

Report to the Mississippi Legislature

2020 Update on Financial Soundness of the Public Employees' Retirement System





PEER: The Mississippi Legislature's Oversight Agency

The Mississippi Legislature created the Joint Legislative Committee on Performance Evaluation and Expenditure Review (PEER Committee) by statute in 1973. A joint committee, the PEER Committee is composed of seven members of the House of Representatives appointed by the Speaker and seven members of the Senate appointed by the Lieutenant Governor. Appointments are made for four-year terms, with one Senator and one Representative appointed from each of the U.S. Congressional Districts and three at-large members appointed from each house. Committee officers are elected by the membership, with officers alternating annually between the two houses. All Committee actions by statute require a majority vote of four Representatives and four Senators voting in the affirmative.

Mississippi's constitution gives the Legislature broad power to conduct examinations and investigations. PEER is authorized by law to review any public entity, including contractors supported in whole or in part by public funds, and to address any issues that may require legislative action. PEER has statutory access to all state and local records and has subpoena power to compel testimony or the production of documents.

PEER provides a variety of services to the Legislature, including program evaluations, economy and efficiency reviews, financial audits, limited scope evaluations, fiscal notes, special investigations, briefings to individual legislators, testimony, and other governmental research and assistance. The Committee identifies inefficiency or ineffectiveness or a failure to accomplish legislative objectives, and makes recommendations for redefinition, redirection, redistribution and/or restructuring of Mississippi government. As directed by and subject to the prior approval of the PEER Committee, the Committee's professional staff executes audit and evaluation projects obtaining information and developing options for consideration by the Committee. The PEER Committee releases reports to the Legislature, Governor, Lieutenant Governor, and the agency examined.

The Committee assigns top priority to written requests from individual legislators and legislative committees. The Committee also considers PEER staff proposals and written requests from state officials and others.

PEER Committee Post Office Box 1204 Jackson, MS 39215-1204

(Tel.) 601-359-1226 (Fax) 601-359-1420 (Website) www.peer.ms.gov

The Mississippi Legislature

Joint Committee on Performance Evaluation and Expenditure Review PEER Committee

SENATORS

KEVIN BLACKWELL Vice Chair CHARLES YOUNGER Secretary LYDIA CHASSANIOL DEAN KIRBY CHAD McMAHAN SOLLIE NORWOOD JOHN POLK

TELEPHONE: (601) 359-1226

FAX: (601) 359-1420



Post Office Box 1204 Jackson, Mississippi 39215-1204

> James A. Barber Executive Director

www.peer.ms.gov

REPRESENTATIVES

TIMMY LADNER
Chair
RICHARD BENNETT
CEDRIC BURNETT
CAROLYN CRAWFORD
BECKY CURRIE
JERRY TURNER
PERCY WATSON

OFFICES:

Woolfolk Building, Suite 301-A 501 North West Street Jackson, Mississippi 39201

May 11, 2021

Honorable Tate Reeves, Governor Honorable Delbert Hosemann, Lieutenant Governor Honorable Philip Gunn, Speaker of the House Members of the Mississippi State Legislature

On May 11, 2021, the PEER Committee authorized release of the report titled **2020** *Update on Financial Soundness of the Public Employees' Retirement System.*

Representative Timmy Ladner, Chair

Juny Th

This report does not recommend increased funding or additional staff.

Table of Contents

| Letter of Transmittal | i |
|---|----|
| | |
| Report Highlights | V |
| Introduction | 1 |
| | |
| Authority, Scope, and Purpose Method | |
| METHOU | 1 |
| Background | 2 |
| Overview of the Public Employees' Retirement System | 2 |
| Composition and Role of the PERS Board of Trustees | 3 |
| Update on Financial Soundness of the Public Employees' Retirement System | 5 |
| Actuarial Soundness and Sustainability | 5 |
| Risk Management and Investment Management | 15 |
| | |
| Issues with Retirees' Return to Work in the Legislature | 21 |
| Historically, How Has PERS Treated Retirees Wanting to Concurrently Serve in the | |
| Legislature and Receive PERS Benefit Payments? | 21 |
| What Actions Did the PERS Board Take in Light of Recent Attorney General Opinions | 23 |
| and IRS Decisions? | 26 |
| | |
| Appendix A: PERS Payroll Growth for FY 2015 through FY 2020 | 28 |
| | |
| Appendix B: PERS Funding Policy Technical Appendix | 29 |
| | |
| Appendix C: PERS Investment Management Fees, FY 2020 & FY 2019 | 34 |
| Agency Response | 36 |
| 18cmcy 10copomoc | 50 |

List of Exhibits

| Exhibit 1: | PERS Plan Payroll Growth (by Source) for the Fiscal Years 2019 and 2020 |
|------------|---|
| Exhibit 2: | PERS System Active and Retiree Members for FY 2010 through FY 2020 (in Thousands) |
| Exhibit 3: | PERS Funding Policy Metric Results as of June 30, 2020 |
| Exhibit 4: | Potential Adjusted PERS Employer Contribution Rates |
| Exhibit 5: | Comparison of PERS Investment Performance to Peer Group of Public Pension Plans with Assets of More Than \$10 Billion |
| Exhibit 6: | PERS FY 2020 Actual Asset Allocation Compared to PERS Overall Asset Allocation Model |

iv PEER Report #654



2020 Update on Financial Soundness of the Public Employees' Retirement System

CONCLUSION: "Financial soundness" should be defined not as a point-in-time comparison of assets and liabilities but as a multifaceted construct. The PERS Board, with assistance from its staff and other contractual advisers, endeavors to maintain the financial soundness of the plan. Over the past 5- and 10-year periods, the PERS actual average annual payroll increase has continued to remain below the actuarial model's projected rate of salary increase (currently assumed at 3.00%). From FY 2010 through FY 2020, the ratio of active members to retired members decreased by approximately 33%, driven by the increasing number of retirees and the decreasing number of active members. The PERS Board has implemented a policy to reduce the PERS plan's investment return assumption from its current rate of 7.75% to the actuary's recommended rate of 7.50%, using future investment gains above the plan's assumed returns.

Background:

The Public Employees' Retirement System of Mississippi (PERS) is a defined benefits retirement plan for a majority of the employees (and/or their beneficiaries) of state agencies, counties, cities, colleges and universities, public school districts, and other participating political subdivisions. State law requires PEER to report annually to the Legislature on the financial soundness of PERS.

In addition to the PERS plan, Mississippi's public retirement system consists of five other retirement allowances and other benefits to segments of Mississippi public employees.

The System is under the administration of the 10-member PERS Board of Trustees, which has a primary responsibility of ensuring adequate funding of the plans it administers. One means of accomplishing this task is by setting contribution rates for employers participating in the plans. For assistance in setting these rates, the PERS Board receives actuarial reports annually and works with independent actuarial advisers to develop comprehensive models that are used to project the financial position of the various plans. These models include such components as investment return assumptions, wage inflation assumptions, retirement tables, and retiree mortality tables.

Each of these components must work in concert with the others for the plan to maintain financial soundness. Underperformance in any one area can cause additional stress on other components of the plan and can lead to underperformance of the plan as a whole.

In addition to annual actuarial valuations and projection reports, the PERS Board biennially reviews the actual experience of the various plans to expected experience for reasonableness, and adjust, as necessary, the assumptions used.

This report also includes information on recent questions regarding whether or not a retiree may receive PERS benefits and simultaneously serve in the Legislature.

Actuarial Soundness

The PERS Board, in consultation with its actuaries, develops an actuarial model based on such assumptions as projected investment returns, payroll increases, inflation, retirement ages, mortality rates, marriage rates, and accrued leave to project the plan's future assets and liabilities. Although the PERS Board sets plan assumptions based on biennial experience studies, the plan's actual experience (e.g., investment returns or mortality rates) is a product of environmental and demographic factors.

Variances in the actual experience of the plan compared to the model's assumptions have an impact on the plan's financial condition. Therefore, the PERS Board, with assistance from its staff and other contractual advisers, endeavors to maintain the actuarial soundness of the plan by monitoring all components used in the PERS actuarial model through quarterly updates on the performance of the plan's assets and annual actuarial updates in conjunction with annual projections and biennial experience reports. Among all continued analyses, the areas of wage inflation, active and retiree member assumptions, and investment return assumptions may require particular attention.

Wage Inflation Assumptions

Over the past 5- and 10-year periods, the PERS actual average annual payroll increase has continued to remain below the actuarial model's projected rate of wage increase (currently assumed at 3.00%). Although the PERS Board adopted changes based on its most recent experience studies (as of June 30, 2012; June 30, 2014; June 30, 2016; and, June 30, 2018), which help PERS's actuarial assumptions align more closely with actual experience, continued analysis of variation between actual and assumed wage growth is warranted.

Active and Retired Employee Assumptions

From FY 2010 through FY 2020, the ratio of active members to retired members decreased by approximately 33%, driven by the increasing number of retirees and the decreasing number of active members. As a result of the decrease, the payroll of fewer active members must fund future pension obligations.

Investment Return Assumptions

The PERS Board has implemented a policy to reduce the PERS plan's investment return assumption from its current rate of 7.75% to the actuary's recommended rate of 7.50%, using future investment gains above the plan's assumed returns. Since the implementation of this policy, the PERS investment returns have fallen short of the current assumed rate and the plan has not recognized any changes to its investment rate assumption. Because of the importance of investment gains as a source of revenue for PERS, experiencing lower than expected investment returns, either currently or in future periods, could be a source of stress on the plan.

PERS Funding Policy Metric Results as of June 30, 2020

Based on the results of the evaluation metrics in the funding policy, as of June 30, 2020, the plan has two metrics at yellow signal-light status (funded ratio and cash flow as a percentage of assets) and one metric at red signal-light status (actuarially determined contribution). According to the funding policy, a red result means that the PERS Board must consider making changes to the employer contribution rate.

In conformity with a red signal-light result in PERS's funding policy assessment, the plan's actuary has recommended the PERS Board consider amending the plan's employer contribution rate. Any change in the rate would be effective no earlier than July 1, 2022.

| Metric | Result | Status |
|--|---------|--------|
| Funded Ratio (in FY 2047) | 67.6% | Yellow |
| Cash Flow as a Percentage of Assets | -6.20% | Yellow |
| Actuarially Determined Contribution | 112.01% | Red |

| Assumption | Potential New Employer Contribution Rate | Percentage Increase Over Existing Rate |
|--|---|---|
| Using 7.75% (PERS Current Investment Rate Assumption) | 19.60% | 12.64% |
| Using 7.50% (Most Recent Actuarially Recommended Investment Rate Assumption) | 20.50% | 17.82% |
| Using 7.25% (Potential Lowered Investment Rate Assumption) | 22.25% | 27.87% |

Issues with Retirees' Return to Work in the Legislature

This year's report also includes information pertaining to the issues surrounding retirees returning to work in the Legislature while also receiving retirement benefit payments from PERS.

In November 2018, and January of 2019, the Attorney General issued opinions challenging PERS's regulations that prohibited retirees from concurrently serving in the Legislature and receiving benefit payments from the PERS System. Based on these opinions, the PERS Board amended its regulations, creating a path for retirees to serve while receiving benefits. These new regulations were made effective contingent on receiving approval from the IRS.

