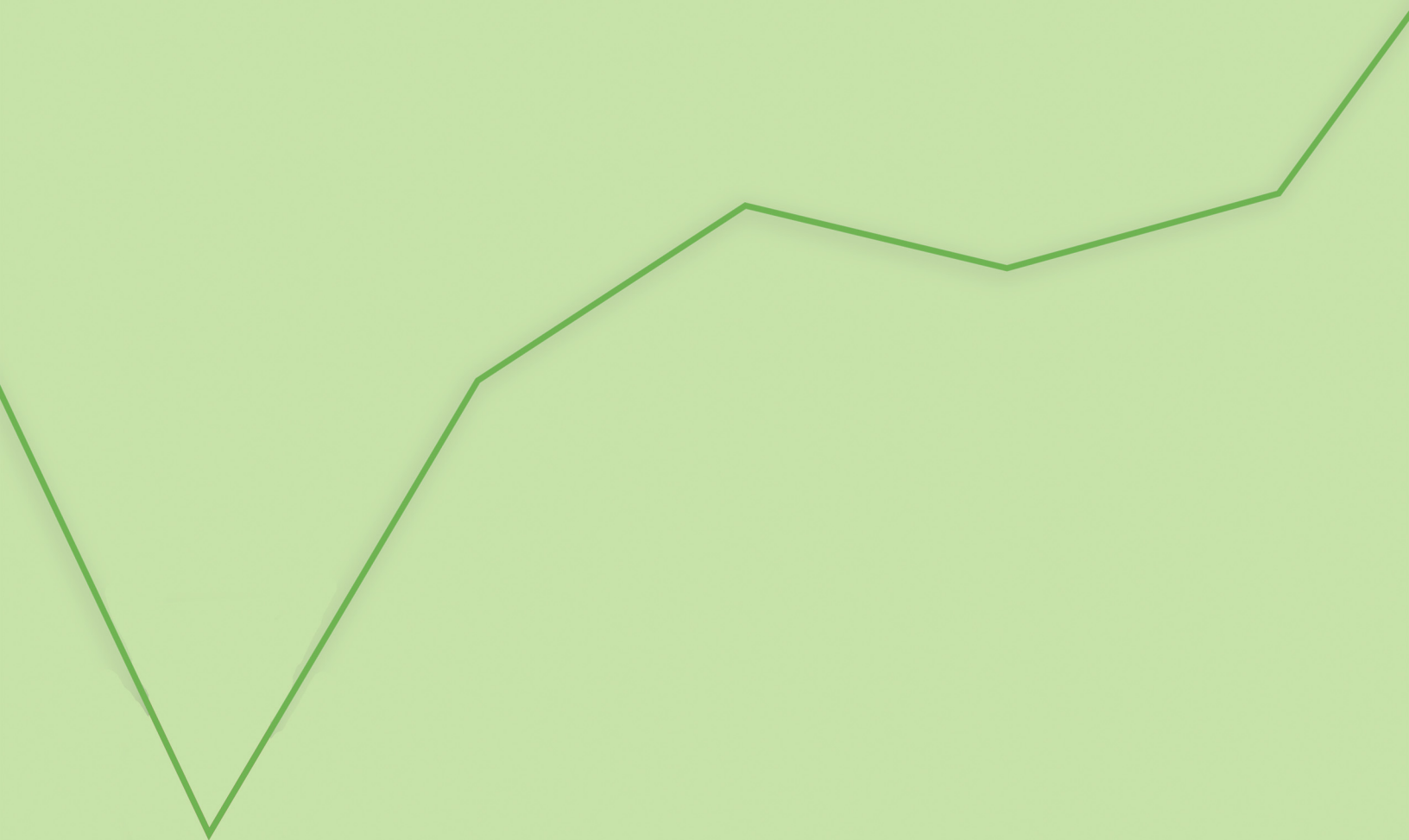




**ARKANSAS PUBLIC EMPLOYEES  
RETIREMENT SYSTEM**



**ANNUAL FINANCIAL REPORT**  
**For the year ending June 30, 2020**



# Arkansas Public Employees Retirement System Annual Financial Report

For the Fiscal Year Ended June 30, 2020

Duncan Baird, Executive Director

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Public Pension Coordinating Council

***Public Pension Standards Award  
For Funding and Administration  
2020***

Presented to

***Arkansas Public Employees Retirement System***

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

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

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

A handwritten signature in cursive script that reads "Alan H. Winkle".

