted for service prior to July 1, 1989, including active-duty military service. "Attribution" means a period for the normal cost is based on entry into PERS even for members who first participated in SLRP at a later age than PERS.

The maximum covered earnings for employers and employees over the years are as follows:

Date From	Date To	Employer Rate	Maximum Covered Earnings	Member Rate	Maximum Covered Earnings
7/1/1989	6/30/1992	6.33%	$75,600	3.00%	$75,600
7/1/1992	6/30/2002	6.33	125,000	3.00	125,000
7/1/2002	6/30/2006	6.33	150,000	3.00	150,000
7/1/2006	6/30/2008	6.65	150,000	3.00	150,000
7/1/2008	6/30/2009	6.65	230,000	3.00	230,000
7/1/2009	12/31/2011	6.65	245,000	3.00	245,000
1/1/2012	6/30/2012	7.40	245,000	3.00	245,000
7/1/2012	6/30/2013	7.40	250,000	3.00	250,000
7/1/2013	6/30/2014	7.40	255,000	3.00	255,000
7/1/2014	6/30/2015	7.40	260,000	3.00	260,000
7/1/2015	6/30/2017	7.40	265,000	3.00	265,000
7/1/2017	6/30/2018	7.40	270,000	3.00	270,000
7/1/2018	6/30/2019	7.40	275,000	3.00	275,000
7/1/2019	6/30/2020	7.40	280,000	3.00	280,000

Benefits

SUPERANNUATION RETIREMENT

Condition for Retirement

a) A retirement allowance is paid upon the request of any member who retires and has attained age 60 and completed at least eight years* of membership service under the System. A retirement allowance may also be paid upon the completion of at least 25 years of creditable service under PERS for members hired prior to July 1, 2011, or upon the completion of 30 years of creditable service for members hired on or after July 1, 2011.

b) Any member who withdraws from service prior to his or her attainment of age 60 and who has completed at least eight years* of membership service is entitled to receive (in lieu of a refund of his or her accumulated contributions) a retirement allowance commencing at age 60.

**Four years for those who entered the System before July 1, 2007.*

Amount of Allowance

The annual retirement allowance payable to a member who retires under condition a) above is equal to:

1. A member's annuity which is the actuarial equivalent of his or her accumulated contributions at the time of his or her retirement, plus

2. An employer's annuity which, together with the member's annuity, is equal to 1.0 percent of his or her average compensation for each of the first 25 years of creditable service plus 1.25 percent for each year of creditable service over 25 years.

The minimum allowance is $60 per year of creditable service.

DISABILITY RETIREMENT

Condition for Retirement

A retirement allowance is paid to a member who is totally and permanently disabled, as determined by the Board and has accumulated eight or more years* of membership service.

** Four years for those who entered the System before July 1, 2007.*

Amount of Allowance

For those who were active members prior to July 1, 1992, and did not elect the benefit structure outlined below, the annual disability retirement allowance payable is equal to a superannuation retirement allowance if the member has attained age 60, otherwise it is equal to a superannuation retirement allowance calculated as follows:

1. A member's annuity equal to the actuarial equivalent of his or her accumulated contributions at the time of retirement, plus

2. An employer's annuity equal to the amount that would have been payable had the member continued in service to age 60.

For those who became active members after June 30, 1992, and for those who were active members prior to July 1, 1992, who so elected, the following benefits are payable:

1. A temporary allowance equal to the greater of (a) 20.0 percent of average compensation plus 5.0 percent for each dependent child up to a maximum of two, or (b) the member's accrued allowance. This temporary allowance is paid for a period of time based on the member's age at disability, as follows:

Age At Disability	Duration
60 & earlier	to age 65
61	to age 66
62	to age 66
63	to age 67
64	to age 67
65	to age 68
66	to age 68
67	to age 69
68	to age 70
69 & later	one year

The minimum allowance is $60 per year of service credit.

2. A deferred allowance commencing when the temporary allowance ceases equal to the greater of (a) the allowance the member would have received based on service to the termination age of the temporary allowance, but not more than 20.0 percent of average compensation, or (b) the member's accrued allowance.

   The minimum allowance is $60 per year of service credit.

Effective July 1, 2004, a temporary benefit can be paid out of a member's accumulated contribution balance while the member is awaiting a determination for eligibility for disability benefits. Future disability payments, if any, would be offset by advanced payments made from the member's accumulated contributions.

ACCIDENTAL DISABILITY RETIREMENT

Condition for Retirement

A retirement allowance is paid to a member who is totally and permanently disabled in the performance of duty.

Amount of Allowance

The annual accidental disability retirement allowance is equal to the allowance payable on disability retirement but not less than 25.0 percent of average compensation. There is no minimum benefit.

ACCIDENTAL DEATH BENEFIT

Condition for Benefit

A retirement allowance is paid to a spouse and/or dependent children upon the death of an active member in the line of performance of duty.

Amount of Allowance

The annual retirement allowance is equal to 25.0 percent of average compensation payable to the spouse and 12.5 percent of average compensation payable to one dependent child or 25.0 percent to two or more children until age 19 (23 if a full-time student). There is no minimum benefit.

ORDINARY DEATH BENEFIT

Condition for Benefit

Upon the death of a member who has completed at least eight years* of membership service, a benefit is payable (in lieu of a refund of the member's accumulated contributions) to his or her spouse, if said spouse has been married to the member for not less than one year.

** Four years for those who entered the System before July 1, 2007.*

Amount of Allowance

The annual retirement allowance payable to the lawful spouse of a vested member who dies is equal to the greater of:

1. The allowance that would have been payable had the member retired and elected Option 2, reduced by an actuarially determined factor based on the number of years the member lacked in qualifying for unreduced benefits, or

2. A lifetime benefit equal to 20.0 percent of the deceased member's average compensation, but not less than $25 per month.

In addition, a benefit is payable to dependent children until age 19 (23 if a full-time student). The benefit is equal to the greater of 5.0 percent of average compensation or $25 per month for each dependent child up to three.

RETURN OF CONTRIBUTIONS

Upon the withdrawal of a member without a retirement benefit, his or her contributions are returned to him or her, together with accumulated regular interest thereon.

Upon the death of a member before retirement, his or her contributions, together with the full accumulated regular interest thereon, are paid to his or her designated beneficiary, if any, otherwise, to his or her estate provided no other survivor benefits are payable.

Effective July 1, 2016, the interest rate on employee contributions shall be calculated based on the money market rate as published by *The Wall Street Journal* on December 31 of each preceding year with a minimum rate of 1.0 percent and a maximum rate of 5.0 percent.

NORMAL FORM OF BENEFIT

The normal form of benefit is an allowance payable during the life of the member with the provision that, upon his or her death, the excess of his or her total contributions at the time of retirement over the total retirement annuity paid to him or her will be paid to his or her designated beneficiary.

OPTIONAL BENEFIT

A member upon retirement may elect to receive his or her allowance in one of the following forms, which are computed to be actuarially equivalent to the applicable retirement allowance.

Option 1. Reduced allowance with the provision that if the pensioner dies before he or she receives the value of the member's annuity as it was at the time of retirement, the balance shall be paid to his or her beneficiary.

Option 2. Upon his or her death, his or her reduced retirement allowance shall be continued throughout the life of, and paid to, his or her beneficiary.

Option 3. Upon his or her death, 50.0 percent of his or her reduced retirement allowance shall be continued throughout the life of, and paid to, a designated beneficiary and the other 50.0 percent of his or her reduced retirement allowance to some other designated beneficiary.

Option 4. Upon his or her death, 75.0 percent of his or her reduced retirement allowance shall be continued throughout the life of, and paid to, a designated beneficiary.

Option 4A. Upon his or her death, 50.0 percent of his or her reduced retirement allowance shall be continued throughout the life of, and paid to, a designated beneficiary.

Option 4B. A reduced retirement allowance shall be continued throughout the life of the pensioner, but with the further guarantee of payment to the pensioner, or his or her beneficiary for a specified number of years certain.

Option 4C. A member may elect any option with the added provision that the member shall receive, so far as possible, the same total amount annually (considering both SLRP and Social Security benefits) before and after the earliest age at which the member becomes eligible for a Social Security benefit. This option was only available to those who retired prior to July 1, 2004.

A member who elects Option 2, Option 4, or Option 4A at retirement may revert to the normal form of benefit if the designated beneficiary predeceases the retired member or if the member divorces the designated beneficiary.

A member who elects the normal form of benefit or Option 1 at retirement may select Option 2, Option 4, or Option 4A to provide beneficiary protection to a new spouse if married at retirement.

A member who has at least 28 years of creditable service* under PERS may select a PLSO at retirement. Under this option, the retiree has the option of taking a partial- lump-sum distribution equal to 12, 24, or 36 times the base maximum monthly benefit. With each lump-sum amount, the base maximum monthly benefit will be actuarially reduced. A member selecting the PLSO may also select any of the regular options except Option 1, the prorated single-life annuity, and Option 4C, the Social Security-leveling provision. The benefit is then calculated using the new reduced maximum benefit as a starting point in applying the appropriate option factors for the reduction.

**Or at least age 63 with four years of membership service for those who entered PERS before July 1, 2007.*

POST-RETIREMENT ADJUSTMENTS IN ALLOWANCES

The allowances of retired members are adjusted annually by an amount equal to:

a) 3.0 percent of the annual retirement allowance for each full fiscal year of retirement prior to the year in which the member reaches age 55, plus

b) 3.0 percent compounded for each year thereafter beginning with the fiscal year in which the member turns age 55.

A prorated portion of the annual adjustment will be paid to the member, beneficiary, or estate of any member or beneficiary who is receiving the annual adjustment in a lump sum, but whose benefits are terminated between July 1 and December 1.

CONTRIBUTIONS

Members currently contribute 3.0 percent of covered earnings. The employer contributes 7.4 percent of covered earnings.

Changes in Plan Provisions

The Mississippi Legislature ended its 2020 legislative session with no changes to the Mississippi Code of 1972 plan provisions of the Public Employees' Retirement System of Mississippi.

Asset Valuation & Funding Progress

As of June 30, 2020, valuation assets and funding progress of the System are based on the June 30, 2019 actuarial valuation. Funding of the actuarial accrued liability is intended to help users assess each plan's funding status on a going-concern basis and assess progress being made in accumulating sufficient assets to pay benefits when due. Actuarial values of assets for PERS, MHSPRS, MRS, and SLRP are based on a smoothed fair-value basis that recognizes 20.0 percent of the unrecognized and unanticipated gains and losses. The actuarial valuation of assets recognizes assumed investment income fully each year. Differences between actual and assumed investment income are recognized in equal increments over a five-year period beginning with the current year.