After requesting more information from PERS staff and tax counsel, Ice Miller, LLP, and the Attorney General's Office and tax counsel, the IRS declined to rule on PERS's regulation changes.

In order to protect the tax-deferred status of the plan, the PERS Board returned its regulation language to the language that was in place before the most recent change (language that considered Legislators as full-time employees and thus incapable of being part-time workers). This helps to protect the plan by reinstituting language that has been reviewed and approved by the IRS (most recently in July 2014).



2020 Update on Financial Soundness of the Public Employees' Retirement System | May 11, 2021 For more information, contact: (601) 359-1226 | P.O. Box 1204, Jackson, MS 39215-1204 Representative Timmy Ladner, Chair | James A. Barber, Executive Director

A copy of the full report is available at: www.peer.ms.gov

vi PEER Report #654

2020 Update on Financial Soundness of the Public Employees' Retirement System

Introduction

Authority, Scope, and Purpose

MISS. CODE ANN. § 25-11-101 (1972) directs the PEER Committee to:

...have performed random actuarial evaluations, as necessary, of the funds and expenses of the Public Employees' Retirement System and to make annual reports to the Legislature on the financial soundness of the system.

The PEER Committee, under the authority found in MISS. CODE ANN. § 5-3-51 et seq. (1972), carried out the statutorily required review of the financial condition of the Public Employees' Retirement System (PERS). Actuarial reviews authorized by MISS. CODE ANN. § 25-11-101 (1972) are discretionary.

This 2020 report includes an update on the financial soundness of PERS and a review of the actions taken by the PERS Board of Trustees regarding retirees returning to work in the Mississippi Legislature while concurrently receiving benefit payments from the PERs plan.

Method

To conduct this assessment. PEER:

- reviewed PERS's financial reports;
- reviewed actuarial reports, projections, and experience studies prepared for PERS;
- reviewed investment assessments prepared for PERS;
- reviewed documents produced by the Internal Revenue Service (IRS); and,
- interviewed personnel of PERS and the Mississippi Attorney General's Office.

Background

Like all other states in the country, Mississippi provides a retirement system for public employees; as is the case in most states, this plan is overseen by an agency of state government that is responsible for the investment and administration of the benefit payment process.

This chapter will present:

- an overview of PERS; and,
- the composition and role of the Board of Trustees of the Public Employees' Retirement System (PERS Board).

Overview of the Public Employees' Retirement System

Under MISS. CODE ANN. § 25-11-101 (1972), the Legislature created a retirement system, the PERS plan, to provide retirement allowances and other benefits for officers and employees in the state's service and their beneficiaries. The PERS Board is responsible for the administration of PERS and for all other state retirement systems. For purposes of this report, the collection of these systems will be referred to as the "System."

Mississippi's retirement systems currently consist of seven types of plans or programs:

- The Public Employees' Retirement System of Mississippi (PERS) is a defined benefit¹ retirement plan for state agencies, counties, cities, school districts, and other participating political subdivisions.
- The Mississippi Highway Safety Patrol Retirement System (MHSPRS) is a defined benefits retirement plan designed exclusively for Mississippi Highway Safety Patrol sworn officers.
- The Mississippi Government Employees' Deferred Compensation Plan and Trust (MDC) is an IRS Section 457(b)² voluntary government employees' deferred compensation plan.³
- Municipal Retirement Systems (MRS) are retirement plans created by 17 municipalities prior to the establishment of PERS

¹ Defined benefit plans, the most prevalent type of plan used by public employers, pay retired employees, or their beneficiaries, a defined amount through a calculation based on the plan's benefits and the employee's salary and years of service.

² Plans eligible under IRS Section 457(b) allow employees of sponsoring organizations (state and local governments and some nongovernmental entities) to defer income taxation on up to \$19,000 (for calendar year 2020) of retirement contributions. Catch-up provisions allow for additional contributions depending on factors such as age, years to retirement, and previous year(s) contributing.

³ MDC is sponsored by the State of Mississippi and administered by the PERS Board. The PERS Board contracts with Empower Retirement (the nation's second-largest retirement services company) as a third-party administrator to perform recordkeeping and administrative functions.

whose membership was closed. The administration and members of the plans were transferred to PERS in 1987.

- The Supplemental Legislative Retirement Plan (SLRP) is a separate plan designed to provide additional benefits to members of the Legislature and the President of the Senate. It is funded by employee and employer contributions in addition to contributions to the PERS plan.
- The Optional Retirement Plan (ORP) is a 401(a) defined contribution plan⁴ that certain teaching and administrative faculty at the state's universities can elect to join in lieu of becoming members of PERS.
- The PERS Board is also responsible for the administration of an optional retiree Medicare supplemental insurance program, the premiums of which are paid by the individuals who participate.

All assets, proceeds, and income of the System as defined here are held in trust (as provided for in Section 272A in the *Mississippi Constitution of 1890*) for the exclusive purpose of providing benefit payments and refunds and providing for the System's administrative expenses. Assets of the System, excluding the MDC and ORP, are invested collectively at the direction of the PERS Board of Trustees and its advisers. Assets of each member of the MDC and ORP are invested at the direction of the member.

Composition and Role of the PERS Board of Trustees

Established in MISS. CODE ANN. § 25-11-15 (1972), the 10-member PERS Board of Trustees is responsible for the administration of the state's retirement system. In addition to administrative oversight provided by the PERS Board and staff, the Mississippi Highway Safety Patrol Retirement System is governed by its own administrative board.

Composition of the PERS Board of Trustees

The current membership of the PERS Board includes:

- the State Treasurer;
- a gubernatorial representative;
- two state employees;
- one municipal employee;
- one county employee;
- one Institutions of Higher Learning (IHL) employee;
- one public school/junior college employee; and,
- two retiree members of PERS.

PEER Report #654

_

⁴ The ORP is a defined contribution plan that has fixed employee and employer contributions. These contributions are the sole financial requirement of the employer.

Except for the State Treasurer and the Governor's appointee, all trustees are elected by the various constituency employee groups they represent (i.e., state, municipal, county, institutions of higher learning, public schools, and junior colleges, as well as retirees).

In addition to those members, state law provides for four legislative advisers to assist the PERS Board (two each from the Mississippi Senate and House).

The PERS Board establishes policies and procedures for the administration of the System in accordance with the laws governing the various benefit plans. This includes adopting rules and regulations necessary to implement those laws and comply with federal regulations.

Role of the PERS Board of Trustees

A primary responsibility of the PERS Board is to ensure adequate funding of the plans it administers. One means of accomplishing this task is by setting contribution rates for employers participating in the plans. For assistance setting these rates, the PERS Board receives actuarial reports annually and works with its actuarial consultants to create comprehensive models that are used to project the financial position of the various plans. These models include such factors as investment return assumptions, wage inflation assumptions, retirement tables, and retiree mortality tables.

In FY 2020, the PERS Board continued its contractual relationship with Cavanaugh Macdonald Consulting, LLC, a nationwide actuarial and healthcare consulting firm that works with state and municipal retirement systems in 27 states and Puerto Rico.

In addition to annual actuarial valuation and projection reports, the PERS Board biennially compares the actual experiences of the various plans to expected experience for reasonableness and adjusts, as necessary, the assumptions used.

The PERS Board also contracts with an investment consultant to conduct asset/liability studies, provide quarterly performance reports and economic updates, and assist the PERS Board and staff in establishing an asset allocation policy and selecting investment management firms. The PERS Board currently contracts with Callan LLC, one of the nation's largest independently owned investment consulting firms.

PERS Board members have a fiduciary duty to manage and invest the funds of the various plans for the exclusive benefit of the members and beneficiaries in the manner provided by law. MISS. CODE ANN. § 25-11-121 (1972) provides guidelines and limitations on the types of assets the PERS Board may use as investments for the PERS plan.

Update on Financial Soundness of the Public Employees' Retirement System

"Financial soundness" should be defined not as a point-in-time comparison of assets and liabilities but as a multifaceted construct involving an understanding of the role of actuarial soundness in judging financial health, a broadly defined view of affordability that encompasses sustainability in consideration of all relevant environmental conditions, and an understanding of the role of risk and investment management in the long-term financial health of the System.

The PERS Board has adopted and implemented policies and procedures that allow it to address the major areas that contribute to the plan's financial well-being and to carry out its fiduciary responsibilities to its active members and retirees. These policies and procedures fall into the following areas:

- actuarial soundness and sustainability; and,
- risk and investment management.

This chapter will discuss each of these areas, highlight relevant activity and changes to PERS⁵ for the past fiscal year, and discuss future projections.

Actuarial Soundness and Sustainability

"Actuarial soundness" and "sustainability" are two of the major components of financial soundness. The purpose of these two components should be to establish a system and actuarial assumption models that can be upheld and defended in view of all relevant environmental conditions, including contractual obligations involved and the potential economic consequences of abrogating those obligations.

Actuarial Soundness

The PERS Board, with assistance from its staff and other contractual advisers, endeavors to maintain the actuarial soundness of the plan by monitoring all components used in the PERS actuarial model. Among all continued analyses, the areas of wage inflation, active and retiree member assumptions, and investment return assumptions may require particular attention.

The PERS Board, in consultation with its actuaries, develops an actuarial model based on such assumptions as projected investment returns, payroll increases, inflation, retirement ages, mortality rates, marriage rates, and accrued leave to project the plan's future assets and liabilities. Although the PERS Board sets plan assumptions based on biennial experience studies, the plan's actual experience (i.e., investment returns or mortality rates) is a product of environmental and demographic factors.

PEER Report #654

_

⁵ For purposes of this report, the retirement plan statutorily created as the Public Employees' Retirement System will be referred to as PERS or the plan.

Variances in the actual experience of the plan compared to the model's assumptions have an impact on the plan's financial condition. Therefore, the PERS Board, with assistance from its staff and other contractual advisers, endeavors to maintain the actuarial soundness of the plan by monitoring all components used in the PERS actuarial model through quarterly updates on the performance of the plan's assets, annual actuarial updates, annual projections, and biennial experience reports.

Differences Between Actual and Assumed Wage Inflation

Over the past 5- and 10-year periods, the PERS actual average annual payroll increase has continued to remain below the actuarial model's projected rate of wage increase (currently assumed at 3.00%). Although the PERS Board adopted changes based on its most recent experience studies (as of June 30, 2012; June 30, 2014; June 30, 2016; and, June 30, 2018), which help PERS's actuarial assumptions align more closely with actual experience, continued analysis of variation between actual and assumed wage growth is warranted.

The wage inflation assumption is the estimate of the amount that PERS members' wages will increase annually in future years. This rate affects the projected amount of funds that are to be contributed annually for investments to meet and calculate the number of future plan liabilities. PERS receives employee and employer contributions⁷ from seven sources:

- state agencies;
- state universities;
- public school districts;
- community and junior colleges;
- counties;
- municipalities; and,
- other political subdivisions (e.g., water or sewer utility districts).

The wage inflation assumption is composed of the impact of inflation and the real rate of wage inflation, which seek to account for the overall increases in the value of labor over time. Currently, these components are 2.75% and 0.25%, respectively. Wage inflation figures can be affected both by changes in payments to an individual (e.g., wage increases resulting from pay or merit raises) and the payments to the total number of individuals (e.g., growing or shrinking workforces).

For more information on the numbers of active employees currently participating in PERS, see Exhibit 2 on page 10.

6 PEER Report #654

⁶ Annual payroll is a statistical figure reported in the PERS plan's annual valuation that represents the total combined wages paid to PERS members by PERS plan employers.

⁷ The current rate each employee and his or her employer must contribute to PERS is 9% and 17.40% of the employee's total salary, respectively.

As a result of the most recent experience study, ended June 30, 2018, the PERS Board adopted changes that reduced the plan's wage inflation rate from 3.25% to 3.00% annually.⁸

For the past five fiscal years (FY 2016 through FY 2020) and 10 fiscal years (FY 2011 through FY 2020), the PERS average annual payroll increase fell below the projected 3.00% annual rate of wage increase. For the past five fiscal years, the average annual payroll increase was 1.27%, and during the past ten fiscal years the average annual payroll increase was 0.88%.

Exhibit 1 on page 8 presents the total payroll reported to PERS for fiscal years 2019 and 2020. As this exhibit indicates, for FY 2020 alone PERS experienced payroll growth of 2.32%, attributable to increases in total payroll in state agencies, state universities, public schools, counties, and municipalities and to decreases in total payroll in community/junior colleges and other political subdivisions. Also illustrated in Exhibit 1, wages of employees of state agencies, which represented approximately 18% of PERS-covered payroll, experienced an increase of 4.81% for FY 2020.

While PERS has experienced positive payroll growth in four of the last five fiscal years, as shown in Appendix A on page 28, each of these periods' results was below the rate of wage growth assumed by the PERS Board for the corresponding period.

As reported in *An Update on the Financial Soundness of the Mississippi Public Employees' Retirement System and Related Legal Issues: 2014* (PEER Report #591, January 5, 2015), PERS actuaries stated that payroll growth (either through increases in existing wages or through the creation of new positions) that is less than expected can cause upward pressure on the amortization period attributed to the unfunded actuarial accrued liability (UAAL), which occurs when a pension system's current actuarial value of assets is less than the present value of benefits earned by retirees, inactive members, and current employees as of the valuation date. However, the upward pressure on the unfunded actuarial accrued liability may be partially or totally offset due to the decrease in the number of future liabilities resulting from a lower payroll amount than assumed in the actuarial model.

In addition, the November 2020 edition of the Public Fund Survey¹¹ from the National Association of State Retirement Administrators states that when a plan's payroll grows at a rate less than expected, the base amount of funds used to amortize the plan's unfunded liability is smaller, meaning that the cost of amortizing the unfunded liability is larger. This is due to the fact that only part of

PEER Report #654

.

 $^{^8}$ Over the past 10-year period, the PERS Board's actuarial assumptions included an assumed growth rate of 4.25% from FY 2010 to FY 2014, 3.75% for FY 2015 and FY 2016, 3.25% for FY 2017 and FY 2018, and 3.00% for FY 2019 and FY 2020.

⁹ For FY 2019 alone, PERS experienced payroll growth of approximately 2.43%, with state agencies experiencing an increase of approximately 1.08%.

¹⁰ UAAL takes into consideration the expected investment return of present assets but does not consider future employee or employer contributions.

¹¹ The Public Fund Survey is an online compendium of key characteristics of 120 of the nation's largest public retirement systems.

the amount contributed to the PERS plan each year goes to the accrual of employee benefits. This component is called the normal cost.¹² The remainder of the contributions, which are not designated for the accrual of specific member future benefits, are held in the trust and utilized by the PERS plan to begin paying off the plan's UAAL.

Exhibit 1: PERS Plan Payroll Growth (by Source) for the Fiscal Years 2019 and 2020

| Payroll Source | Total P | ayroll | Increase (Decrease) | Percentage Change |
|---------------------------------|------------------|------------------|------------------------|----------------------|
| | FY 2020 FY 2019 | | | |
| State Agencies | \$ 1,114,859,714 | \$ 1,063,710,982 | \$ 51,148,732 | 4.81% |
| State Universities | 1,020,096,503 | 1,006,586,405 | 13,510,098 | 1.34% |
| Public Schools | 2,387,605,891 | 2,315,173,189 | 72,432,702 | 3.13% |
| Community & Junior Colleges | 299,391,280 | 302,704,747 | (3,313,467) | (1.09%) |
| Counties | 520,773,382 | 506,733,334 | 14,040,048 | 2.77% |
| Municipalities | 600,155,657 | 595,249,349 | 4,906,308 | 0.82% |
| Other Political Subdivisions | 344,559,040 | 354,757,624 | (10,198,584) | (2.87%) |
| Total | \$6,287,441,467 | \$6,144,915,630 | \$ 142,525,837 | 2.32% |

SOURCE: PEER analysis of the Report on the Annual Valuation of the Public Employees' Retirement System of Mississippi as of June 30, 2020.

For example, for FY 2020, total contributions were 26.40% of covered payroll (9% employee contribution and 17.40% employer contribution). The normal cost for FY 2020 was 10.34% (9% employee and 1.34% employer). The remainder of the employer contribution, 16.06%, is added to the assets of the plan for use in paying down the plan's UAAL. Thus, for FY 2020, for every dollar of covered payroll, the PERS plan received approximately 16.06 cents to be invested to help pay down the plan's UAAL. When the plan experiences less payroll growth than anticipated, the 16.06 cents per dollar of the difference between anticipated and actual covered payroll is not deposited into the PERS trust assets and is not able to grow at the assumed rate of 7.75% annually. Over a 30-year period, assuming all other assumptions are met, this 16.06 cents would grow to \$1.51, an increase of 840%.

8 PEER Report #654

¹² Normal cost is the annual cost of providing retirement benefits for services performed by current members. This is a shared responsibility between the member and employer.

Although the PERS Board has made changes to actuarial assumptions in the past, continued analysis of the difference between actual and assumed wage inflation is warranted. This is made more evident when PERS's experience is compared to the average experience of plans in the Public Fund Survey. The survey's November 2020 report indicates that the median experience for plans in the survey for FY 2019 was a positive change in annual payroll of approximately 3.25%, as compared to the PERS FY 2019 increase of 2.43%. In addition, the survey indicates that the median annual payroll change has been above 2% for the past five fiscal years, FY 2015 through FY 2019, while PERS's average wage growth over the same period was 0.54%.

Active and Retired Employee Assumptions

From FY 2010 through FY 2020, the ratio of active members to retired members decreased by approximately 33%, driven by the increasing number of retirees and the decreasing number of active members. As a result of the decrease, the payroll of fewer active members must fund future pension obligations.

The PERS plan, and all other plans administered by the PERS Board, have three types of members: active, inactive, and retired (also referred to as a retiree).

Active PERS members are current employees who are contributing to the plan through monthly withholding from pay. As noted previously, employee contributions represent an important revenue stream to the plan. As they continue to work, active members accrue service credits that will be used in calculating their annual payment when they become eligible to receive retirement benefits. The plan accounts for the cost of these accruals (the normal costs¹³) and funds them on a yearly basis through both employee and employer contributions.

Inactive members are members of PERS who are no longer working in any PERS-covered position and have not retired or received a refund of contributions. An inactive member retains his or her membership and the right to future benefits, either as a refund of contributions and interest or, if vested, as a deferred retirement benefit. The spouse and dependent children of a vested inactive member may be eligible for certain survivor benefits.

Retired PERS members are individuals who are no longer working in a PERS-covered position and have begun receiving payments based on their retirement calculations.

Each type of member is considered within the actuarial model of the plans; however, because liabilities associated with inactive members account for only 0.85% of the overall PERS plan's present value of future benefits, the ratio of active to retired employees is of primary importance. As shown in Exhibit 2, the ratio of active to retired members in the PERS plan decreased from 2.02:1 in FY 2010

PEER Report #654

_

¹³ Since 2013, PERS has included an estimated budgeted administrative expense in the calculation of the plan's normal cost. For FY 2020 an estimate of 0.25% of covered payroll was used in the calculation.

to 1.35:1 in FY 2020, or approximately 33%.¹⁴ The declining ratio is attributable to a decrease in the number of active members and an increase in the number of retired members. As a result of the decrease, the payroll of fewer active members must fund future pension obligations, a factor made more important because contributions from active members and their employers comprise approximately 46% of PERS revenues (as of FY 2020).

Exhibit 2: PERS System Active and Retiree Members for FY 2010 through FY 2020 (in Thousands) *

| Member Type | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Active | 166 | 162 | 163 | 162 | 162 | 158 | 155 | 153 | 151 | 151 | 151 |
| Retiree | 82 | 86 | 90 | 93 | 96 | 99 | 102 | 105 | 108 | 110 | 112 |
| Ratio | 2.02:1 | 1.88:1 | 1.81:1 | 1.74:1 | 1.69:1 | 1.60:1 | 1.52:1 | 1.46:1 | 1.40:1 | 1.37:1 | 1.35:1 |

^{*}Calculations are based on rounding to the nearest hundredth.

SOURCE: Public Employees' Retirement System of Mississippi.

Although the PERS active to retired member ratio has declined over the past 10 fiscal years, the ratio of 1.37:1 at the end of FY 2019 was above the average ratio for other pension plans across the nation. According to the November 2020 Public Fund Survey, when examining the membership of the pension plans tracked by the database, the overall active to retiree ratio is 1.34:1 as of the end of FY 2019, the most recent nationwide information available. This indicates that PERS has a higher ratio of members paying into the plan compared to retirees than the average pension plan in the United States.

In addition, the Public Fund Survey observed that a lower ratio of active members to retired members results in funding future obligations over a smaller payroll base, although a declining active member to retired member ratio does not automatically pose an actuarial or financial problem. However, when combined with an unfunded liability, a low or declining ratio of actives to retirees can cause financial distress for a pension system provider.

With a maturing plan,¹⁵ increasing retirements are expected, and the model attempts to account for these changes. Although the PERS ratio of active members to retirees is above the national average, PERS's experience does differ from the average plan of the Public Fund Survey database. PERS active membership has continued to decline, whereas the national average plan's membership has grown over the past five fiscal years (FY 2015)

10 PEER Report #654

٠

¹⁴ The rate of decline in the ratio of active members to retired members for the 10-year period between FY 2009 and FY 2019 was 36%.

¹⁵ According to Zacks Investment Research, a maturing pension plan is a plan where the number of employees and retirees is approaching equality.

through FY 2019). As such, continued analysis of the assumptions for active and retired members is warranted.

As with all the actuarial model's assumptions, the assumptions for active and retired members are evaluated every two years during the PERS Board's biennial experience study. The PERS Board will receive the results of its most recent biennial experience study during its April 2021 board meeting.

Investment Return Assumptions

The PERS Board has implemented a policy to reduce the PERS plan's investment return assumption from its current rate of 7.75% to the actuary's recommended rate of 7.50%, using future investment gains above the plan's assumed returns. Since the implementation of this policy, the PERS investment returns have fallen short of the current assumed rate and the plan has not recognized any changes to its investment rate assumption. Because of the importance of investment gains as a source of revenue for PERS, experiencing lower than expected investment returns, either currently or in future periods, could be a source of stress on the plan.

During its October 2019 meeting, the PERS Board finalized adoption of amendments to the plan's funding policy to reflect the method the PERS plan will use to lower its investment return assumption from its current rate of 7.75% to the actuary's recommended rate of 7.50%. (See discussion on page 18.)