The following table presents the actuarial change in asset valuation for the year ended June 30, 2019 [in thousands]:

	PERS	MHSPRS	MRS	SLRP	TOTAL
Asset Valuation as of June 30, 2018	**$27,455,702**	**$352,415**	**$154,749**	**$17,945**	**$27,980,811**
Contributions & Other Revenue	1,619,049	21,715	17,129	739	1,658,632
Benefit Payments	(2,855,439)	(34,687)	(32,935)	(1,442)	(2,924,503)
Administrative Expenses	(16,905)	(312)	(342)	(11)	(17,570)
Investment Expenses*	(102,447)	(1,527)	-	(78)	(104,052)
Net	**(1,355,742)**	**(14,811)**	**(16,148)**	**(792)**	**(1,387,493)**
Expected Total Investment Return for 2018 (7.75%)	2,205,529	28,460	11,330	1,448	2,246,767
Adjustment Toward Market (20%)	(280,878)	(3,473)	(2,260)	(173)	(286,784)
Asset Valuation as of June 30, 2019	**$28,024,611**	**$362,591**	**$147,671**	**$18,428**	**$28,553,301**

** This amount is based on a proportionate share of the total investment expense of the commingled assets. The ratio of this number to the total investment expense is equal to the ratio of a fiscal year average market value of assets for this fund to a fiscal year average market value of the total commingled assets.*

The components of the change in the computed unfunded actuarial accrued liability amortization period are presented in the following table. The plans that comprise MRS are closed and have a funding policy that provides for property tax to be sufficiently levied within limits established by Mississippi statutes to provide for a declining amortization period for each municipality.

The following table presents the actual remaining amortization periods as of June 30, 2019.

	PERS	MHSPRS	SLRP
Previously Reported Period	30.9 years	18.3 years	20.1 years
Change Due To:			
Normal Amortization	(1.0)	(1.0)	(1.0)
Actuarial Experience	2.0	(0.4)	1.6
Assumption Method Changes	4.1	1.6	2.2
Plan Amendments	-	-	-
Additional Assumed Contributions	-	(0.6)	-
Contribution Experience	0.2	(0.2)	-
Computed Period	36.2 years	17.7 years	22.9 years

For PERS, the primary reasons for the increase in the amortization period were assumption changes adopted by the Board in August 2019 and the loss due to investment earnings on an actuarial value of assets basis worse than expected (7.19 percent vs. 7.75 percent).

For MHSPRS, there was a slight decrease in the amortization period compared to a greater decline in the prior year due to the change in the employer contribution rate increase from 37.0 to 49.08 percent of compensation.

For SLRP, the primary reasons for the increase in the amortization period are the change in actuarial assumptions and an investment loss on an actuarial value basis.

The funded status of each of the plans is shown in the Schedules of Funding Progress on pages 144 and 145. This table shows funding ratios for the last 10 fiscal years. The table also shows the amount by which actuarial assets exceeded or fell short of actuarial benefit liabilities. An actuarial valuation of the plan's assets and benefit obligations is performed annually.

At the date of the most recent actuarial valuation, June 30, 2019, the funded status of PERS decreased to 60.9 percent from 61.8 percent at June 30, 2018. The amount by which PERS' actuarial assets were less than actuarial benefit liabilities was $18.0 billion at June 30, 2019, compared to $16.9 billion at June 30, 2018.

At the date of the most recent actuarial valuation, June 30, 2019, the funded status of the MHSPRS increased to 66.9 percent from 66.8 percent at June 30, 2018. The amount by which the MHSPRS' actuarial assets were less than actuarial benefit liabilities was $179.3 million, compared with $175.0 million at June 30, 2018.

As of the June 30, 2019, actuarial valuation of MRS, the funded status decreased to 49.9 percent from 50.3 percent at June 30, 2018. The amount by which the MRS actuarial assets were less than actuarial benefit liabilities was $148.3 million at June 30, 2019, compared with $152.7 million at June 30, 2018.

At the date of the most recent actuarial valuation, June 30, 2019, the funded status of SLRP remained at 80.4 percent. The amount by which the SLRP actuarial assets were less than actuarial benefit liabilities was $4.5 million at June 30, 2019, compared with $4.4 million at June 30, 2018.

Schedules of Funding Progress
Last 10 Fiscal Years

[in thousands]

Actuarial Valuation Date	Actuarial Value of Assets (A)	Actuarial Accrued Liability (AAL) Entry Age (B)	Unfunded AAL (UAAL) (B-A)	Percent Funded (A/B)	Annual Covered Payroll (C)	UAAL as a Percentage of Covered Payroll ((B-A)/C)
Public Employees' Retirement System of Mississippi						
6/30/10	$20,143,426	$31,399,988	$11,256,562	64.20%	$5,763,556	195.30%
6/30/11	20,315,165	32,654,465	12,339,300	62.20	5,684,624	217.10
6/30/12	19,992,797	34,492,873	14,500,076	58.00	5,857,789	247.50
6/30/13	20,490,555	35,542,848	15,052,293	57.70	5,823,578	258.50
6/30/14	22,569,940	37,015,288	14,445,348	61.00	5,834,687	247.60
6/30/15	24,387,161	40,364,584	15,977,423	60.40	5,904,827	270.60
6/30/16	25,185,078	41,997,513	16,812,435	60.00	6,022,533	279.20
6/30/17	26,364,446	43,166,491	16,802,045	61.10	6,038,229	278.30
6/30/18	27,455,702	44,396,161	16,940,459	61.80	5,999,231	282.40
6/30/19	28,024,611	46,006,859	17,982,248	60.90	6,144,916	292.60
Mississippi Highway Safety Patrol Retirement System						
6/30/10	$281,088	$411,277	$130,189	68.30%	$26,353	494.00%
6/30/11	278,265	414,432	136,167	67.10	24,872	547.50
6/30/12	268,424	421,415	152,991	63.70	25,670	596.00
6/30/13	271,097	431,575	160,478	62.80	25,816	621.60
6/30/14	295,298	445,822	150,524	66.20	25,554	589.00
6/30/15	316,149	477,803	161,654	66.20	25,505	633.80
6/30/16	324,894	494,101	169,207	65.80	27,380	618.00
6/30/17	339,114	497,992	158,878	68.10	28,845	550.80
6/30/18	352,415	527,428	175,013	66.80	29,555	592.20
6/30/19	362,591	541,925	179,334	66.90	31,811	563.70
Municipal Retirement Systems						
9/30/10	$175,988	$372,897	$196,909	47.20%	$1,425	13,818.20%
9/30/11	167,604	363,604	196,000	46.10	1,357	14,443.60
9/30/12	155,484	356,571	201,087	43.60	1,131	17,779.60
6/30/13*	153,241	349,588	196,347	43.80	794	24,728.80
6/30/14	157,970	340,385	182,415	46.40	727	25,091.50
6/30/15	162,616	341,525	178,909	47.60	579	30,899.70
6/30/16	159,160	330,663	171,503	48.10	419	40,931.50
6/30/17	157,674	321,747	164,073	49.00	321	51,113.10
6/30/18	154,749	307,457	152,708	50.30	200	76,354.00
6/30/19	147,671	296,006	148,335	49.90	95	156,142.10
Supplemental Legislative Retirement Plan						
6/30/10	$13,241	$17,081	$3,840	77.50%	$6,605	58.10%
6/30/11	13,606	18,605	4,999	73.10	6,810	73.40
6/30/12	13,268	19,537	6,269	67.90	6,872	91.20
6/30/13	13,554	19,978	6,424	67.80	6,695	96.00
6/30/14	14,899	20,240	5,341	73.60	6,918	77.20
6/30/15	16,098	21,213	5,115	75.90	6,861	74.60
6/30/16	16,447	21,259	4,812	77.40	6,862	70.10
6/30/17	17,208	21,849	4,641	78.80	6,928	67.00
6/30/18	17,945	22,319	4,374	80.40	6,833	64.00
6/30/19	18,428	22,934	4,506	80.40	6,937	65.00

** Municipal Retirement Systems' plan year changed from September 30 to June 30, beginning in fiscal year 2013.*

Solvency Tests

(in thousands]

	Actuarial Accrued Liabilities for:				Portions of Accrued Liabilities Covered by Assets		
	(1) Accumulated Employee Contributions Including Allocated Investment Earnings	(2) Retirees & Beneficiaries Currently Receiving Benefits	(3) Active & Inactive Members Employer-Financed Portion	Net Position Available for Benefits	(1)	(2)	(3)
Public Employees' Retirement System of Mississippi							
6/30/10	$4,266,621	$16,763,455	$10,369,912	$20,143,426	100.00%	94.70%	-%
6/30/11	4,356,556	18,001,718	10,296,191	20,315,165	100.00	88.70	-
6/30/12	4,463,252	19,547,367	10,482,254	19,992,797	100.00	79.40	-
6/30/13	5,053,888	20,789,551	9,699,409	20,490,555	100.00	74.30	-
6/30/14	5,277,944	22,033,588	9,703,756	22,569,940	100.00	78.50	-
6/30/15	5,379,226	24,012,624	10,972,734	24,387,161	100.00	79.20	-
6/30/16	5,468,859	25,390,774	11,137,880	25,185,078	100.00	77.70	-
6/30/17	5,534,403	26,686,958	10,945,130	26,364,446	100.00	78.10	-
6/30/18	5,570,524	27,874,365	10,951,272	27,455,702	100.00	78.50	-
6/30/19	5,626,602	29,109,623	11,270,634	28,024,611	100.00	76.90	-
Mississippi Highway Safety Patrol Retirement System							
6/30/10	$20,658	$284,106	$106,513	$281,088	100.00%	91.70%	-%
6/30/11	20,621	292,234	101,577	278,265	100.00	88.20	-
6/30/12	20,760	300,753	99,902	268,424	100.00	82.30	-
6/30/13	23,706	306,273	101,596	271,097	100.00	80.80	-
6/30/14	24,411	317,825	103,586	295,298	100.00	85.20	-
6/30/15	24,827	338,459	114,517	316,149	100.00	86.10	-
6/30/16	25,791	343,635	124,675	324,894	100.00	87.00	-
6/30/17	26,922	349,850	121,220	339,114	100.00	89.20	-
6/30/18	27,581	358,342	141,505	352,415	100.00	90.60	-
6/30/19	27,244	372,526	142,155	362,591	100.00	90.00	-
Municipal Retirement Systems							
9/30/10	$2,295	$362,444	$8,158	$175,988	100.00%	47.90%	-%
9/30/11	2,256	353,609	7,739	167,604	100.00	46.80	-
9/30/12	1,957	348,121	6,493	155,484	100.00	44.10	-
* 6/30/13	1,483	343,770	4,335	153,241	100.00	44.10	-
6/30/14	1,342	334,937	4,106	157,970	100.00	46.80	-
6/30/15	1,101	337,039	3,385	162,616	100.00	47.90	-
6/30/16	867	327,525	2,271	159,160	100.00	48.30	-
6/30/17	667	319,346	1,734	157,674	100.00	49.20	-
6/30/18	442	305,791	1,223	154,749	100.00	50.50	-
6/30/19	220	295,261	525	147,671	100.00	49.90	-
Supplemental Legislative Retirement Plan							
6/30/10	$2,509	$8,777	$5,795	$13,241	100.00%	100.00%	33.70%
6/30/11	2,642	8,734	7,229	13,606	100.00	100.00	33.80
6/30/12	2,105	11,428	6,004	13,268	100.00	97.70	-
6/30/13	2,416	11,909	5,652	13,554	100.00	93.50	-
6/30/14	2,638	11,920	5,682	14,899	100.00	100.00	6.00
6/30/15	2,862	12,329	6,023	16,098	100.00	100.00	15.10
6/30/16	2,485	13,758	5,016	16,447	100.00	100.00	4.10
6/30/17	2,636	13,799	5,414	17,208	100.00	100.00	14.30
6/30/18	2,693	13,840	5,786	17,945	100.00	100.00	24.40
6/30/19	2,701	14,282	5,951	18,428	100.00	100.00	24.30