According to the amended funding policy, the plan's investment assumption rate will be reduced until it reaches the rate recommended by the actuary in the most recent experience study. The specific parameters for this reduction are outlined by the funding policy which can be found in its entirety on PERS's website.¹⁶

For example, PERS's current investment return assumption, for the year ending June 30, 2020, is 7.75%. If PERS's investments returned 9.75% for the fiscal year, then the PERS Board would lower the plan's investment return assumption five basis points (or 0.05%) from its current 7.75% to 7.70%. Until investment returns in a future period allow for further reduction in the investment return assumption, the plan's valuations would continue to utilize the new 7.70% rate for predicting investment growth and for discounting future liabilities.

However, since the implementation of this change to the funding policy, the PERS investment returns of 6.87% in FY 2019 and 3.35% in FY 2020 have fallen short of the current assumed rate of 7.75%. As such, the funding policy has not recognized any change to the investment rate assumption, and the plan continues to utilize the current rate.

According to the PERS Board, this assumption change methodology was chosen because:

¹⁶ https://www.pers.ms.gov/Content/General/PERS%20Funding%20Policy.pdf

Decreases in the long-term investment assumptions are made at the same time asset gains are recognized, which helps lessen the overall impact of the assumption change on the liabilities and contributions requirements.

While PERS's actuary did recommend this assumption change methodology, among several others, the PERS Board's choice to utilize this methodology could continue to be a cause of concern. Selection of this methodology has delayed implementation of the assumption reduction and has been a contributing factor to the PERS plan's lower-than-projected investment returns.

Because of the importance of investment gains as a source of revenue for PERS, experiencing lower-than-expected investment returns, either currently or in future periods, could be a source of stress on the plan.

For example, as of June 30, 2020, the PERS anticipated accrued liability payment period¹⁷ was 37.1 years, an increase from 36.2 years as of June 30, 2019.¹⁸ The PERS Board's independent actuarial adviser attributes the increase primarily to lower-than-expected investment earnings on an actuarial basis along with other losses from the plan's demographic experience.

Elements that contributed to an increase in the anticipated accrued liability payment period include the current year realization of investment losses from three of the past five fiscal years in the actuarial valuation of assets. By using the accepted practice of "smoothing," PERS recognizes actuarial investment gains and losses over a five-year period. This allows the calculation of the anticipated accrued liability payment period and the accrued liability funding percentage to be based on a five-year period rather than on a one-year period, reducing the chance of large fluctuations in these figures. In FY 2020, actuarially smoothed investment returns were approximately \$297 million lower than the actuarially projected returns for FY 2016 through FY 2020. Elements that reduced the payment period include lower-than-expected service and disability retirements.

Because the PERS plan did not make progress in lowering its investment return assumption to the actuarial recommendation in FY 2019 and FY 2020, it is critical that the PERS Board and its actuary continue to monitor this assumption and the experience of the plan.

The PERS plan's actuary will evaluate the plan's investment return assumption in the plan's next experience study (which will be presented to the Board at its April 2021 meeting). Based on

12 PEER Report #654

¹⁷ The anticipated accrued liability payment period is the estimated length of time under current actuarial assumptions that is required to pay the unfunded actuarial accrued liability. An unfunded actuarial accrued liability occurs when the total of present value of future benefits associated with prior years' service and the present value of future administrative costs is greater than the actuarial present value of the system's current assets.

¹⁸ PERS's anticipated liability payment period, as of June 30, 2018, was 30.9 years.

¹⁹ The actuarial value of PERS's investments is calculated on a five-year smoothing average in which gains and losses are recognized over five years.

recommendations from this report, the PERS Board will have to consider whether the current method for adopting changes to the plan's investment return assumption is sufficient or if additional changes will need to be made to the plan's funding policy.

While adoption of any future changes under the current methodology may lessen the impact on the plan, any delays in their implementation may cause adjustments to be larger than was first necessary.

Sustainability

The PERS plan's funding policy defines several goals and objectives for the PERS plan, including the maintenance of an increasing trend in the plan's funded ratio (over the projection period) with the target of a 100% funding level by 2047.

According to the National Association of State Retirement Administrators, a pension plan funding policy is a set of guidelines adopted by a pension plan that determines how much should be contributed each year by the employers and active participants of a pension plan to provide for the secure funding of benefits in a systematic fashion. The PERS Board continues to operate the PERS plan under the funding policy that was implemented during FY 2018. The plan's funding policy defines several goals and objectives, including contribution rate stability and the maintenance of an increasing trend in the plan's funded ratio (over the projection period) with the target of a 100% funding level by 2047. For more information on the PERS funding policy, please see Appendix B on page 29.

Review of Funding Policy Metrics

Based on the results of the evaluation metrics in the funding policy, as of June 30, 2020, the plan has two metrics at yellow signal-light status (funded ratio and cash flow as a percentage of assets) and one metric at red signal-light status (actuarially determined contribution). According to the funding policy, a red result means that the PERS Board must consider making changes to the employer contribution rate.

Included in the policy are three metrics that will be utilized to track the plan's progress in achieving the funding goals and objectives set by the board and a course of action should any of these metrics fall below certain thresholds. These new metrics will be evaluated through the use of a "signal light" approach (green indicating goals and objectives achieved; yellow representing a warning that future negative actions may lead to a failure of the goals and objectives; and red suggesting that the PERS Board must consider making changes to the employer contribution rate).

Exhibit 3: PERS Funding Policy Metric Results as of June 30, 2020

| Metric | Result | Status |
|-------------------------------------|---------|--------|
| Funded Ratio (in FY 2047) | 67.6% | Yellow |
| Cash Flow as a Percentage of Assets | -6.20% | Yellow |
| Actuarially Determined Contribution | 112.01% | Red |

SOURCE: Report on Thirty-Year Projections of the Mississippi Retirement Systems, prepared as of June 30, 2020.

Based on the results of the evaluation metrics in the funding policy, as of June 30, 2020, the plan has two metrics at yellow signal-light status (funded ratio and cash flow as a percentage of assets) and one metric at red status (actuarially determined contribution). Exhibit 3 illustrates the status of these three metrics as assessed through the annual valuation and projection report as of June 30, 2020. For more information on the funding policy metrics please see Appendix B on page 29.

Prospective Changes to PERS's Employer Contribution Rate

In conformity with a red signal-light result in PERS's funding policy assessment, the plan's actuary has recommended the PERS Board consider amending the plan's employer contribution rate. Any change in the rate would be effective no earlier than July 1, 2022.

As highlighted previously, for the fiscal year ended June 30, 2020, the PERS plan's funding policy metric assessing the ratio between the plan's actuarially determined contribution and its fixed contribution reached a red signal-light status. According to the PERS funding policy, if any one metric is in the red signal-light status in conjunction with the annual valuation report and the projection report, the actuary will determine and recommend to the board an employer contribution rate increase to consider that is sufficient enough to get all three funding policy metrics back into the green-light status.

Under MISS. CODE ANN. § 25-11-123 (1972), the PERS Board is given the authority to determine, biennially, the employee and employer contribution rate that will be paid on members' earned compensation, and has the ability to make changes to these rates. However, because Mississippi is a "California Rule" state²⁰ (once a retirement benefit is vested, it cannot be taken away), any changes to the employee contribution rate would require the provision of comparable benefits to plan members, which would require changes to state law by the Legislature. Any changes recommended to the contribution rates of the plan must be applied to the employer contribution rate.

Currently, the employer contribution rate for the PERS plan is set at 17.40% of covered payroll.

As highlighted previously, the PERS Board has implemented funding policies for the PERS plan that will reduce the plan's assumed rate of investment return from its current 7.75% to the

²⁰ See Attorney General's Opinion to Robertson, February 22, 2010.

rate most recently recommended by the plan's actuary (7.50%). However, in its presentation the plan's actuary stated:

During the 2019 experience investigation, we recommended a long-term investment return assumption of 7.50% and an upcoming experience study for 2021 is expected to result in a similar or possibly even reduced recommendation based on the continued forecast of inflation and real returns in the marketplace.

The PERS plan's actuary presented its recommendations for a potential employer rate increase to the PERS Board at its December 2020 meeting.

The recommendation provided by the actuary included multiple possible new assumptions based on the plan's funding status and condition as of June 30, 2020, and striated over several assumed investment rates of return that can be seen in Exhibit 4.

Exhibit 4: Potential Adjusted PERS Employer Contribution Rates

| Assumption | New Employer Contribution Rate | Percentage Increase Over Existing Rate |
|--|-----------------------------------|--|
| Using 7.75% (PERS Current Investment Rate Assumption) | 19.60% | 12.64% |
| Using 7.50% (Most Recent Actuarially Recommended Investment Rate Assumption) | 20.50% | 17.82% |
| Using 7.25% (Potential Lowered Investment Rate Assumption) | 22.25% | 27.87% |

SOURCE: Report on Thirty-Year Projections of the Mississippi Retirement Systems, prepared as of June 30, 2020.

As shown in Exhibit 4, while these projected employer contribution rates represent a significant increase in PERS employers' personnel costs, at this time the actual dollar cost of these increases cannot be calculated.

The PERS Board voted to receive the reports presented by the plan's actuary and will consider the plan's prospective rate increase and the results of its next experience study at its April 2021 board meeting. Any changes approved by the PERS Board will become effective no earlier than the fiscal year beginning July 1, 2022 (FY 2023).

Risk Management and Investment Management

Risk management and investment management should provide a long-term framework for the structure that will control the plan's long-term risk environment and allow it a reasonable opportunity to collect or earn sufficient assets to meet its benefit obligations.

Risk management and investment management represent the other major components of financial soundness. These concepts are utilized to provide a long-term framework for the structure that will manage the plan's long-term risk environment in ways that allow it a reasonable opportunity to collect or earn sufficient assets to meet its benefit obligations.

Risk Management

As of June 30, 2020, the PERS funding ratio was 58.8%, a decrease from 61.3% as of June 30, 2019. Primarily due to the less than expected investment returns, the PERS plan has a projected future funding ratio of 67.6% as of 2047, which passes the assessment metrics outlined in the plan's new funding policy with a warning.

To determine the funding ratio, or funding level, of a plan, the current value of all projected future obligations of the plan (such as future pension payments) is calculated. In other words, the cost of all of the plan's future obligations is calculated in today's dollars. The total of the current value of future obligations is compared to the plan's assets on hand today and a funding ratio (the funding level) is derived.

The calculation of a plan's funding level is an accounting measure that quantifies the plan's ability to meet its projected future obligations, based on service already performed, with assets currently available. However, this measure, like most accounting measures, assesses the plan in a conservative manner and does not take into account such items as future investment gains and losses and/or loss of contributions from employees and participating employers. This measure also does not reflect the ability of the plan to meet its current obligations.

For FY 2020 the actuarial value of assets in PERS decreased in relation to the actuarial value of its liabilities—from 61.3% in FY 2019 to 58.8% in FY 2020.²¹ The relationship between these two valuations weakened because actual experience varied from expected experience regarding investment returns and member withdrawals.²² The actuarial gain on investments for FY 2020 was 6.72%, which represents the actuarial smoothing of gains and losses from FY 2016 through FY 2020.²³

According to projections prepared by the fund's actuary, as of June 30, 2020, the plan's funding ratio was projected to be 67.6% by 2047, as compared to 83.2% reported in the FY 2019 projection reports.²⁴ The decrease in the future funding level is due to less

PEER Report #654

²¹ For the fiscal year ended June 30, 2018, the PERS plan had a funding level of 61.8%.

²² Member withdrawals occur when a member of PERS, upon separation from employment in a PERS-covered position, requests to receive a refund of their accumulated contributions, which are comprised of all amounts deducted from the member's compensation and all regular interest allocated to the account as directed under MISS. CODE ANN. § 25-11-123 (1972).

²³ The PERS plan's actuarial gain on investments as of June 30, 2019, was 7.19%.

²⁴ For the period ended June 30, 2018, the PERS plan's projected funding level in 2047 was 95.8%.

than expected investment gains and an adopted change to the profile for new entrants of the plan.²⁵

For any projected funding level information to be accurate, all actuarial assumptions must be met exactly for all fiscal years forecasted. As past performance indicates, this mark can be missed on both the high and low sides, creating variability from the model.

Investment Management

For FY 2020, the PERS plan's combined investment portfolio experienced a return of 3.35%, and the market value of the System's assets was approximately \$28.2 billion.

Having realized a return of approximately 3.35% in the PERS plan's combined investment portfolio, the market value of assets declined from approximately \$28.6 billion to \$28.2 billion during FY 2020, a decrease of approximately \$0.4 billion.

As presented in Exhibit 5 on page 18, according to investment consultant Callan LLC, PERS's investment performance for FY 2020 was below the current actuarial model's target investment return of 7.75%, placing it below the median return for its peer group²⁶ of 3.91%. In contrast, PERS's investment performance has exceeded its peer group median for each of the past 3-, 5-, and 10-year periods.

Over the past 10 years, PERS's investment return on assets averaged 9.44%. Investment returns ranged from 0.60% during FY 2012 to 25.4% during FY 2011. Historically, PERS investment returns have averaged 5.81% over the past 20 years, 7.53% over the past 25 years, and 8.05% over the past 30 years.

PEER Report #654

_

²⁵ The actuarial assumptions used in the forward-looking projections for the plan are based on the assumption that in future periods the active membership of the plan will remain level with today's membership figures. During FY 2020, the PERS plan adopted the use of a new entrant profile that was developed based on analysis of the new hires for the period encompassing fiscal years 2018, 2019, and 2020.

 $^{^{26}}$ The PERS peer group is composed of other nationally based large pension plans (plans having greater than \$10 billion in assets).

Exhibit 5: Comparison of PERS Investment Performance to Peer Group of Public Pension Plans with Assets of More Than \$10 Billion

| Category | FY 2020 | 3-Year Return | 5-Year Return | 10-Year Return |
|------------------------------|---------|---------------|---------------|----------------|
| PERS Return | 3.35% | 6.53% | 7.05% | 9.44% |
| Peer Group Median (midpoint) | 3.91% | 6.50% | 6.84% | 8.65% |
| PERS Percentile Rank | 59* | 48 | 27 | 19 |
| 25th Percentile* | 5.91% | 7.13% | 7.15% | 9.27% |
| 10th Percentile* | 8.05% | 8.32% | 7.85% | 9.59% |

^{*}NOTE: In this example, 59th percentile means PERS outperformed 41% of peer group funds; 25th percentile means these returns were greater than 75% of peer group funds; and, 10th percentile means these returns were greater than 90% of peer group funds.

SOURCE: Callan LLC, Investment Performance Review as of June 30, 2020.

According to the February 2020 *NASRA Issue Brief: Public Pension Plan Investment Return Assumptions*, the median public pension annualized investment 10-year return for the period ending December 31, 2019, was 8.2% and the 25-year return was 8.2%.²⁷ PERS's investment returns have exceeded the median for other public pension plans for the past 10-year period but have trailed during the past 25-year period. The volatility of the recent years' returns reinforces the principle of viewing investment returns over a long period and comparing long-term returns to investment return goals rather than focusing on a single year's returns or returns over a short period.

Because investment returns are the largest piece of a pension's funding source, when actual returns fall below projections, over time the plan must rely on other sources (contributions) to provide for the difference, which could lead to decreases in the plan's assets.

Considering the importance of the investment return assumption, the PERS plan's actuary recommended a reduction in the PERS plan's investment return assumption of 0.25%, lowering the recommended assumption from 7.75% to 7.50%. The PERS Board, in its October 2019 meeting, finalized the adoption of amendments to the plan's funding policy requiring the plan to utilize future excess investment revenues, above the current projected investment revenues, to lower the plan's investment rate assumption until it reaches the rate recommended by the plan's actuary.

During FY 2019, the plan's combined return of 6.87% was below the target return of 7.75%, so the assumption remained at 7.75% for the annual valuation and projection report (for the year ending June 30, 2019). As highlighted previously on page 17, the combined

PEER Report #654

²⁷ At the time of publication of this report, the Public Fund Survey for the period ending June 30, 2020, had not been released.

return for the PERS System during FY 2020 was 3.35%, also below the plan's targeted return of 7.75%. For the annual valuation and projection report (for the year ended June 30, 2020) the assumed investment rate of return remained 7.75%. Even with these adjustments to the plan's assumption recommendations and funding policy, the PERS Board and its independent actuarial adviser plan to continue to monitor the investment return assumption in future years to ensure that the investment return assumption accurately reflects market conditions and the System's investment allocation model. This assumption will be reviewed in the plan's next experience study that will be heard by the PERS Board during their April 2021 meeting.

Asset Allocation Model

For FY 2020 the PERS Board of Trustees continued to adhere to the overall asset allocation model adopted in June 2015. This model continues to set investment-level targets for the PERS investment portfolio.

The PERS independent investment consultant periodically performs an asset/liability allocation study that considers projected future liabilities of the System, expected risk, returns of various asset classes, and statutory investment restrictions. For FY 2020 the PERS Board continued to adhere to the overall asset allocation model adopted in June 2015. The asset allocation model determines the mix of asset classes in which PERS will invest and the overall weight of each asset class within the whole portfolio.

The PERS Board and PERS staff use this model to mitigate investment risk through diversification and to establish risk and rate of return expectations for the adopted target asset allocation mix. On a quarterly basis, the PERS Board and its staff, in consultation with its investment advisers, review the performance of each investment manager relative to the asset class's target performance level.

Exhibit 6 presents the actual FY 2020 investment allocation compared to the model.

Exhibit 6: PERS FY 2020 Actual Asset Allocation Compared to PERS Overall Asset Allocation Model

| Year | U.S. Equity | Non-U.S. Equity | Debt Investments | Real Estate | Private Equity | Global Equity | Cash |
|---------|----------------|--------------------|---------------------|----------------|-------------------|------------------|------|
| Model | 27% | 22% | 20% | 10% | 8% | 12% | 1% |
| FY 2020 | 29% | 20% | 19% | 9% | 9% | 13% | 1% |

SOURCE: Callan LLC, Investment Performance Review as of June 30, 2020.

As presented in Exhibit 6, PERS assets are being invested in accordance with the asset allocation model. Instances in which current investment levels do not agree with the model do not automatically constitute a cause for alarm or present the need for an immediate change in investment levels. The investment model represents targeted investment levels designed to prevent the investment portfolio from becoming too heavily weighted in a certain investment type. Market conditions may, at times, cause a prudent manager to call for slight departures from target goals. For these reasons, the PERS Board monitors investment performance, strategies, and weights throughout the year and manages the investment portfolio based on input from professional money managers, advisers, and its professional staff.

The PERS Board's decision to utilize numerous investment managers minimizes investment risk, as it prevents a large portion of plan assets from being under the management of any one investment manager. For FY 2020 the PERS Board had investment management contracts with 53 managers (including two that were hired in FY 2020, and paid management fees to 49 investment managers. PERS paid \$99.0 million to investment managers on PERS plan assets of \$28.2 billion, a combined investment management expense rate of 0.35% (the expense rate for the fiscal year ending June 30, 2019, was 0.36%).

As of June 30, 2020, Eagle Capital, a manager in the large-cap domestic equity sector, had the most assets under management as a percentage of the total portfolio by any one active investment manager²⁸ with 3.90% (approximately \$1.1 billion of the PERS plan's \$28.2 billion in assets).

For more information on investment management fees, see Appendix C on page 34.

20 PEER Report #654

²⁸ Active investment management refers to a portfolio management strategy by which the manager uses various investment research approaches, models, and systems to select the fund's specific investments with the goal of outperforming the fund investment's benchmark index.

Issues with Retirees' Return to Work in the Legislature

In recent years, questions have arisen regarding whether or not a retiree may receive PERS benefits and simultaneously serve in the Legislature. This chapter will discuss the following areas:

- Historically, how has PERS treated retirees wanting to concurrently serve in the Legislature and receive PERS benefit payments?
- How have recent Attorney General opinions affected PERS?
- What actions did the PERS Board take in light of recent Attorney General opinions and IRS decisions?

Historically, How Has PERS Treated Retirees Wanting to Concurrently Serve in the Legislature and Receive PERS Benefit Payments?

Historically, retirees have been precluded from serving in the Legislature while continuing to receive monthly retirement benefits due to PERS's position that legislators are "full-time" employees under MISS. CODE ANN. § 25-11-109(2)(b) (1972). As such, legislators' use of the methods outlined in MISS. CODE ANN. § 25-11-127 (1972) is not protected under previous IRS letter rulings, and thus not permissible.

PERS is codified under MISS. CODE ANN. § 25-11-101 et seq. (1972). Retirees²⁹ from PERS are generally precluded from concurrently drawing retirement benefits from PERS and being reemployed in most PERS-covered positions³⁰ unless his or her reemployment is provided for in the exceptions outlined in MISS. CODE ANN. § 25-11-127 (1972). These provisions require a mandatory break in service³¹ and allow for the retiree to be employed under one of the following scenarios:

- for a period of time not to exceed one-half (1/2) of the normal working days for the position in any fiscal year during which the retiree will receive no more than one-half (1/2) of the salary in effect for the position at the time of employment;³² or,
- for a period of time in any fiscal year sufficient in length to permit a retiree to earn not in excess of 25% of retiree's average compensation.

PEER Report #654

²⁹ As defined on page 9, retirees (or retired PERS members) are individuals who are no longer working in a PERS-covered position and have begun receiving payments based on their retirement calculations.

³⁰ Special distinctions for retirees who are drawing retirement benefits from PERS and are reemployed in a county or municipal elected position are made in MISS. CODE ANN. § 25-11-127(6) (1972). Additionally, separate provisions are made for Senior or Special Judges under MISS. CODE. ANN. § 9-1-105 (1972).

³¹ A mandatory break in service is defined by a period of time of at least 90 consecutive days following the date of the retiree's separation from service.

 $^{^{32}}$ To determine the normal working days for a position under the first scenario, the employer shall determine the required number of working days for the position on a full-time basis and the equivalent number of hours representing the full-time position. The retiree then may work up to one-half (1/2) of the required number of working days or up to one-half (1/2) of the equivalent number of hours and receive up to one-half (1/2) of the salary for the position. In the case of employment with multiple employers, the limitation shall equal one-half (1/2) of the number of days or hours for a single full-time position.