** Municipal Retirement Systems' plan year changed from September 30 to June 30, beginning in fiscal year 2013.*

Analysis of Financial Experience
Gains & Losses in Accrued Liabilities Resulting from Differences Between Assumed Experience & Actual Experience
For The Year Ended June 30, 2019

[in thousands]

	Gain (Loss) for Year			
Type of Activity	PERS	MHSPRS	MRS	SLRP
Age & Service Retirements: If members retire at older ages, there is a gain. If younger ages, a loss.	$75,600.00	$(773.30)	$(5.40)	$(120.90)
Disability Retirements: If disability claims are less than assumed, there is a gain. If more claims, a loss.	2,000.00	57.80	-	9.70
Death-in-service Benefits: If survivor claims are less than assumed, there is a gain. If more claims, a loss.	(800.00)	266.80	0.60	4.00
Withdrawal from Employment: If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	(138,000.00)	221.00	-	88.60
Pay Increase: If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	(33,000.00)	800.10	1.40	44.80
New Members: Additional unfunded accrued liability will produce a loss.	(65,800.00)	(49.50)	-	(18.10)
Investment Income: If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(257,000.00)	(3,337.40)	(2,308.40)	(166.00)
Death after retirement: If retirants live longer than assumed, there is a loss. If not as long, a gain.	(2,300.00)	1,881.80	1,751.70	188.90
Other: Miscellaneous gains & losses, data adjustments, timing of financial transactions, etc.	10,800.00	(1,988.00)	(671.10)	(75.80)
Gain (or Loss) During Year from Financial Experience	(408,500.00)	(2,920.70)	(1,231.20)	(44.80)
Non-recurring Items: Adjustments for plan amendments, software changes, assumption changes, or method changes.	(305,400.00)	(3,020.90)	22.30	(68.70)
Composite Gain (or Loss) during Year	$(713,900.00)	$(5,941.60)	$(1,208.90)	$(113.50)

Schedule of Active Member Valuation Data

Valuation Date	Number of Employers	Number of Employees	Annual Payroll	Annual Average Pay	Increase in Average Pay
	Active Members				
Public Employees' Retirement System of Mississippi					
6/30/10	868	164,896	$5,763,556,195	$34,953	0.20 %
6/30/11	872	161,676	5,684,624,214	35,161	0.60
6/30/12	870	162,311	5,857,789,376	36,090	2.60
6/30/13	873	161,744	5,823,577,978	36,005	(0.20)
6/30/14	871	161,360	5,834,686,655	36,159	0.40
6/30/15	868	157,215	5,904,827,181	37,559	3.90
6/30/16	862	154,104	6,022,532,933	39,081	4.10
6/30/17	861	152,382	6,038,228,708	39,626	1.40
6/30/18	858	150,687	5,999,230,701	39,813	0.50
6/30/19	854	150,651	6,144,915,630	40,789	2.50
Mississippi Highway Safety Patrol Retirement System					
6/30/10	1	542	$26,353,400	$48,623	5.00 %
6/30/11	1	515	24,872,085	48,295	(0.70)
6/30/12	1	547	25,670,030	46,929	(2.80)
6/30/13	1	520	25,815,787	49,646	5.80
6/30/14	1	495	25,553,765	51,624	4.00
6/30/15	1	518	25,504,676	49,237	(4.60)
6/30/16	1	484	27,380,162	56,571	14.90
6/30/17	1	470	28,845,478	61,373	8.50
6/30/18	1	511	29,555,411	57,838	(5.80)
6/30/19	1	522	31,811,231	60,941	5.40
Municipal Retirement System					
9/30/10	17	27	$1,424,636	$52,764	1.70 %
9/30/11	17	25	1,356,858	54,274	2.90
9/30/12	17	21	1,131,252	53,869	(0.70)
* 6/30/13	17	16	793,841	49,615	(7.90)
6/30/14	17	14	727,347	51,953	4.70
6/30/15	17	11	579,267	52,661	1.40
6/30/16	17	8	419,000	52,375	(0.50)
6/30/17	17	6	321,243	53,541	2.20
6/30/18	17	4	199,742	49,936	(6.70)
6/30/19	17	2	94,871	47,436	(5.00)
Supplemental Legislative Retirement Plan					
6/30/10	5	175	$6,605,037	$37,743	(3.50)%
6/30/11	5	174	6,809,770	39,137	3.70
6/30/12	5	175	6,871,757	39,267	0.30
6/30/13	5	175	6,695,359	38,259	(2.60)
6/30/14	5	175	6,917,939	39,531	3.30
6/30/15	5	174	6,861,166	39,432	(0.30)
6/30/16	5	171	6,862,262	40,130	1.80
6/30/17	5	174	6,928,085	39,817	(0.80)
6/30/18	5	174	6,832,961	39,270	(1.40)
6/30/19	5	170	6,937,075	40,806	3.90

** Municipal Retirement Systems' plan year changed from September 30 to June 30, beginning in fiscal year 2013.*

Schedule of Retirants Added to & Removed from Rolls

Last Seven Fiscal Years

Fiscal Year Ended	Added		Removed		Increase Due to Annual COLA	Rolls at End of Year		Increase in Annual Allowances	Average Annual Allowances
	Number	Annual Allowances	Number	Annual Allowances		Number	Annual Allowances		
June 30, 2013									
PERS	6,276	$120,592,399	(2,891)	$(47,237,330)	$48,758,557	90,214	$1,874,720,385	6.97 %	$20,781
MHSPRS	23	642,344	(23)	(596,871)	622,206	713	25,835,619	2.65	36,235
MRS	40	896,085	(77)	(1,083,209)	195,722	1,941	35,105,891	0.02	18,086
SLRP	20	77,003	(5)	(26,497)	24,226	188	1,121,404	7.14	5,965
June 30, 2014									
PERS	6,159	$120,190,296	(2,869)	$(48,955,768)	$52,368,041	93,504	$1,998,322,954	6.59 %	$21,372
MHSPRS	28	1,113,236	(21)	(661,028)	678,533	720	26,966,360	4.38	34,453
MRS	29	485,121	(80)	(1,041,083)	173,544	1,890	34,723,473	(1.09)	18,372
SLRP	6	32,688	(7)	(44,780)	30,165	187	1,139,477	1.61	6,093
June 30, 2015									
PERS	5,907	$117,113,206	(3,073)	$(55,158,128)	$56,044,620	96,338	$2,116,322,652	5.90 %	$21,968
MHSPRS	22	890,167	(18)	(480,408)	700,417	724	28,076,536	4.12	38,780
MRS	40	731,337	(81)	(1,119,680)	143,234	1,849	34,478,364	(0.71)	18,647
SLRP	8	58,303	(10)	(95,910)	31,718	185	1,133,588	(0.52)	6,128
June 30, 2016									
PERS	6,548	$132,970,248	(3,403)	$(59,603,335)	$59,355,139	99,483	$2,249,044,704	6.27 %	$22,607
MHSPRS	26	833,870	(26)	(830,278)	701,887	724	28,782,015	2.51	39,754
MRS	46	842,966	(97)	(1,365,194)	132,268	1,798	34,088,404	(1.13)	18,959
SLRP	28	177,207	(6)	(57,546)	24,514	207	1,277,763	12.72	6,173
June 30, 2017									
PERS	6,219	$123,938,697	(3,442)	$(62,470,173)	$64,233,789	102,260	$2,374,747,017	5.59 %	$23,223
MHSPRS	22	717,225	(20)	(694,187)	758,789	726	29,563,842	2.72	40,722
MRS	34	712,490	(78)	(1,174,872)	125,506	1,754	33,751,528	(0.99)	19,243
SLRP	6	31,300	(8)	(64,321)	34,729	205	1,279,471	0.13	6,241
June 30, 2018									
PERS	5,985	$121,870,115	(3,272)	$(64,186,324)	$68,319,584	104,973	$2,500,750,392	5.31 %	$23,823
MHSPRS	17	787,728	(18)	(494,512)	757,399	725	30,614,457	3.55	42,227
MRS	36	674,428	(96)	(1,530,600)	102,334	1,694	32,997,690	(2.23)	19,479
SLRP	6	34,983	(4)	(42,480)	32,574	207	1,304,548	1.96	6,302
June 30, 2019									
PERS	6,101	$129,095,132	(3,230)	$(67,416,138)	$72,575,289	107,844	$2,635,004,675	5.37 %	$24,433
MHSPRS	28	1,186,864	(19)	(812,457)	826,033	734	31,814,897	3.92	43,345
MRS	37	736,820	(97)	(1,441,224)	130,022	1,634	32,423,308	(1.74)	19,843
SLRP	11	72,406	(3)	(43,651)	39,575	215	1,372,878	5.24	6,385

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SUSTAINABLE

Sustainability means always looking ahead and preparing for the future.

Statistical

Statistical Report

The objective of the statistical section is to provide additional historical perspective, context, and details to assist readers in understanding and using the information in the financial statements and required supplementary information. Statistical data for each plan is obtained from the System's internal resources and the actuarial valuation (the most recent being as of June 30, 2019). As of June 30, 2020, the System had no outstanding debt.

Financial Trends

The schedule of changes in net position contains historical information related to the System's revenues (in the form of contributions and investment earnings), deductions (primarily retirement annuities), changes in net position, and ending net position restricted for benefits.

Increases to net position of the System's plans are from the excess of investment earnings and contributions over deductions. Over the last 10 years, investment income has fluctuated with the economy, with net investment earnings ranging from approximately $61 million in 2012 to a high of over $4 billion in 2011. Employer contribution rates are set by the Board based on recommendations from the actuaries. Employee contribution rates can only be changed by the state Legislature. The steady increase in contributions is attributable to contribution rate increases, as well as wage increases over the 10-year period.

Retirement annuities account for approximately 96-percent of the total deductions for the System and have increased steadily over the 10-year period for all plans with the exception of MRS. The drivers of this increase include an increase in the number of retirees (for example there were approximately 79,000 PERS retirees as of June 30, 2010 compared with 108,000 per the June 30, 2019 actuarial valuation report), wage and payroll increases, and the 3-percent cumulative annual cost-of-living adjustment.

Operating Information

These schedules provide information on retiree benefits and refunds as presented in the most recent actuarial valuation. Retiree information includes total number and dollar amount by type of retirement (service, disability, survivor), as well as average monthly benefit based on years of service and retirement option selected by retirees. Additionally, a summary of employer by type and the associated employer and member contribution amounts is provided for the current and prior year.