Through the authority granted under MISS. CODE ANN. § 25-11-127(3) (1972), the PERS Board has established guidelines for the administration of retiree reemployment in PERS-covered positions in PERS Board Regulation 34.

According to PERS tax counsel, Ice Miller, LLP, the 2015 IRS Determination Letter³³ approved employees' election of either option provided in MISS. CODE ANN. 25-11-127 (1972) when they return to work, while continuing to receive monthly retirement benefits, in most PERS-covered positions. The approval granted by the IRS determination letter extends to all retirees in covered positions granted eligibility status in PERS regulation at the time of the letter and allows those employees to make an election if they so choose without contravening IRS regulations on cash or deferred elections (CODA).³⁴ These employees have been "grandfathered in" under less restrictive regulations.

However, at the time of the IRS determination letter, PERS regulations did not extend eligibility to retirees returning to covered positions in the Legislature (and other elected positions other than county and municipal elected positions). According to PERS's outside tax counsel, this is because:

PERS has historically interpreted legislative service as full-time employment for all purposes by relying on MISS. CODE ANN. Section 25-11-109(2)(b) which grants state and local elected officials **creditable service** as if they were full-time employees.

According to PERS staff, because state elected officials are considered full-time employees, for the purpose of creditable service, this designation places members of the Legislature in conflict with MISS. CODE ANN. § 25-11-127(2) (1972) which states:

Any person who has been retired under the provisions of Article 3 and who is later reemployed in service covered by this article shall cease to receive benefits under this article and shall again become a contributing member of the retirement system. When the person retires again, if the reemployment exceeds six (6) months, the person shall have his or her benefit recomputed, including service after again becoming a member, provided that the total retirement allowance paid to the retired member in his or her previous retirement shall be deducted from the member's retirement reserve and taken into

³³ A Determination Letter is a formal document issued by the IRS that indicates whether or not an entity's employee benefit plan documents have met the minimum legal requirements for special tax treatment (tax status).

³⁴ A cash or deferred arrangement (CODA) is the ability of an employee to elect to have his or her employer either: provide an amount to the employee in the form of cash or some other taxable benefit that is not currently available or contribute an amount to a trust, or provide an accrual or other benefit, under a plan deferring the receipt of compensation. These types of elections are permissible under federal law, but only if made as an irrevocable choice when the employee is first eligible under the plan (or any plan of the employer).

consideration in recalculating the retirement allowance under a new option selected.

As such, unlike those employees grandfathered in, retirees were not eligible under PERS regulations to serve in the Legislature (and other elected positions excluding county and municipal elected positions) and receive pension benefits under any conditions. On advice from its tax counsel, PERS staff believes that more stringent IRS regulations adopted since the earlier letter ruling in 2015 would preclude new classes of retirees from being able to make the election.

How Have Recent Attorney General Opinions Affected PERS?

On November 29, 2018, the Attorney General's Office issued the Norwood Opinion that concluded retirees have vested rights under PERS to receive benefits, and statutory rights to return to state service within the limits outlined in state law. On January 24, 2019, the Attorney General's Office issued the Higgins Opinion to help address questions posed by PERS in light of the Norwood Opinion. The Higgins Opinion provided clarification on the definition of salary for a legislator in Mississippi, opined that a legislator could waive a portion of his or her statutorily mandated salary, and upheld that legislators may exercise all options for reemployment as outlined under MISS. CODE ANN. § 25-11-127(4) (1972).

PERS Board's Regulation 34's stance precluding retirees from concurrently serving in the Legislature (and other elected positions other than county and municipal elected positions) and receiving benefit payments from the PERS System led to Norwood³⁵ and Higgins³⁶ Opinions by the Mississippi Attorney General's Office in December of 2018 and January of 2019 respectively.

Norwood Opinion

On November 29, 2018, the Attorney General's Office issued the Norwood Opinion, which concluded retirees have vested rights under PERS to receive benefits, and statutory rights to return to state service within the limits outlined in state law.

In light of Regulation 34's stance, Senator Sollie Norwood sought an opinion from the Attorney General on the issue of whether PERS must terminate benefits paid to a retiree who is sitting in the Mississippi Legislature. On November 29, 2018, an Attorney General Opinion to Norwood held:

- Retiree service in the Legislature was consistent with the plain meaning of state law dealing with retiree return to duty at either half time or quarter compensation.³⁷
- PERS regulations that specifically provide that persons receiving PERS benefits are prohibited from drawing their retirement and serving in the Legislature are inconsistent with the provisions of the above-cited CODE provisions, and further exclusion is not required by MISS. CODE ANN. § 25-11-127(6)

PEER Report #654

٠

³⁵ 2018 Atty. Op. to Norwood WL 6718797.

³⁶ 2019 Atty. Op. to Higgins WL 2763115.

³⁷ MISS. CODE ANN. § 25-11-127(1) (1972) and MISS. CODE ANN. § 25-11-127(4)(a) and (b) (1972).

(1972) that by its specific terms only allows local elected officials to receive their PERS benefits while serving in office.

- While MISS. CODE ANN. § 25-11-127 (1972) prohibits return to full-time service in PERS-covered positions, and MISS. CODE ANN. § 27-11-109 (1972) declares elective offices to be full-time positions, the sole purpose for making these positions full-time was to enable incumbents to receive year for year creditable service while they held elective office. Consequently, the declaration in MISS. CODE ANN. § 25-11-109 (1972) that an elective office is full time would not bar PERS retirees from drawing benefits and serving in an elective position such as a legislative seat.
- Retirees have vested rights under PERS to receive benefits, and statutory rights to return to state service within the limits of MISS. CODE ANN. § 25-11-127 (1) and (4) (1972).

Under this Opinion, the Attorney General's Office stated that PERS's regulations limiting retirees from serving in the Legislature was not in compliance with state law, and that as long as the retiree's return was in conformity with existing statutes,³⁸ he or she should be able to both serve in the Legislature and receive retirement benefits form the PERS plan.

Higgins Opinion

On January 24, 2019, the Attorney General's Office issued the Higgins Opinion to help address questions posed by PERS in light of the Norwood Opinion. The Higgins Opinion provided clarification on the definition of salary for a legislator in Mississippi, opined that a legislator could waive a portion of his or her statutorily mandated salary, and upheld that Legislators may exercise all options for reemployment as outlined under MISS. CODE ANN. § 25-11-127(4) (1972).

In response to the components of the Norwood Opinion, Ray Higgins, the Executive Director of PERS, sought an opinion from the Attorney General that addressed several questions that arose from the positions taken by the Attorney General in the Norwood Opinion. In the Opinion to Higgins, dated January 24, 2019, the Attorney General opined to the PERS Executive Director on eight technical questions associated with matters of compensation that are essential to determining whether or not PERS members receiving retirement benefits can hold elective public office.

Legislator Salary

Included in the issues addressed in the Opinion, the Attorney General provided clarification on the definition of salary for a legislator in Mississippi. Under MISS. CODE ANN. § 25-11-103(k)(iii) (1972), earned compensation for a member of the State Legislator is defined as:

24 PEER Report #654

٠

³⁸ MISS. CODE ANN. § 25-11-127 (1) and (4) (1972).

...all remuneration or amounts paid, except mileage allowance, shall apply.

However, because the provisions of MISS. CODE ANN. § 25-11-127(4)(a) (1972) utilize the term salary, other sections must be considered.

State law makes provision for the remuneration of legislators in MISS. CODE ANN. § 5-1-41 (1972), through compensation and mileage reimbursement.³⁹ In the Higgins Opinion, the Attorney General opined that:

All sums paid to legislators under Section 5-1-41, with the exception of mileage, would be considered salary for purposes of Section 25-11-127(4)(a).

State law makes additional provision for mileage and expense allowances for legislators in MISS. CODE ANN. § 5-1-47 (1972). However, the Attorney General opined:

Because the expenses in Section 5-1-47 are "in addition to the regular salary," a legislator would continue to receive those expenses, but those expenses are not counted as salary for purposes of Section 25-11-127(4)(a).

Under this Opinion, the Attorney General holds that only a legislator's base salary under MISS. CODE ANN. Section 5-1-47 (1972) and per diem received under MISS. CODE ANN. Section 5-1-41 (1972) should be considered when determining a legislator's ability to serve in the Legislature while concurrently receiving retirement benefits for the PERS plan.

Acceptance of Statutory Salary

The Higgins Opinion also addressed whether it was possible for a reemployed retiree member of the Mississippi Legislature to be paid one-half the salary for the position in order to meet the requirements set forth in MISS. CODE ANN. § 25-11-127(4)(a) (1972), despite the requirement in statute for the specified compensation.

Historically, members of the Legislature have been unable to waive any component of their compensation because state law mandates that they will receive each component. The Attorney General opined the following:

Section 25-11-127(4)(a) controls and directs that a retiree who is reemployed on a half-time basis and draws a retirement allowance may "receive no more than one-half of the salary in effect for the position at the time of employment. This is a mandatory salary limitation placed on a retiree by the retirement statute and cannot be modified by the retiree or the employer."

25

³⁹ Reimbursement for mileage is further clarified under MISS. CODE ANN. § 25-3-41 (1972).

This opinion makes it possible for a reemployed retiree member to waive one-half of the statutorily defined salary for serving in the Legislature.

Methods of Reemployment Available

As previously discussed, state law allows, for most retirees of the PERS plan who receive benefit payments from the System, two methods for returning to work in a PERS-covered position while still receiving retirement benefits from the System. In response to questions submitted by PERS, the Attorney General provided clarity on whether a retiree wishing to concurrently draw retirement benefits from the PERS System and serve in the Legislature can avail him/herself of both of the methods outlined in MISS. CODE ANN. Section 25-11-127(4) (1972). On this topic, the Higgins opinion states:

A retiree who is serving in the Legislature may receive their retirement benefit if they meet the requirements of Section 25-11-127(1) and 25-11-127(4)(a) and (b).

Under this opinion, a legislator may serve in the Legislature while receiving retirement benefits from the PERS plan by either working "half-time/half-pay" for the position held or by only working a period of time that would allow him or her to receive compensation less than 25% of the retirees' average compensation.

What Actions Did the PERS Board Take in Light of Recent Attorney General Opinions and IRS Decisions?

In light of the Attorney General Opinions in November 2018 and January 2019, the PERS Board voted to amend its regulations on retirees concurrently serving in the Legislature and receiving benefit payments from the PERS System. This change was approved, pending a favorable opinion from the IRS. When the IRS declined to offer a decision on PERS's amended regulation regarding retirees' reemployment in the Legislature, the PERS Board voted to return its regulation language to the most current iteration prior to the recent changes.

In light of the Norwood and Higgins Opinions, the PERS Board called a special meeting, with representatives from its tax counsel Ice Miller, LLP, and members of the Attorney General's Office to discuss prospective changes to Regulation 34, which addresses retiree reemployment in PERS-covered positions. These changes would form parameters around retirees concurrently serving in the Legislature and receiving benefits from the PERS System.

The PERS Board passed an initial adoption of amendments to Regulation 34 in its April 2019 meeting. Within the motion to adopt the changes, the PERS Board also stated that final adoption of these changes would be based on receipt of a favorable opinion from the Private Letter Ruling⁴⁰ (PLR) request sent by the PERS Board to the

26 PEER Report #654

4

⁴⁰ A Private Letter Ruling (PLR) is a written decision by the IRS that is sent in response to a taxpayer's request for guidance on unusual circumstances or complex questions about their specific tax situation.