Demographic & Economic Information

The schedules of active members by age and years of service summarize relevant details about the composition of each plan's membership as reported in the actuarial valuation. Members are grouped by age to show the length of service and associated payroll totals. The schedule of benefit payments by county provides the location of benefit recipients with their associated annuity payments and accordingly, the economic contribution to areas within the state of Mississippi and beyond. The ten largest participating employers schedule shows those employers with the most covered employees for the multi-employer plans, which are PERS and MRS.

Changes in Net Position

Last 10 Fiscal Years

[in thousands]

Public Employees' Retirement System of Mississippi

Fiscal Year	Beginning Net Position	Member Contributions Amount	Member Contributions Percent*	Employer Contributions Amount	Employer Contributions Percent*	Net Investment Income	Other Revenues	Total Additions
2011	$16,788,214	$533,369	9.00%	$723,836	12.00%	$4,167,042	$639	$5,424,886
2012	20,377,236	545,587	9.00	768,914	12.93	59,595	664	1,374,760
2013	19,781,387	547,792	9.00	881,847	14.26	2,564,097	691	3,994,427
2014	21,686,911	549,528	9.00	969,674	15.75	3,905,728	885	5,425,815
2015	24,877,119	557,909	9.00	996,478	15.75	827,666	670	2,382,723
2016	24,906,556	572,574	9.00	1,021,261	15.75	130,900	633	1,725,368
2017	24,135,016	570,066	9.00	1,019,084	15.75	3,436,144	604	5,025,898
2018	26,543,097	570,807	9.00	1,018,163	15.75	2,385,913	51	3,974,934
2019	27,763,190	580,941	9.00	1,038,108	15.75	1,701,321	38	3,320,408
2020	28,206,602	594,711	9.00	1,171,805	17.40	856,935	22	2,623,473

Fiscal Year	Pension Benefits	Refunds	Administrative Expenses	Total Deductions	Changes in Net Position	Ending Net Position
2011	$1,734,475	$88,343	$13,046	$1,835,864	$3,589,022	$20,377,236
2012	1,862,826	93,379	14,404	1,970,609	(595,849)	19,781,387
2013	1,965,660	108,365	14,878	2,088,903	1,905,524	21,686,911
2014	2,099,843	121,532	14,232	2,235,607	3,190,208	24,877,119
2015	2,219,240	119,356	14,690	2,353,286	29,437	24,906,556
2016	2,367,709	112,926	16,273	2,496,908	(771,540)	24,135,016
2017	2,477,914	113,707	26,196	2,617,817	2,408,081	26,543,097
2018	2,609,415	124,306	21,120	2,754,841	1,220,093	27,763,190
2019	2,747,397	108,042	21,557	2,876,996	443,412	28,206,602
2020	2,878,073	104,851	19,757	3,002,681	(379,208)	27,827,394

** Percentage of annual covered payroll. The rate shown for 2012 for PERS was effective as of January 1, 2012. For 2012, the rate prior to January 1, 2012, was 12.0 percent.*

Changes in Net Position

Last 10 Fiscal Years

[in thousands]

Mississippi Highway Safety Patrol Retirement System

Fiscal Year	Beginning Net Position	Member Contributions Amount	Member Contributions Percent*	Employer Contributions Amount	Employer Contributions Percent*	Net Investment Income	Other Revenues	Total Additions
2011	$232,873	$1,948	7.25%	$8,067	30.30%	$57,090	$3,427	$70,532
2012	277,563	1,946	7.25	8,798	35.21	805	3,246	14,795
2013	265,232	1,951	7.25	9,952	37.00	34,270	3,414	49,587
2014	287,456	1,963	7.25	13,500	37.00	51,575	-	67,038
2015	326,032	1,938	7.25	13,695	37.00	10,812	-	26,445
2016	323,207	2,128	7.25	14,755	37.00	1,704	-	18,587
2017	311,612	2,147	7.25	14,809	37.00	44,499	-	61,455
2018	341,719	2,271	7.25	15,128	37.00	30,855	-	48,254
2019	357,305	2,340	7.25	19,375	49.08	22,144	-	43,859
2020	366,165	2,428	7.25	20,144	49.08	11,196	-	33,768

Fiscal Year	Pension Benefits	Refunds	Administrative Expenses	Total Deductions	Changes in Net Position	Ending Net Position
2011	$25,620	$60	$162	$25,842	$44,690	$277,563
2012	26,926	24	176	27,126	(12,331)	265,232
2013	27,052	112	199	27,363	22,224	287,456
2014	28,220	42	200	28,462	38,576	326,032
2015	28,909	163	198	29,270	(2,825)	323,207
2016	29,913	52	217	30,182	(11,595)	311,612
2017	31,001	144	203	31,348	30,107	341,719
2018	32,315	103	250	32,668	15,586	357,305
2019	34,671	16	312	34,999	8,860	366,165
2020	35,455	48	328	35,831	(2,063)	364,102

** Percentage of annual covered payroll. The rate shown for 2012 for MHSPRS was effective as of January 1, 2012. For 2012, the rate prior to January 1, 2012, was 30.30 percent.*

*** Additional contributions for MHSPRS, from House Bill No. 1015, were previously shown in Other Revenues and Transfers. Beginning with fiscal year 2014, these fees are reported in Employer Contributions.*

Changes in Net Position

Last 10 Fiscal Years

[in thousands]

Municipal Retirement Systems

Fiscal Year	Beginning Net Position	Member Contributions Amount	Member Contributions Percent*	Employer Contributions Amount	Employer Contributions Percent*	Net Investment Income	Other Revenues	Total Additions
2011	$150,203	$126	**	$22,860	**	$35,363	$-	$58,349
2012	172,451	121	**	23,449	**	487	-	24,057
2013	160,688	100	**	21,718	**	19,837	-	41,655
2014	166,648	78	**	20,337	**	28,453	-	48,868
2015	180,092	45	**	19,344	**	5,692	-	25,081
2016	169,986	53	**	18,542	**	846	-	19,441
2017	154,627	31	**	17,732	**	20,605	-	38,368
2018	158,570	25	**	17,610	**	13,066	-	30,701
2019	155,314	15	**	17,114	**	9,297	-	26,426
2020	148,463	8	**	16,614	**	4,197	-	20,819

Fiscal Year	Pension Benefits	Refunds	Administrative Expenses	Total Deductions	Changes in Net Position	Ending Net Position
2011	$35,609	$35	$457	$36,101	$22,248	$172,451
2012	35,348	3	469	35,820	(11,763)	160,688
2013	35,227	34	434	35,695	5,960	166,648
2014	35,014	3	407	35,424	13,444	180,092
2015	34,799	1	387	35,187	(10,106)	169,986
2016	34,429	-	371	34,800	(15,359)	154,627
2017	34,070	-	355	34,425	3,943	158,570
2018	33,604	-	353	33,957	(3,256)	155,314
2019	32,935	-	342	33,277	(6,851)	148,463
2020	32,170	-	331	32,501	(11,682)	136,781

** Percentage of annual covered payroll.*
*** Employee and employer rates vary among the 19 systems that comprise the Municipal Retirement Systems.*

Changes in Net Position

Last 10 Fiscal Years

[in thousands]

Supplemental Legislative Retirement Plan

		Member Contributions		Employer Contributions				
Fiscal Year	Beginning Net Position	Amount	Percent*	Amount	Percent*	Net Investment Income	Other Revenues	Total Additions
2011	$11,079	$206	3.00%	$457	6.65%	$2,832	$-	$3,495
2012	13,737	206	3.00	490	7.40	39	-	735
2013	13,169	204	3.00	503	7.40	1,715	-	2,422
2014	14,374	208	3.00	514	7.40	2,605	-	3,327
2015	16,453	207	3.00	511	7.40	552	-	1,270
2016	16,456	208	3.00	514	7.40	86	-	808
2017	15,768	212	3.00	522	7.40	2,264	-	2,998
2018	17,342	207	3.00	513	7.40	1,412	-	2,132
2019	18,036	214	3.00	525	7.40	1,287	-	2,026
2020	18,609	207	3.00	512	7.40	554	-	1,273

Fiscal Year	Pension Benefits	Refunds	Administrative Expenses	Total Deductions	Changes in Net Position	Ending Net Position
2011	$828	$-	$9	$837	$2,658	$13,737
2012	1,268	25	10	1,303	(568)	13,169
2013	1,182	25	10	1,217	1,205	14,374
2014	1,216	22	10	1,248	2,079	16,453
2015	1,220	37	10	1,267	3	16,456
2016	1,454	32	10	1,496	(688)	15,768
2017	1,397	17	10	1,424	1,574	17,342
2018	1,410	18	10	1,438	694	18,036
2019	1,442	-	11	1,453	573	18,609
2020	1,857	20	10	1,887	(614)	17,995

** Percentage of annual covered payroll. The rate shown for 2012 for SLRP was effective as of January 1, 2012. For 2012, the rate prior to January 1, 2012, was 6.65 percent.*

Benefit & Refund Payments by Type:
Public Employees' Retirement System of Mississippi
Last 10 Fiscal Years

Number of Participants by Type of Benefit

Fiscal Year	Service	Disability	Survivor	Total	Refunds Terminated	Refunds Deaths*
2010	64,049	5,399	9,720	79,168	14,433	-
2011	67,486	5,676	9,953	83,115	16,595	-
2012	70,843	5,845	10,141	86,829	18,053	-
2013	73,830	6,030	10,354	90,214	19,920	-
2014	76,665	6,229	10,610	93,504	20,700	-
2015	79,156	6,352	10,830	96,338	19,479	-
2016	82,145	6,430	10,908	99,483	13,026	449
2017	84,825	6,485	10,950	102,260	13,003	633
2018	87,277	6,506	11,190	104,973	12,407	454
2019	89,811	6,514	11,519	107,844	12,502	416

Total Payments by Type of Benefit
[in thousands]

Fiscal Year	Service	Disability	Survivor	Total	Refunds Terminated	Refunds Deaths*
2010	$1,444,987	$99,920	$35,901	$1,580,808	$73,580	$-
2011	1,588,369	107,657	38,449	1,734,475	88,343	-
2012	1,707,922	115,042	39,862	1,862,826	93,379	-
2013	1,804,812	120,342	40,506	1,965,660	108,365	-
2014	1,930,284	127,537	42,022	2,099,843	121,532	-
2015	2,042,728	133,454	43,058	2,219,240	119,356	-
2016	2,182,627	140,619	44,464	2,367,710	106,644	6,282
2017	2,289,330	143,292	45,292	2,477,914	108,652	5,055
2018	2,415,631	146,835	46,949	2,609,415	118,638	5,668
2019	2,548,245	150,741	48,411	2,747,397	103,716	4,326

** Information unavailable prior to 2016.*

Benefit & Refund Payments by Type:
Mississippi Highway Safety Patrol Retirement System
Last 10 Fiscal Years

Number of Participants by Type of Benefit

Fiscal Year	Service	Disability	Survivor	Total	Refunds: Terminated	Refunds: Deaths*
2010	489	18	189	696	5	-
2011	500	18	186	704	14	-
2012	510	19	184	713	7	-
2013	510	19	184	713	9	-
2014	516	17	187	720	9	-
2015	525	17	182	724	13	-
2016	526	17	181	724	3	1
2017	528	16	182	726	7	-
2018	534	17	174	725	6	-
2019	544	17	173	734	1	-

Total Payments by Type of Benefit
[in thousands]

Fiscal Year	Service	Disability	Survivor	Total	Refunds: Terminated	Refunds: Deaths*
2010	$24,029	$472	$1,346	$25,847	$65	$-
2011	23,953	507	1,160	25,620	60	-
2012	25,337	516	1,073	26,926	24	-
2013	25,476	522	1,054	27,052	112	-
2014	26,595	526	1,099	28,220	42	-
2015	27,295	501	1,113	28,909	163	-
2016	29,153	509	249	29,911	42	10
2017	30,175	518	308	31,001	144	-
2018	31,455	554	306	32,315	103	-
2019	33,757	583	331	34,671	16	-

** Information unavailable prior to 2016.*

Benefit & Refund Payments by Type:
Municipal Retirement Systems
Last 10 Fiscal Years

Number of Participants by Type of Benefit

Fiscal Year	Service	Disability	Survivor	Total	Refunds Terminated	Refunds Deaths*
2010*	1,388	84	584	2,056	9	-
2011*	1,334	80	602	2,016	7	-
2012*	1,302	75	601	1,978	-	-
2013**	1,260	71	610	1,941	4	-
2014**	1,216	70	604	1,890	7	-
2015**	1,170	66	613	1,849	1	-
2016**	1,110	64	624	1,798	-	-
2017**	1,070	59	625	1,754	-	-
2018**	1,014	57	623	1,694	-	-
2019**	974	51	609	1,634	-	-

*Total Payments by Type of Benefit ****
[in thousands]

Fiscal Year	Service	Disability	Survivor	Total	Refunds Terminated	Refunds Deaths****
2010*	$27,062	$927	$7,430	$35,419	$35	$-
2011*	26,315	894	7,956	35,165	3	-
2012*	26,056	850	8,190	35,096	-	-
2013**	25,787	817	8,623	35,227	34	-
2014**	25,382	816	8,816	35,014	3	-
2015**	24,824	761	9,214	34,799	1	-
2016**	24,085	744	9,600	34,429	-	-
2017**	23,456	688	9,926	34,070	-	-
2018**	22,807	657	10,140	33,604	-	-
2019**	22,093	612	10,230	32,935	-	-

** Valuation Information furnished for MRS is as of September 30.*
*** Valuation information furnished for MRS is as of June 30, due to plan year change.*
**** Individual MRS COLA increases are paid if funding is available.*
***** Information unavailable prior to 2016.*

Benefit & Refund Payments by Type:
Supplemental Legislative Retirement Plan
Last 10 Fiscal Years

Number of Participants by Type of Benefit

Fiscal Year	Service	Disability	Survivor	Total	Refunds Terminated	Refunds Deaths*
2010	117	2	23	142	3	-
2011	118	2	27	147	-	-
2012	143	2	28	173	8	-
2013	150	2	36	188	4	-
2014	149	2	36	187	5	-
2015	145	2	38	185	7	-
2016	167	2	38	207	2	1
2017	168	1	36	205	1	1
2018	168	1	38	207	2	1
2019	173	1	41	215	-	-

Total Payments by Type of Benefit
[in thousands]

Fiscal Year	Service	Disability	Survivor	Total	Refunds Terminated	Refunds Deaths*
2010	$758	$12	$34	$804	$20	$-
2011	781	12	35	828	-	-
2012	1,184	16	68	1,268	25	-
2013	1,104	13	65	1,182	25	-
2014	1,123	13	80	1,216	22	-
2015	1,126	13	81	1,220	37	-
2016	1,341	15	97	1,453	9	22
2017	1,314	11	72	1,397	12	5
2018	1,332	10	68	1,410	13	5
2019	1,361	11	70	1,442	-	-

** Information unavailable prior to 2016.*

Average Benefit Payments:
Public Employees' Retirement System of Mississippi

Retirement Effective Dates: July 1, 2009 to June 30, 2019	Years Credited Service							
	0-9	10-14	15-19	20-24	25	26-29	30	30+
2019								
Average Monthly Benefit	$476	$730	$1,156	$1,852	$2,091	$2,316	$2,469	$3,356
Average Final Salary	$33,243	$36,871	$42,708	$51,686	$52,874	$55,298	$55,458	$65,639
Number of Active Retirants	730	930	870	1,127	359	1,062	204	819
2018								
Average Monthly Benefit	$485	$722	$1,057	$1,767	$2,024	$2,174	$2,534	$3,179
Average Final Salary	$32,660	$37,608	$39,878	$49,009	$52,289	$52,205	$57,261	$60,427
Number of Active Retirants	672	933	849	1,047	348	1,080	192	864
2017								
Average Monthly Benefit	$476	$727	$1,013	$1,656	$1,948	$2,106	$2,446	$3,093
Average Final Salary	$31,990	$37,033	$39,332	$47,400	$49,568	$50,461	$55,156	$59,849
Number of Active Retirants	732	938	859	1,014	369	1,174	190	943
2016								
Average Monthly Benefit	$512	$701	$1,054	$1,638	$1,879	$2,118	$2,400	$3,196
Average Final Salary	$31,771	$34,459	$39,422	$45,571	$46,533	$50,536	$52,472	$59,306
Number of Active Retirants	751	997	874	1,048	402	1,204	234	1,038
2015								
Average Monthly Benefit	$458	$688	$977	$1,346	$1,834	$1,989	$2,217	$2,899
Average Final Salary	$29,781	$33,585	$37,938	$40,770	$46,461	$48,614	$50,908	$57,019
Number of Active Retirants	599	898	774	693	494	1,072	230	1,147
2014								
Average Monthly Benefit	$465	$712	$999	$1,384	$1,871	$1,993	$2,283	$2,954
Average Final Salary	$31,044	$35,356	$37,962	$40,947	$47,490	$48,732	$51,456	$57,022
Number of Active Retirants	751	945	815	663	505	1,146	232	1,102
2013								
Average Monthly Benefit	$442	$695	$964	$1,422	$1,925	$2,017	$2,188	$2,931
Average Final Salary	$30,487	$34,404	$36,876	$41,550	$47,768	$48,862	$49,470	$56,341
Number of Active Retirants	915	901	740	758	496	1,121	224	1,121
2012								
Average Monthly Benefit	$437	$656	$984	$1,325	$1,823	$1,957	$2,283	$2,938
Average Final Salary	$29,120	$32,872	$37,561	$40,246	$46,050	$47,965	$51,720	$56,263
Number of Active Retirants	1,007	867	779	736	501	1,138	260	1,281
2011								
Average Monthly Benefit	$455	$637	$975	$1,347	$1,792	$1,996	$2,176	$2,911
Average Final Salary	$29,000	$31,063	$36,095	$39,613	$45,296	$48,620	$49,084	$55,608
Number of Active Retirants	1,084	808	741	743	456	1,050	245	1,439
2010								
Average Monthly Benefit	$371	$620	$905	$1,240	$1,718	$1,898	$2,175	$2,833
Average Final Salary	$26,406	$30,890	$33,781	$37,426	$43,924	$46,537	$49,426	$54,049
Number of Active Retirants	985	773	641	627	428	867	237	1,189

Retirement Effective Dates: July 1, 2009 to June 30, 2019	Years Credited Service							
	0-9	10-15	16-20	21-24	25	26-29	30	30+
2019								
Average Monthly Benefit	$-	$455	$2,112	$3,375	$3,943	$4,902	$5,824	$5,690
Average Final Salary	$-	$56,574	$53,477	$77,544	$75,696	$84,403	$93,541	$82,712
Number of Active Retirants	-	3	6	9	1	1	1	7
2018								
Average Monthly Benefit	$-	$1,307	$2,491	$3,100	$-	$3,562	$4,826	$5,101
Average Final Salary	$-	$31,380	$68,832	$60,334	$-	$68,126	$77,928	$75,940
Number of Active Retirants	-	1	2	4	-	1	2	7
2017								
Average Monthly Benefit	$338	$996	$556	$2,928	$1,186	$2,670	$4,606	$3,493
Average Final Salary	$19,660	$45,533	$22,016	$67,683	$28,912	$54,518	$72,101	$47,950
Number of Active Retirants	1	1	1	6	2	6	4	1
2016								
Average Monthly Benefit	$315	$-	$-	$2,078	$-	$3,013	$1,729	$5,059
Average Final Salary	$53,306	$-	$-	$45,948	$-	$37,841	$50,692	$51,223
Number of Active Retirants	3	-	-	6	-	13	1	3
2015								
Average Monthly Benefit	$-	$-	$1,831	$1,719	$1,978	$4,054	$-	$4,758
Average Final Salary	$-	$-	$45,652	$30,832	$36,845	$51,500	$-	$67,378
Number of Active Retirants	-	-	3	3	2	10	-	4
2014								
Average Monthly Benefit	$-	$-	$402	$2,013	$-	$2,756	$3,899	$4,528
Average Final Salary	$-	$-	$15,019	$54,344	$-	$51,233	$69,760	$68,011
Number of Active Retirants	-	-	1	5	-	8	5	9
2013								
Average Monthly Benefit	$662	$710	$-	$1,173	$1,696	$2,860	$-	$3,270
Average Final Salary	$21,844	$36,998	$-	$31,852	$28,673	$54,158	$-	$54,646
Number of Active Retirants	1	2	-	3	2	11	-	4
2012								
Average Monthly Benefit	$1,649	$-	$2,341	$982	$1,569	$2,268	$4,335	$3,799
Average Final Salary	$39,568	$-	$58,021	$39,971	$28,717	$46,824	$71,048	$62,979
Number of Active Retirants	1	-	1	1	1	10	5	12
2011								
Average Monthly Benefit	$-	$716	$1,021	$2,434	$1,897	$2,409	$3,792	$3,297
Average Final Salary	$-	$28,058	$26,202	$60,343	$43,144	$50,020	$52,042	$51,856
Number of Active Retirants	-	1	2	3	2	11	4	9
2010								
Average Monthly Benefit	$-	$-	$1,405	$-	$3,155	$3,025	$3,461	$2,974
Average Final Salary	$-	$-	$37,963	$-	$59,219	$47,431	$30,160	$41,004
Number of Active Retirants	-	-	4	-	2	5	2	9