Internal Revenue Service. PERS sent this request to the IRS on July 10, 2019.

After sending the request to the IRS, the PERS staff and their tax counsel, along with the Attorney General's office and its tax counsel, worked with the IRS to answer additional questions posed and to provide clarifying information when necessary. Ultimately, after receiving a phone call from IRS personnel stating that a favorable opinion would be issued, the PERS Board voted in its December 2019 board meeting to finalize the adoption of the amended Regulation 34 (with an effective date of January 1, 2020).

After the enacting of the amended Regulation 34, all parties continued to communicate with the IRS to help finalize the PLR process. At the heart of the IRS's inquiries were discussions about whether or not the election to work part-time as a Legislator created an impermissible CODA. In a reversal from its verbal approval, on May 7, 2020, the IRS issued a letter to PERS's Executive Director, Ray Higgins, "declining to issue a letter ruling, on the IRS's determination that it could not issue a ruling based on the factual nature of the matter involved." The IRS's decision to decline issuing a PLR, in essence, means that PERS's decision to allow retirees to return to the legislature does not have IRS approval.

In light of the IRS's PLR, and additional guidance provided by the Attorney General's office through the Caldwell Opinion,⁴¹ PERS's tax counsel issued a memo to PERS's Executive Director recommending the PERS Board amend the language of Regulation 34 to return it to the language that was in place when the PERS received a favorable determination from the IRS, dated July 10, 2014. The PERS Board voted in its June 2020 meeting to again amend Regulation 34, returning its language to the version used prior to the current version. The Board voted in the August 2020 meeting to finalize the amendments to Regulation 34, making the new language effective as of October 1, 2020.

With this action, the PERS Board again considers service in the Legislature as a full-time position. This again precludes retirees from serving in the Legislature while concurrently receiving retirement benefits from the PERS plan.

⁴¹ The Attorney General issued its Opinion to Caldwell on May 19, 2020. The May 19 2020 Opinion to Caldwell concluded that waiving of a portion of a statutory salary was impermissible. The Attorney General further noted, "This conclusion is consistent with the previous opinions that an individual holding a position or office for which the salary is prescribed by statute may not waive that salary, (citations omitted). To the extent this opinion conflicts with our response to Question no. 3 in MS AG Op. Higgins, January 24, 2019, this opinion controls."

Appendix A: PERS Payroll Growth for FY 2015 through FY 2020

| Payroll for the Fiscal Year Ending June 30 (in thousands)† | | | | | | | | |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-----------|--|
| Employer Group | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2015-2020 | |
| State Agencies | \$1,090,118 | \$1,099,584 | \$1,094,366 | \$1,052,316 | \$1,063,711 | \$1,114,860 | 2.27% | |
| State Universities | \$928,827 | \$965,648 | \$963,344 | \$974,096 | \$1,006,586 | \$1,020,097 | 9.83% | |
| Public Schools | \$2,237,050 | \$2,281,801 | \$2,264,502 | \$2,247,354 | \$2,315,173 | \$2,387,606 | 6.73% | |
| Community/Jr. Colleges | \$286,804 | \$295,021 | \$296,504 | \$294,536 | \$302,705 | \$299,391 | 4.39% | |
| Counties | \$455,989 | \$462,828 | \$480,694 | \$493,220 | \$506,733 | \$520,773 | 14.21% | |
| Municipalities | \$567,479 | \$570,531 | \$583,092 | \$587,108 | \$595,249 | \$600,156 | 5.76% | |
| Other Political Subdivisions | \$338,559 | \$347,120 | \$355,728 | \$350,602 | \$354,758 | \$344,559 | 1.77% | |
| Total Payroll Reported to PERS | \$5,904,826 | \$6,022,533 | \$6,038,230 | \$5,999,232 | \$6,144,915 | \$6,287,442 | 6.48% | |
| Actuarial Assumed Rate of PERS Plan Salary Growth | ж | 3.75% | 3.25% | 3.25% | 3.00% | 3.00% | | |
| Actual Rate of PERS Plan Salary Growth | × | 1.99% | 0.26% | -0.65% | 2.43% | 2.32% | | |

[†] Payroll totals reported here have been rounded and may not directly tie with the payroll figures reported on page 8. * 2015 payroll data is for baseline comparisons only.

SOURCE: PERS annual valuations for years ending June 30, 2015, through June 30, 2020.

Appendix B: PERS Funding Policy Technical Appendix

Progress of the PERS plan's funding policy is tracked through the use of three metrics:

- the funded ratio;
- cash flow as a percentage of assets; and,
- the actuarially determined contribution.

These metrics are tracked through a tiered method called the "Signal Light" approach, in which each level of the predefined metric tranches is assigned a color and a definition (Exhibit B1).

Exhibit B1: PERS Funding Policy "Signal Light" Levels and Definitions

| Status | Definition |
|--------|---|
| Green | Plan passes metric and PERS funding goals and objectives are achieved. |
| Yellow | Plan passes metric but a warning is issued that negative experience may lead to failing status. |
| Red | Plan fails metric and PERS must consider contribution increases. |

SOURCE: PERS Board of Trustees policy.

The new funding policy (like its most recent predecessor) also includes a provision that serves as a safety net for the plan. If any one of the metrics is in red signal-light status in conjunction with the annual valuation report and the projection report, the actuary will determine and recommend to the Board for its consideration an employer contribution rate increase that is sufficient to get all three metrics back into green signal-light status.⁴²

Funded Ratio

The calculation of a plan's funding level is an accounting measure that quantifies the plan's ability to meet its projected future obligations, based on service already performed, with assets currently available.

This metric uses information from the 30-year projection reports developed by the plan's actuaries to assess the plan's funding level at a defined point in the future (for now, FY 2047).

Exhibit B2 presents the funding policy's defined channels for the funded ratio signal lights.

⁴² Any resulting contribution rate increase would be effective for July 1, 18 months following the completion of the associated projection report. The delay allows the state, counties, municipalities, and political subdivisions ample time to incorporate the increase into their operating budgets.

Exhibit B2: Signal Light Definitions for Funded Ratio

Funded ratio above 80% in 2047.

Funded ratio between 65% and 80% in 2047.

Funded ratio below 65% in 2047.

SOURCE: PERS Board of Trustees policy.

For the year ended June 30, 2020, the projected funding ratio in FY 2047 is 67.6%, placing the PERS System in the yellow signal-light status.

As noted on page 13, one of the policy's new goals is to maintain an increasing trend in the funded ratio over the projection period with an ultimate goal of being 100% funded. However, the use of a 100% funded ratio can be seen differently when used as a target of financial health versus a goal of a pension's funding policy.

As Exhibit B2 indicates, the plan's performance corresponds to the yellow signal-light status when the results of the projection report show the funded ratio to be between 65% and 80%.

Even with the assignment of being 80% funded as the threshold for green status, there is no industry statement or requirement for a pension plan's funding level to be at 80% to be defined as "healthy." Neither the Governmental Accounting Standards Board⁴³ or the American Academy of Actuaries uses an 80% funded ratio to define a plan as financially healthy.

Cash Flow as a Percentage of Assets

The PERS funding policy defines "cash flow as a percentage of assets" as the difference between total contributions coming into the trust and the benefit payments made to retirees and beneficiaries withdrawn from the trust as a percentage of beginning year market value of assets. The formula for cash flow as a percentage of assets also can be defined as follows:

 $\frac{\textit{Total Annual Contributions-Benefit Payments}^{44}}{\textit{Beginning of Year Market Value of Assets}}$

For example, computing the cash flow as a percentage of assets for FY 2020 (in thousands) is calculated as follows:

$$\frac{(1,766,516 - 2,982,924)}{28,206,602} \times 100 = -4.31\%$$

PERS testing of cash flow as a percentage of assets is not only a point-in-time comparison for the current fiscal year, but it also will

⁴³ The Governmental Accounting Standards Board is an independent organization that establishes standards of accounting and financial reporting for state and local governments in the United States.

⁴⁴ For purposes of this calculation, benefit payments include any refunds made to inactive members.

be evaluated over the entirety of the period reviewed during the actuary's 30-year projection report, with the lowest current or projected cash flow as a percentage of assets used as the metric result.

Exhibit B3 defines signal-light statuses for cash flow as a percentage of assets.

Exhibit B3: Signal Light Definitions for Cash Flow as a Percentage of Assets

Net Cash Flow Percentage above -6.00% during the projection period.

Net Cash Flow Percentage between -6.00% and -7.75% during the projection period.

Net Cash Flow Percentage below -7.75% during the projection period.

SOURCE: PERS Board of Trustees policy.

For the length of the projection period, the lowest cash flow rate is -6.20%, in FY 2035, which places the PERS plan in the yellow signal-light status for this metric. This means that although the PERS plan will continue to pay out more in benefit payments than it receives in employee and employer contributions, the difference between these two figures, in the opinion of the plan's actuary, does not rise to a level that is unhealthy for the plan (but does cause some concern).

The Public Fund Survey also provides data on cash flow as a percentage of assets. According to the November 2020 report, nearly all systems in the survey had a negative cash flow, and the median cash flow as a percentage of assets for plans in its survey, as of FY 2019, was -2.7%. While this can be compared to the PERS result of -4.45% for FY 2019, it must also be noted that this is not a direct comparison. As discussed on page 32, PERS cash flow as a percentage of assets metric is not a point-in-time comparison (like the Public Fund Survey) but a measure over its full projection period, and the Public Fund Survey metric accounts for administrative expenses, while the PERS metric excludes administrative expenses from the calculation.

Actuarially Determined Contribution

The PERS funding policy defines the actuarially determined contribution (ADC) as the potential payment to the plan as determined by the actuary based on the following principal elements disclosed in the funding policy:

- actuarial cost method:
- asset valuation method; and,
- amortization method.

⁴⁵ The Public Fund Survey cash flow as a percentage of assets figure also includes administrative expenses within plan outflows in its methodology.

The purpose of the ADC is to provide a measure of the potential contribution rate necessary to allow the PERS plan to reach its funding goals within a 30-year period under the prescribed methods outlined in the board's funding policy.

The calculation for the ADC will be done during the actuarial valuation (typically released during the Board's December meeting). The ratio of the ADC to the fixed contribution rate, ⁴⁶ as set by the funding policy, will be tested. The results of this calculation will be compared to the signal-light levels described in Exhibit B4.

Exhibit B4: Signal Light Definitions for Actuarially Determined Contribution

ADC ratio at or below 100% of fixed contribution rate at valuation date.

ADC ratio between 100% and 110% of fixed contribution rate at valuation date.

ADC ratio above 110% of fixed contribution rate at valuation date.

SOURCE: PERS Board of Trustees policy.

For the fiscal year ended June 30, 2020, PERS's ADC ratio was 112.01%, placing it in red signal-light status.⁴⁷ This indicates that the contribution rate set by the board (currently 17.40%) is smaller than the ADC, and the difference between these two figures, in the opinion of the plan's actuary, is outside the range established.

According to the PERS funding policy, if any one metric is in the red signal-light status in conjunction with the annual valuation report and the projection report, the actuary will determine and recommend to the board an employer contribution rate increase to consider that is sufficient enough to get all three funding policy metrics back into the green-light status.

Amortization Method Assumptions for the Actuarially Determined Contribution

A plan's amortization period is the length of time necessary for a plan's unfunded liabilities to be paid if all actuarial assumptions are met over that period. Under PERS prior funding policy, the amortization period fluctuated, which was not an uncommon practice among plans. To help align the plan with actuarial standards of practice, the PERS Board, as advised by its actuarial consultants, adopted a layered amortization⁴⁸ for use in calculating the actuarially determined contribution.

32 PEER Report #654

⁴⁶ To help potentially limit annual fluctuations to members' and employers' contribution expenditures, the PERS Board adopted, as a component of the PERS funding policy, policies that "fix" the employer contribution rate as a percentage of covered payroll.

⁴⁷ The ADC ratio is calculated by dividing the ADC calculated during the actuarial valuation for the year ended June 30, 2018, (17.62%) by the fixed contribution rate set by the PERS Board (currently at 17.40%).

⁴⁸ Layered amortization is the amortization of components of the UAAL over a separate fixed period as they emerge.

Under a layered amortization approach, the board has elected to amortize the plan's existing unfunded actuarial accrued liability balance (as of June 30, 2018) over a closed⁴⁹ 30-year amortization period and any future changes to the unfunded balance (i.e., actuarial gains/losses, assumption changes, and plan changes) over a closed 25-year amortization period. These amortization assumption methods pertain to the calculation for the ADC only.

Actuaries must have a component of the funding model that can be adjusted to account for asset changes. The PERS Board, in attempting to maintain its goal of a stable contribution rate (17.40% as of July 1, 2019), has elected to continue using the plan's amortization period as this variable. As discussed previously, on page 12, the PERS plan's projected UAAL payment period, as of June 30, 2020, is 37.1 years.

Because the new amortization assumptions apply to the calculation of the ADC only, it is possible for the projected payment period of the plan to extend past the 30-year target included in the ADC calculation. To help ensure that the plan's projected payment period does not deviate too far from these assumptions, the board's funding policy includes a metric that requires the comparison of the plan's fixed contribution rate to the ADC annually.

⁴⁹ A closed amortization period is a type of amortization period utilized by pension plans that results in the full amortization of specific items within a finite (or predefined) period (i.e., a traditional 30-year mortgage on a home).

Appendix C: PERS Investment Management Fees, FY 2020 & FY 2019

| CLASS | MANAGER | \$ FY 20 (thousands) | \$ FY 19 (thousands) |
|------------------|---|----------------------|-------------------------|
| U.S. Equity | ARTISAN PARTNERS (LARGE CAP GROWTH) | 2,539 | 2,300 |
| U.S. Equity | BOSTON COMPANY (MID CAP) — Terminated Q4 FY 2019 | - | 1,988 |
| U.S. Equity | DIMENSIONAL FUND ADVISORS (SMALL CAP VALUE) | 1,057 | 1,253 |
| U.S. Equity | EAGLE CAPITAL (LARGE CAP CORE) | 6,647 | 6,374 |
| U.S. Equity | NORTHERN TRUST (LARGE CAP VALUE - PASSIVE) — Terminated Q4 FY 2019 | - | 39 |
| U.S. Equity | NORTHERN TRUST (RUSSELL MID CAP - PASSIVE) — Hired Q4 FY 2019 | 22 | 2 |
| U.S. Equity | NORTHERN TRUST (S&P 500 - PASSIVE) | 225 | 163 |
| U.S. Equity | RIVERBRIDGE (SMALL CAP GROWTH) | 2,412 | 2,416 |
| U.S. Equity | WEDGEWOOD PARTNERS (LARGE CAP GROWTH) — Terminated Q4 FY 2019 | - | 1,980 |
| U.S. Equity | WELLINGTON (MID CAP VALUE) | 1,951 | 1,992 |
| U.S. Equity | WELLINGTON (SMALL CAP CORE) | 2,106 | 2,290 |
| Non-U.S. Equity | ARROWSTREET CAPITAL (ALL COUNTRIES X-US) | 3,257 | 3,187 |
| Non-U.S. Equity | BAILLIE GIFFORD (ALL COUNTRIES X-US) | 2,820 | 2,620 |
| Non-U.S. Equity | FIDELITY INSTITUTIONAL ASSET MANAGEMENT — Terminated Q2 FY 2019 | - | 576 |
| Non-U.S. Equity | FISHER INVESTMENTS (EMERGING MARKETS) | 3,328 | 3,521 |
| Non-U.S. Equity | LAZARD ASSET MANAGEMENT (EMERGING MARKETS) | 1,918 | 2,042 |
| Non-U.S. Equity | MARATHON (ALL COUNTRIES X-US) | 3,709 | 3,669 |
| Non-U.S. Equity | MONDRIAN (SMALL CAP DEVELOPED MARKETS) | 2,078 | 2,114 |
| Non-U.S. Equity | NORTHERN TRUST EAFE (DEVELOPED MARKETS - PASSIVE) | 179 | 199 |
| Non-U.S. Equity | PRINCIPAL GLOBAL (SMALL CAP INTERNATIONAL) — Hired Q2 FY 2019 | 1,415 | 922 |
| Debt Investments | ALLIANCEBERNSTEIN (GLOBAL FIXED INCOME) | 1,619 | 1,646 |
| Debt Investments | LOOMIS SAYLES (CORE PLUS) | 1,799 | 1,780 |
| Debt Investments | MANULIFE (CORE) | 862 | 855 |
| Debt Investments | NORTHERN TRUST (CORE - PASSIVE) | 110 | 110 |
| Debt Investments | PACIFIC INVESTMENT MANAGEMENT CO. (CORE) | 864 | 864 |
| Debt Investments | PACIFIC INVESTMENT MANAGEMENT CO. (GLOBAL) | 1,684 | 1,704 |
| Debt Investments | PRUDENTIAL (CORE PLUS) | 1,401 | 1,392 |
| Debt Investments | WELLINGTON (EMERGING MARKETS) | 2,581 | 2,605 |

| CLASS | MANAGER | \$ FY 20 (thousands) | \$ FY 19 (thousands) |
|----------------|---|----------------------|----------------------|
| Real Estate | AEW PARTNERS VI, LP* | - | 181 |
| Real Estate | AEW PARTNERS VII, LP | 153 | 203 |
| Real Estate | AEW PARTNERS VIII, LP | 360 | 400 |
| Real Estate | AEW Partners IX, LP — Hired Q4 FY 2020† | - | - |
| Real Estate | AG CORE PLUS FUND II LP* | - | 2 |
| Real Estate | AG CORE PLUS FUND III LP | 128 | 147 |
| Real Estate | AG CORE PLUS FUND IV LP | 635 | 568 |
| Real Estate | AG CORE PLUS VALUE X LP — Hired Q4 FY 2019 | 658 | 465 |
| Real Estate | CENTERSQUARE | 749 | 780 |
| Real Estate | COHEN & STEERS | 1,139 | 1,189 |
| Real Estate | HANCOCK TIMBER FUND | 1,103 | 1,121 |
| Real Estate | HEITMAN VALUE PARTNERS III LP | 125 | 265 |
| Real Estate | HEITMAN VALUE PARTNERS IV LP — Hired Q3 FY 2019 | 189 | 99 |
| Real Estate | INVESCO VALUE ADD FUND IV LP | 399 | 492 |
| Real Estate | INVESCO VALUE ADD FUND V LP — Hired Q3 FY 2019 | 408 | 188 |
| Real Estate | JP MORGAN STRATEGIC PROPERTY FUND | 3,689 | 5,101 |
| Real Estate | PRINCIPAL GLOBAL INVESTORS | 6,212 | 6,152 |
| Real Estate | TA REALTY ASSOCIATES FUND X LP | 16 | 762 |
| Real Estate | TA REALTY ASSOCIATES FUND XI LP | 792 | 1,421 |
| Real Estate | TA REALTY ASSOCIATES FUND XII LP — Hired Q1 FY 2019 | 1,017 | - |
| Real Estate | UBS TRUMBULL PROPERTY FUND | 2,443 | 2,658 |
| Real Estate | UBS TRUMBULL PROPERTY GROWTH & INCOME FUND | 2,179 | 2,061 |
| Real Estate | WESTBROOK X LP | 441 | 436 |
| Real Estate | WESTBROOK XI LP — Hired Q3 FY 2020 [†] | - | - |
| Private Equity | GROSVENOR & PATHWAY CAPITAL MAN - PRIVATE EQUITY | 14,427 | 13,781 |
| Global Equity | ACADIAN | 3,220 | 3,160 |
| Global Equity | EPOCH | 4,261 | 4,220 |
| Global Equity | HARDING LOEVNER | 3,620 | 3,452 |
| Global Equity | LONGVIEW PARTNERS | 4,097 | 4,185 |
| | | 99,043 | 104,092 |

 $^{^{*}}$ While PERS paid no investment management fees to this manager during FY 2020, PERS's relationship with this manager/investment is still ongoing.

SOURCE: PERS Staff and PERS FY 2020 Comprehensive Annual Financial Report.

[†] While PERS has an active management contract with this manager, the manager has not drawn any capital and has not received any management fees.

Agency Response



Providing Benefits for Life

May 5, 2021

Mr. James Barber
Executive Director
Joint Committee on Performance Evaluation and Expenditure Review
Woolfolk Building, Suite 301-A
501 North West St.
Jackson, MS 39201

Dear Mr. Barber:

Thank you for the opportunity to review the draft of the PEER Report titled 2020 Update on Financial Soundness of the Public Employees' Retirement System (PERS).

As discussed, although we did not verify every number and the explanation of certain aspects could vary, we understand this is a PEER document and recognize the diligence and effort expended in completing the assignment. Overall, we feel this is a good report and, in many ways, reconciles with our information. The PEER analysis also rightfully calls attention to areas that continue to be under review and consideration in the best interest of the membership and System.

We respect the professional way the review was conducted, and we appreciate your continued support of PERS. Please contact me at 601-359-2241 if you need further information. Thank you.

Sincerely,

H. Ray Higgins, Jr. Executive Director

H. Ray Higgins, Jr. Executive Director Board of Trustees:

Chris Howard State Employees, Chair Randy D. McCoy Retirees, Vice Chair Bill Benson County Employees Kelly Breland State Employees

Lee Childress
Public Schools
Community/Jr. Colleges

George Dale Retirees Chris Graham Gubernatorial Appointee Kimberly Hanna Municipal Employees David McRae State Treasurer Brian Rutledge Institutions of Higher Learning Employees

PEER Committee Staff

James A. Barber, Executive Director

<u>Legal and Reapportionment</u> Ted Booth, General Counsel Ben Collins Barton Norfleet

Administration Deborah Hardy Gale Taylor

Quality Assurance and Reporting Tracy Bobo Hannah Jane LeDuff Performance Evaluation
Lonnie Edgar, Principal Analyst
David Pray, Principal Analyst
Jennifer Sebren, Principal Analyst
Kim Cummins
Matthew Dry
Samuel Hearn
Matthew Holmes
Taylor Mullins
Sarah Williamson
Julie Winkeljohn
Ray Wright

Performance Accountability Kirby Arinder Debra Monroe-Lax Meri Clare Ringer