Average Benefit Payments:
Municipal Retirement Systems

Retirement Effective Dates: July 1, 2009 to June 30, 2019	Years Credited Service							
	0-9	10-14	15-19	20-24	25	26-29	30	31+
2019								
Average Monthly Benefit	$-	$-	$-	$-	$-	$-	$-	$3,427
Average Final Salary	$-	$-	$-	$-	$-	$-	$-	$53,998
Number of Active Retirants	-	-	-	-	-	-	-	2
2018								
Average Monthly Benefit	$-	$-	$-	$-	$-	$-	$-	$3,738
Average Final Salary	$-	$-	$-	$-	$-	$-	$-	$67,277
Number of Active Retirants	-	-	-	-	-	-	-	2
2017								
Average Monthly Benefit	$-	$-	$-	$-	$-	$-	$-	$2,424
Average Final Salary	$-	$-	$-	$-	$-	$-	$-	$43,631
Number of Active Retirants	-	-	-	-	-	-	-	2
2016								
Average Monthly Benefit	$-	$-	$-	$-	$-	$-	$-	$3,479
Average Final Salary	$-	$-	$-	$-	$-	$-	$-	$44,155
Number of Active Retirants	-	-	-	-	-	-	-	3
2015								
Average Monthly Benefit	$-	$-	$-	$-	$-	$-	$2,898	$2,912
Average Final Salary	$-	$-	$-	$-	$-	$-	$51,253	$56,520
Number of Active Retirants	-	-	-	-	-	-	1	2
2014								
Average Monthly Benefit	$-	$-	$-	$-	$-	$-	$-	$2,778
Average Final Salary	$-	$-	$-	$-	$-	$-	$-	$47,160
Number of Active Retirants	-	-	-	-	-	-	-	2
*2013**								
Average Monthly Benefit	$-	$-	$-	$-	$-	$3,490	$-	$4,379
Average Final Salary	$-	$-	$-	$-	$-	$63,310	$-	$72,947
Number of Active Retirants	-	-	-	-	-	1	-	4
*2012**								
Average Monthly Benefit	$-	$-	$-	$-	$-	$-	$-	$3,423
Average Final Salary	$-	$-	$-	$-	$-	$-	$-	$61,607
Number of Active Retirants	-	-	-	-	-	-	-	4
*2011**								
Average Monthly Benefit	$-	$-	$-	$-	$2,222	$-	$-	$2,149
Average Final Salary	$-	$-	$-	$-	$43,366	$-	$-	$38,685
Number of Active Retirants	-	-	-	-	1	-	-	1
*2010**								
Average Monthly Benefit	$-	$-	$-	$-	$-	$2,903	$-	$2,630
Average Final Salary	$-	$-	$-	$-	$-	$53,341	$-	$45,078
Number of Active Retirants	-	-	-	-	-	1	-	3

** Valuation information is as of October 1 to September 30, due to plan year change.*

Average Benefit Payments:
Supplemental Legislative Retirement Plan

Retirement Effective Dates: July 1, 2009 to June 30, 2019	Years Credited Service							
	0-9	10-15	16-20	21-24	25	26-29	30	31+
2019								
Average Monthly Benefit	$169	$373	$637	$742	$-	$739	$-	$960
Average Final Salary	$24,873	$42,782	$42,043	$42,480	$-	$40,655	$-	$44,126
Number of Active Retirants	3	2	1	2	-	1	-	2
2018								
Average Monthly Benefit	$33	$-	$538	$513	$-	$-	$-	$1,285
Average Final Salary	$20,840	$-	$40,101	$41,549	$-	$-	$-	$41,618
Number of Active Retirants	2	-	1	2	-	-	-	1
2017								
Average Monthly Benefit	$181	$-	$609	$452	$732	$-	$-	$-
Average Final Salary	$29,821	$-	$37,791	$28,378	$40,932	$-	$-	$-
Number of Active Retirants	2	-	1	2	1	-	-	-
2016								
Average Monthly Benefit	$250	$350	$487	$654	$522	$-	$-	$1,200
Average Final Salary	$36,600	$39,878	$35,211	$39,774	$41,482	$-	$-	$42,238
Number of Active Retirants	2	6	4	7	2	-	-	3
2015								
Average Monthly Benefit	$164	$740	$721	$-	$579	$-	$-	$1,032
Average Final Salary	$18,636	$68,228	$37,912	$-	$34,791	$-	$-	$42,949
Number of Active Retirants	6	2	2	-	1	-	-	1
2014								
Average Monthly Benefit	$-	$345	$491	$473	$-	$580	$-	$-
Average Final Salary	$-	$34,404	$34,871	$39,301	$-	$43,165	$-	$-
Number of Active Retirants	-	2	2	1	-	1	-	-
2013								
Average Monthly Benefit	$168	$183	$463	$550	$-	$731	$-	$-
Average Final Salary	$27,925	$29,576	$36,140	$39,581	$-	$38,727	$-	$-
Number of Active Retirants	6	7	1	4	-	2	-	-
2012								
Average Monthly Benefit	$194	$405	$430	$676	$-	$-731	$-	$1,237
Average Final Salary	$33,827	$43,765	$36,045	$38,901	$-	$38,645	$-	$57,276
Number of Active Retirants	10	6	3	4	-	3	-	7
2011								
Average Monthly Benefit	$182	$109	$-	$305	$-	$-	$-	$369
Average Final Salary	$33,981	$19,188	$-	$36,782	$-	$-	$-	$27,287
Number of Active Retirants	2	1	-	2	-	-	-	2
2010								
Average Monthly Benefit	$130	$517	$-	$759	$-	$-	$-	$1,295
Average Final Salary	$29,883	$48,827	$-	$45,504	$-	$-	$-	$36,181
Number of Active Retirants	3	1	-	1	-	-	-	1

Public Employees' Retirement System of Mississippi

Amount of Monthly Benefit *	Option Selected ** Life	Opt. 1	Opt. 2	Opt. 3	Opt. 4	Opt. 4A
$1 - 500	16,133	723	2,691	173	151	461
501 - 1,000	15,013	677	2,875	185	214	907
1,001 - 1,500	12,225	664	3,070	201	264	1,141
1,501 - 2,000	9,772	464	2,582	127	297	1,175
2,001 - 2,500	7,005	290	1,952	82	217	1,107
2,501 - 3,000	4,224	155	1,138	41	154	662
3,001 - 3,500	2,621	103	705	23	116	440
3,501 - 4,000	1,423	55	404	13	50	241
4,001 - 4,500	835	26	269	6	42	197
4,501 - 5,000	450	9	146	2	15	107
Over 5,000	817	20	401	8	73	255
Totals	**70,518**	**3,186**	**16,233**	**861**	**1,593**	**6,693**

Amount of Monthly Benefit *	Opt. 4B	Opt. 4C***	Opt. 5	PLSO 1 YR.***	PLSO 2 YR.***	PLSO 3 YR.***
$1 - 500	1,811	162	48	581	495	2,282
501 - 1,000	1,524	758	71	834	596	2,035
1,001 - 1,500	1,433	939	71	804	714	2,858
1,501 - 2,000	1,292	416	32	703	740	3,378
2,001 - 2,500	968	119	21	752	658	2,743
2,501 - 3,000	615	47	14	551	437	1,544
3,001 - 3,500	369	18	7	425	289	855
3,501 - 4,000	185	10	-	241	157	404
4,001 - 4,500	113	3	-	150	90	276
4,501 - 5,000	56	2	-	74	35	143
Over 5,000	130	3	-	136	77	265
Totals	**8,496**	**2,477**	**264**	**5,251**	4,288	**16,783**

* Excluding Cost-of-Living Adjustment
** Option Selected: Life – return of contributions;
Opt. 1 – return of member's annuity;
Opt. 2 – 100.0 percent survivorship;
Opt. 3 – 50.0 percent / 50.0 percent dual survivorship;
Opt. 4 – 75.0 percent survivorship;
Opt. 4A – 50.0 percent survivorship;
Opt. 4B – years certain and life;
Opt. 4C – Social Security leveling;
Opt. 5 – pop up;
PLSO – Partial-Lump-Sum Option.
*** Included in other options.

Retired Members by Type of Benefit

June 30, 2019

Mississippi Highway Safety Patrol Retirement System

Amount of Monthly Benefit *	Option Selected ** Life	Opt. 1	Opt. 2	Opt. 3	Opt. 4	Opt. 4A
$1 - 500	30	-	1	-	-	3
501 - 1,000	79	-	1	1	-	9
1,001 - 1,500	40	-	3	-	-	24
1,501 - 2,000	20	-	9	2	-	68
2,001 - 2,500	10	-	8	-	-	83
2,501 - 3,000	9	-	9	1	-	74
3,001 - 3,500	14	1	9	-	-	71
3,501 - 4,000	3	-	1	1	-	43
4,001 - 4,500	1	1	4	-	-	28
4,501 - 5,000	-	-	-	-	-	18
Over 5,000	1	-	-	-	-	39
Totals	**207**	**2**	**45**	**5**	**-**	**460**

Amount of Monthly Benefit *	Opt. 4B	Opt. 4C***	Opt. 5	PLSO 1 YR.***	PLSO 2 YR.***	PLSO 3 YR.***
$1 - 500	-	-	-	-	-	-
501 - 1,000	-	1	-	-	1	-
1,001 - 1,500	1	3	-	2	-	4
1,501 - 2,000	3	3	-	1	1	8
2,001 - 2,500	2	1	-	9	3	16
2,501 - 3,000	5	3	-	5	5	35
3,001 - 3,500	1	-	-	9	5	34
3,501 - 4,000	2	-	-	7	4	20
4,001 - 4,500	1	-	-	3	3	9
4,501 - 5,000	-	-	-	3	-	8
Over 5,000	-	-	-	3	7	7
Totals	**15**	**11**	**-**	**42**	**29**	**141**

* Excluding Cost-of-Living Adjustment
** Option Selected: Life – return of contributions;
Opt. 1 – return of member's annuity;
Opt. 2 – 100.0 percent survivorship;
Opt. 3 – 50.0 percent / 50.0 percent dual survivorship;
Opt. 4 – 75.0 percent survivorship;
Opt. 4A – 50.0 percent survivorship;
Opt. 4B – years certain and life;
Opt. 4C – Social Security leveling;
Opt. 5 – pop up;
PLSO – Partial-Lump-Sum Option.
*** Included in other options.

Retired Members by Type of Benefit

June 30, 2019

Supplemental Legislative Retirement Plan

Amount of Monthly Benefit *	Option Selected **					
	Life	Opt. 1	Opt. 2	Opt. 3	Opt. 4	Opt. 4A
$1 - 100	6	-	6	-	-	-
101 - 200	16	1	16	-	1	-
201 - 300	14	1	14	2	1	3
301 - 400	22	1	12	-	-	3
401 - 500	12	1	7	2	-	1
501 - 600	4	-	2	1	-	2
601 - 700	4	-	9	-	-	1
701 - 800	3	-	4	-	1	-
801 - 900	4	-	1	-	1	1
901 – 1,000	1	-	1	-	-	-
Over 1,000	4	-	3	1	-	1
Totals	**90**	**4**	**75**	**6**	**4**	**12**

Amount of Monthly Benefit *	Opt. 4B	Opt. 4C***	Opt. 5	PLSO 1 YR.***	PLSO 2 YR.***	PLSO 3 YR.***
$1 - 100	3	1	-	-	-	1
101 - 200	1	-	-	-	-	4
201 - 300	2	-	-	1	-	2
301 - 400	7	-	-	2	-	8
401 - 500	3	-	-	1	3	6
501 - 600	2	-	-	1	2	3
601 - 700	2	-	-	-	1	1
701 - 800	-	-	-	1	1	2
801 - 900	1	-	-	-	-	1
901 – 1,000	2	-	-	-	1	1
Over 1,000	1	-	-	2	-	4
Totals	**24**	**1**	**-**	**8**	**8**	**33**

* Excluding Cost-of-Living Adjustment
** Option Selected: Life – return of contributions;
Opt. 1 – return of member's annuity;
Opt. 2 – 100.0 percent survivorship;
Opt. 3 – 50.0 percent / 50.0 percent dual survivorship;
Opt. 4 – 75.0 percent survivorship;
Opt. 4A – 50.0 percent survivorship;
Opt. 4B – years certain and life;
Opt. 4C – Social Security leveling;
Opt. 5 – pop up;
PLSO – Partial-Lump-Sum Option.
*** Included in other options.

Analysis of Employer & Member Contributions

Public Employees' Retirement System of Mississippi

For Fiscal Years Ended June 30, 2020 & 2019

[contributions in thousands]

	Employer		Member			
	Units	Contributions	Number	Contributions	Total Contributions	Percent
2020						
State Agencies	104	$201,665	26,811	$103,665	$305,330	17.28%
State Universities	9	185,589	17,764	95,030	280,619	15.89
Public Schools	139	447,293	61,308	228,673	675,966	38.27
Community/Junior Colleges	15	55,896	5,978	28,498	84,394	4.78
Counties	82	100,940	13,738	51,072	152,012	8.61
Municipalities	242	109,147	15,847	56,025	165,172	9.35
Others	262	71,275	8,409	31,748	103,023	5.83
Totals	**853**	**$1,171,805**	**149,855**	**$594,711**	**$1,766,516**	**100.00%**
2019						
State Agencies	105	$177,548	27,259	$100,599	$278,147	17.18%
State Universities	9	164,607	17,878	93,016	257,623	15.91
Public Schools	140	394,418	60,792	222,399	616,817	38.10
Community/Junior Colleges	15	50,008	6,117	28,122	78,130	4.83
Counties	82	88,895	13,765	49,644	138,539	8.56
Municipalities	242	97,280	16,115	55,167	152,447	9.42
Others	261	65,352	8,725	31,994	97,346	6.00
Totals	**854**	**$1,038,108**	**150,651**	**$580,941**	**$1,619,049**	**100.00%**

Note: Above table excludes MHSPRS, MRS, and SLRP contributions. Classification amounts are established at the time entities join PERS. Classification amounts may differ from those identified through other sources.

Total Active Members by Attained Age & Years of Service:
Public Employees' Retirement System of Mississippi
June 30, 2019

	Active Member Years of Service							Totals	
Attained Age	0-4	5-9	10-14	15-19	20-24	25-29	30+	Numbers	Valuation Payroll
Under 21	289	-	-	-	-	-	-	289	$5,274,470
21-24	6,126	43	-	-	-	-	-	6,169	171,580,957
25-29	11,503	2,577	40	-	-	-	-	14,120	478,641,868
30-34	7,616	6,543	2,061	51	-	-	-	16,271	623,271,973
35-39	6,429	4,671	5,964	1,957	43	-	-	19,064	793,125,502
40-44	5,517	3,844	3,882	4,865	1,588	25	-	19,721	871,280,372
45-49	4,971	3,521	3,696	3,653	3,970	1,187	33	21,031	946,117,233
50-54	4,143	3,002	3,047	2,930	2,894	2,060	556	18,632	806,199,483
55-59	3,581	2,814	2,847	2,924	2,800	1,589	1,222	17,777	734,133,708
60-64	2,153	2,018	1,976	1,762	1,558	1,065	1,037	11,569	476,348,557
65-69	865	794	695	571	424	273	376	3,998	163,833,580
70 & Over	437	365	371	279	217	133	208	2,010	75,107,927
Totals	**53,630**	**30,192**	**24,579**	**18,992**	**13,494**	**6,332**	**3,432**	**150,651**	**$6,144,915,630**

While not used in the financial computations, the following group averages are computed and shown because of their general interest:

Age: 44.9 years
Service: 10.3 years
Annual Pay: $40,789

Total Active Members by Attained Age & Years of Service:
Mississippi Highway Safety Patrol Retirement System
June 30, 2019

	Active Member Years of Service							Totals	
Attained Age	0-4	5-9	10-14	15-19	20-24	25-29	30+	Numbers	Valuation Payroll
Under 25	19	-	-	-	-	-	-	19	$797,405
25-29	46	2	-	-	-	-	-	48	2,054,494
30-34	43	15	9	-	-	-	-	67	3,167,199
35-39	20	17	47	4	-	-	-	88	4,914,519
40-44	11	3	35	33	7	-	-	89	5,534,184
45-49	7	3	22	32	35	7	-	106	7,230,960
50-54	2	-	4	14	18	21	2	61	4,458,861
55-59	-	-	1	2	12	6	9	30	2,387,839
60-64	-	-	-	1	2	-	11	14	1,265,770
65 & Over	-	-	-	-	-	-	-	-	-
Totals	**148**	40	**118**	**86**	**74**	**35**	**21**	**522**	**$31,811,231**

While not used in the financial computations, the following group averages are computed and shown because of their general interest:

Age: 42.0 years
Service: 13.1 years
Annual Pay: $60,941

Total Active Members by Attained Age & Years of Service:
Municipal Retirement System
June 30, 2019

Attained Age	Active Member Years of Service							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30+	Numbers	Valuation Payroll
Under 25	-	-	-	-	-	-	-	-	$-
25-29	-	-	-	-	-	-	-	-	-
30-34	-	-	-	-	-	-	-	-	-
35-39	-	-	-	-	-	-	-	-	-
40-44	-	-	-	-	-	-	-	-	-
45-49	-	-	-	-	-	-	-	-	-
50-54	-	-	-	-	-	-	-	-	-
55-59	-	-	-	-	-	-	1	1	52,336
60 & Over	-	-	-	-	-	-	1	1	42,536
Totals	**-**	**-**	**-**	**-**	**-**	**-**	2	2	**$94,872**

While not used in the financial computations, the following group averages are computed and shown because of their general interest:

Age: 63.5 years
Service: 42.8 years
Annual Pay: $47,436

Total Active Members by Attained Age & Years of Service:
Supplemental Legislative Retirement Plan
June 30, 2019

Attained Age	Active Member Years of Service							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30+	Numbers	Valuation Payroll
Under 25	-	-	-	-	-	-	-	-	$-
25-29	2	1	-	-	-	-	-	3	102,374
30-34	3	-	-	-	-	-	-	3	111,298
35-39	6	4	-	-	-	-	-	10	373,052
40-44	9	4	2	1	-	-	-	16	633,955
45-49	7	12	2	2	-	-	-	23	944,551
50-54	9	10	2	2	1	-	-	24	957,660
55-59	9	10	3	4	-	-	-	26	1,103,329
60-64	3	2	2	6	-	4	2	19	804,557
65-69	1	4	3	4	1	3	3	19	780,520
70 & Over	1	3	4	5	4	6	4	27	1,125,779
Totals	**50**	**50**	**18**	**24**	**6**	**13**	**8**	**170**	**$6,937,075**

While not used in the financial computations, the following group averages are computed and shown because of their general interest:

Age: 56.5 years
Benefit Service: 11.4 years
Eligibility Service: 16.2 years
Annual Pay: $40,806

System Benefit Payments by County

June 30, 2020

[in thousands]

County	Number of Payments	Amount Paid
Adams	1,363	$31,840
Alcorn	1,336	33,758
Amite	403	8,637
Attala	869	20,171
Benton	227	4,905
Bolivar	1,583	40,943
Calhoun	494	11,608
Carroll	512	11,559
Chickasaw	616	14,224
Choctaw	369	8,503
Claiborne	379	10,041
Clarke	666	12,872
Clay	671	17,918
Coahoma	984	26,603
Copiah	1,047	25,866
Covington	770	18,805
Desoto	1,933	44,791
Forrest	3,567	102,331
Franklin	355	8,307
George	705	14,914
Greene	374	8,199
Grenada	873	21,632
Hancock	1,067	24,344
Harrison	5,224	136,035
Hinds	10,522	296,972
Holmes	748	16,994
Humphreys	282	7,980
Issaquena	29	611
Itawamba	926	23,171
Jackson	3,996	100,701
Jasper	629	13,543
Jefferson	424	11,306
Jefferson Davis	408	8,901
Jones	2,774	65,426
Kemper	361	8,680
Lafayette	2,383	81,419
Lamar	1,387	32,884
Lauderdale	2,919	71,424
Lawrence	584	12,198
Leake	749	17,190
Lee	2,666	70,777
Leflore	1,172	32,578
Lincoln	1,092	27,979

County	Number of Payments	Amount Paid
Lowndes	1,781	$46,869
Madison	4,319	141,095
Marion	825	20,345
Marshall	793	17,271
Monroe	1,199	28,084
Montgomery	596	14,914
Neshoba	993	22,669
Newton	871	21,433
Noxubee	338	8,537
Oktibbeha	2,554	93,779
Panola	1,228	28,807
Pearl River	1,380	29,668
Perry	484	9,840
Pike	1,375	34,391
Pontotoc	850	21,816
Prentiss	873	21,987
Quitman	262	6,132
Rankin	6,574	186,916
Scott	888	19,741
Sharkey	215	5,919
Simpson	1,170	27,092
Smith	583	12,214
Stone	792	19,366
Sunflower	965	23,265
Tallahatchie	480	11,498
Tate	879	22,558
Tippah	865	19,702
Tishomingo	586	12,639
Tunica	266	5,706
Union	958	23,861
Walthall	430	9,976
Warren	1,498	41,021
Washington	1,719	42,780
Wayne	600	13,546
Webster	634	16,435
Wilkinson	318	7,762
Winston	745	19,710
Yalobusha	686	16,043
Yazoo	872	21,537
Mississippi	**103,882**	**$2,706,464**
Out-of-Country	30	804
Out-of-State	10,763	240,287
Total	**114,675**	**$2,947,555**

Ten Largest Participating Employers

	2020			2011		
Participating Employer	Covered Employees	Rank	Percentage of Total System	Covered Employees	Rank	Percentage of Total System
Public Employees' Retirement System						
University Medical Center	7,956	1	5.31%	7,488	1	4.63%
Desoto County Board of Education	4,245	2	2.83	3,522	4	2.18
Mississippi State University	3,768	3	2.51	3,655	3	2.26
Jackson Municipal Separated Schools	3,767	4	2.51	4,780	2	2.96
Mississippi Department of Human Services	3,085	5	2.06	3,274	6	2.03
Mississippi Department of Transportation	2,948	6	1.97	3,363	5	2.08
Rankin County Board of Education	2,353	7	1.57	2,312	9	1.43
University of Mississippi	2,051	8	1.37	1,887	-	1.17
Harrison County Board of Education	1,881	9	1.26	1,512	-	0.94
State Department of Health	1,835	10	1.22	2,403	8	1.49
All Other*	115,966	-	77.39	127,480	-	78.83
Totals (853 Employers)	**149,855**	**-**	**100.00%**	**161,676**	**-**	**100.00%**
Municipal Retirement System						
Totals (17 Employers)*	**2**	**-**	**-**	**25**	**-**	**100.00%**

** All MRS are employers included in Ten Largest. As of 6/30/2020, there are no current covered employees.*

Participating Employers Covered by Law

State Agencies
State Universities
Community/Junior Colleges
Public School Districts

Participating Employers Covered by Separate Agreement

Counties

Local Governmental Entities Covered by Separate Agreement

Municipalities

Aberdeen
Ackerman
Algoma
Amory
Anguilla
Arcola
Artesia
Ashland
Baldwyn
Bassfield
Batesville
Bay Springs
Bay St. Louis
Beaumont
Belmont
Belzoni
Benoit
Bentonia
Biloxi
Blue Mountain
Booneville
Boyle
Brandon
Brookhaven
Brooksville
Bruce
Bude
Burnsville
Byhalia
Byram
Caledonia
Calhoun City
Canton
Carthage
Cary
Centreville
Charleston
Chunky
Clarksdale
Cleveland
Clinton
Coffeeville
Coldwater
Collins
Columbia
Columbus
Como
Corinth
Crawford
Crenshaw
Crosby
Crystal Springs
Decatur
De Kalb
D'lo
Derma
D'Iberville
Drew
Duck Hill
Durant
Ecru
Edwards
Ellisville
Enterprise
Ethel
Eupora
Falkner
Farmington
Flora
Florence
Flowood
Forest
French Camp
Fulton
Gautier
Gloster
Golden
Goodman
Greenville
Greenwood
Grenada
Gulfport
Guntown
Hatley
Hattiesburg
Hazlehurst
Heidelberg
Hernando
Hickory
Hickory Flat
Hollandale
Holly Springs
Horn Lake
Houlka
Houston
Indianola
Inverness
Itta Bena
Iuka
Jackson
Jonestown
Jumpertown
Kilmichael
Kosciusko
Lake
Lambert
Laurel
Leakesville
Leland
Lena
Lexington
Liberty
Long Beach
Louin
Louise
Louisville
Lucedale
Lula
Lumberton
Lyon
Maben
Macon
Madison
Magee
Magnolia
Mantachie
Marietta
Marion
Marks
Mathiston
Mayersville
McComb
McLain
Meadville
Mendenhall
Meridian
Merigold
Metcalfe
Mize
Monticello
Moorhead
Morton
Moss Point
Mount Olive
Myrtle
Natchez
Nettleton
New Albany
New Augusta
New Hebron
Newton
North Carrollton
Noxapater
Ocean Springs
Okolona
Olive Branch
Osyka
Oxford
Pascagoula
Pass Christian
Pearl
Pelahatchie
Petal
Philadelphia
Picayune
Plantersville
Polkville
Pontotoc
Poplarville
Port Gibson
Potts Camp
Prentiss
Puckett
Purvis
Quitman
Raleigh
Raymond
Renova
Richland
Richton
Ridgeland
Rienzi
Ripley
Rolling Fork
Rosedale
Roxie
Ruleville
Saltillo
Sallis
Sandersville
Sardis
Sebastopol
Seminary
Senatobia
Shannon
Shaw
Shelby
Sherman
Shubuta
Shuqualak
Silver City
Sledge
Smithville
Soso
Southaven
Starkville
State Line
Stonewall
Sturgis
Summit
Sumner
Sumrall
Sunflower
Taylorsville
Tchula
Terry
Tishomingo
Tremont
Tunica
Tupelo
Tutwiler
Tylertown
Union
Vaiden
Vardaman
Verona
Vicksburg
Walnut
Walnut Grove
Walthall
Water Valley
Waveland
Waynesboro
Weir
Wesson
West
West Point
Wiggins
Winona
Woodland
Woodville
Yazoo City

Public Agencies Covered by State Retirement Annuity
(continued)

Juristic Entities

Adams County Airport Commission
Adams County Soil & Water Conservation District
Bogue Philia Drainage District
Bolivar County Soil & Water Conservation District
Caledonia Natural Gas District
Calhoun County Soil & Water Conservation District
Canton Convention & Visitors Bureau
Canton Redevelopment Authority
Chickasawhay Natural Gas District
Choctaw County Economic Development District
Claiborne County Human Resource Agency
Cleary Water, Sewer & Fire District
Coahoma County Soil & Water Conservation District
Coast Coliseum & Convention Center
Copiah County Human Resource Agency
Corinth-Alcorn Airport Board
Corinth-Alcorn Convention & Agriculture Exposition Center
Corinth-Alcorn County Recreation Commission
Covington County Soil & Water Conservation District
Culkin Water District
Delta Blues Museum
Desoto County Convention & Visitors Bureau
Desoto County Regional Utility Authority
Desoto County Soil & Water Conservation District
Diamondhead Fire Protection District
East Leflore County Water & Sewer District
Emergency Management District
Forrest County Soil & Water Conservation District
George County Soil & Water Conservation District
Glendale Utility District
Golden Triangle Cooperative Service District
Golden Triangle Regional Airport
Golden Triangle Regional Solid Waste Management Authority
Greenville Port Commission
Greenwood Tourism Commission
Grenada County Civil Defense
Grenada County Soil & Water Conservation District
Gulf Park Estates St. Andrew Fire Protection District
Gulf Regional Planning Commission
Gulfport-Biloxi Regional Airport Authority
Hancock County Human Resource Agency
Hancock County Planning Commission
Hancock County Port & Harbor Commission
Hancock County Soil Conservation District
Hancock County Utility Authority
Hancock County Water & Sewer District
Harrison County Development Commission
Harrison County Soil & Water Conservation District
Harrison County Utility Authority
Hattiesburg Tourism Commission
Hinds County Soil & Water Conservation District
Holmes County Soil & Water Conservation District
Itawamba County Soil & Water Conservation District
Jackson County Emergency Communications District
Jackson County Port Authority
Jackson County Utility Authority
Jackson Municipal Airport Authority
Jones County Economic Development Authority
Kiln Water & Fire District Of Hancock County
Lafayette County Soil & Water Conservation District
Lamar County Soil & Water Conservation District
Lauderdale County Emergency Medical Service District
Lauderdale County Soil & Water Conservation District
Laurel Airport Authority
Lee County Soil & Water Conservation District
Madison County Economic Development Authority
Madison County Nursing Home
Madison County Soil & Water Conservation District
Marion County Soil & Water Conservation District
Mental Health & Retardation, Region III (NE MS)
Mental Health & Retardation, Region IV (Corinth)
Mental Health & Retardation, Region VI (Greenwood)
Mental Health & Retardation, Region VIII (Brandon)
Mental Health & Retardation, Region X (Weems)
Mental Health & Retardation, Region XI (SW MS)
Mental Health & Retardation, Region XIV (Singing River)
Meridian Airport Authority
Mid-Mississippi Development District
Mississippi Gulf Coast Regional Convention & Visitors Bureau
Mississippi Levee Commissioners
Municipal Energy Agency Of Mississippi
Natchez-Adams County Port Commission
Natchez Waterworks
Neshoba County Soil Conservation District
Newton County Soil Conservation District
Northeast Mississippi Natural Gas District
Northeast Mississippi Regional Water Supply District
NRoute Transit Commission
Oxford Tourism Council
Panola County Soil & Water Conservation District
Philadelphia-Neshoba County Park Commission
Pike County Soil Conservation District
Pine Belt Region Solid Waste Management Authority
Pontotoc County Soil & Water Conservation District
Prentiss County Soil & Water Conservation District
Rankin County Human Resource Agency
Rankin-hinds Pearl River Flood
Reservoir Fire Protection District
Ridgeland Tourism Commission
Rosedale-bolivar County Port Commission
Runnelstown Utility District
Scenic Rivers Development Alliance
Sebastopol Natural Gas District
Simpson County Parks & Recreation
South Madison County Fire Protection District
South Mississippi Fair Commission
Stone County Soil & Water Conservation District
Stone County Utility Authority
Sunflower County Soil & Water Conservation District
Tallahatchie County Soil & Water Conservation District
Tennessee-Tombigbee Waterway Development Authority

Juristic Entities (continued)

Tunica County Airport Commission
Tunica County Tourism Commission
Tupelo Airport Authority
Union County Soil & Water Conservation District
Vicksburg Convention & Visitors Bureau
Walthall County Soil & Water Conservation District
Warren County Parks & Recreation Commission
Warren County Soil & Water Conservation District
Wayne County Economic Development District
Wayne County Soil & Water Conservation District
West Jackson County Utility District
West Rankin Utility Authority
Winston County Economic Development
Winston County Soil & Water Conservation District
Yalobusha Water & Sewer District
Yazoo County Convention & Visitors Bureau
Yazoo County Soil & Water Conservation District
Yazoo-Mississippi Delta Joint Water Management District
Yazoo-Mississippi Delta Levee Commission
Yazoo Recreation Commission

Housing Authorities

Attala County
Baldwyn
Bay Waveland
Biloxi
Booneville
Canton
Clarksdale
Columbus
Corinth
Forest
Greenwood
Hattiesburg
Hazlehurst
Holly Springs
Itta Bena
Iuka
Jackson
Laurel
Louisville
McComb
Meridian
MS Reg. IV-Columbus
MS Reg. V-Newton
MS Reg. VI-Jackson
MS Reg. VII-McComb
MS Reg. VIII-Gulfport
Mound Bayou
Natchez
Oxford
Picayune
Pontotoc
Sardis
Pontotoc
Sardis
Senatobia
Shelby
South Delta Region
Starkville
Summit
Tupelo
Vicksburg
Water Valley
Waynesboro
West Point
Winona
Yazoo City

Local Hospitals

Claiborne County Medical Center
Field Memorial Community
Franklin County Memorial
Jefferson County
Magnolia Regional Health Center
North Sunflower Medical Center
South Sunflower County
Tippah County

Local Libraries

Amory Municipal
Benton County
Bolivar County
Carnegie Public
Carroll County
Central Mississippi Regional
Choctaw County
Columbus-Lowndes Public
Copiah-Jefferson Regional
Covington County
Dixie Regional
East Mississippi Regional
Elizabeth Jones
Evans Memorial
First Regional
Greenwood-Leflore Public
Hancock County
Harriette Person Memorial
Harrison County
Hattiesburg-petal-Forrest County
Humphreys County
Jackson-George Regional
Jackson-Hinds
Jennie Stephens Smith
Judge George W Armstrong
Kemper-Newton County Regional
Lamar County
Laurel-Jones County
Lee-Itawamba County
Lincoln-Lawrence-Franklin
Madison County-Canton Public
Marks-Quitman County
Marshall County
Meridian-Lauderdale County
Mid-Mississippi Regional
Neshoba County Public
Northeast Regional
Noxubee County
Oktibbeha County
Pearl River County
Pike-Amite-Walthall County
Pine Forest Regional
Sharkey-Issaquena County
South Mississippi Regional
Sunflower County
Tallahatchie County
Tombigbee Regional
Washington County
Waynesboro-Wayne County
Wilkinson County
Yalobusha County
Yazoo Library Association

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