Alan H. Winkle  
Program Administrator

## Introduction

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# Introduction

System Overview

Letter of Transmittal

Chair's Letter

Board of Trustees

APERS Senior Staff

Professional Service Providers

*Dow Jones Industrial Average closed at 25812.88 on June 30, 2020.*



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## SYSTEM OVERVIEW

for the year ended June 30, 2020

## THE FUND

|                                   |                |
|-----------------------------------|----------------|
| VALUATION ASSETS<br>(In Millions) | <b>\$9,090</b> |
| FUNDED RATIO                      | <b>79%</b>     |

|                                |                 |
|--------------------------------|-----------------|
| RATE OF RETURN                 | <b>2.41%</b>    |
| BENEFITS PAID<br>(In Millions) | <b>\$ 587.4</b> |

## OUR MEMBERS

| ACTIVE                |                 |
|-----------------------|-----------------|
| TOTAL ACTIVE MEMBERS  | <b>44,373</b>   |
| AVERAGE AGE           | <b>44.4</b>     |
| AVERAGE YEARS SERVICE | <b>8.9</b>      |
| AVERAGE SALARY        | <b>\$40,469</b> |

| RETIRED                 |                |
|-------------------------|----------------|
| TOTAL RETIRED MEMBERS   | <b>39,805</b>  |
| AVERAGE MONTHLY PENSION | <b>\$1,334</b> |
| INACTIVE                |                |
| TOTAL INACTIVE MEMBERS  | <b>14,711</b>  |

## COVERED EMPLOYERS

|                                |                |
|--------------------------------|----------------|
| TOTAL COVERED EMPLOYERS        | <b>654</b>     |
| CONTRIBUTIONS<br>(In Millions) | <b>\$298.9</b> |

## LETTER OF TRANSMITTAL

December 20, 2020  
Board of Trustees  
Arkansas Public Employees Retirement System  
Little Rock, AR 72201

To the Board of Trustees and members of the Arkansas Public Employees Retirement System:

I am pleased to present to you the 2020 Annual Financial Report of the Arkansas Public Employees Retirement System (APERS) for the fiscal year ended June 30, 2020. Responsibility for both the accuracy of the data and the completeness and fairness of the presentation, including all disclosures, rests with the management of the System. To the best of our knowledge, the enclosed data is accurate in all material respects and is reported in a manner designed to present fairly the financial status of the System and changes therein.

The compilation of this report reflects the combined efforts of APERS' management under the leadership of the Board of Trustees of the Arkansas Public Employees Retirement System (the Board). The report is intended to provide extensive and reliable information for making management decisions, determining compliance with legal provisions, and determining responsible stewardship for the assets contributed by the System's members and their employers.

### Plan Basics

APERS was established for state employees by legislation enacted in 1957 and subsequently expanded to include the employees of counties, municipalities, schools, and other political subdivisions. The mission of the System is to provide a secure benefit in retirement to our members and their beneficiaries. All services provided by management are performed to meet this objective. The summary of plan provisions is presented in the Actuarial Section and a comprehensive list of all participating employers is provided in the Statistical Section.

### Major Initiatives

During this fiscal year, management engaged in several important initiatives for the system, including the following:

**Legislative town hall Meetings** – During the Fall of 2019, APERS staff participated in 11 statewide Legislative town hall meetings attended by over 2,000 individuals. The staff listened to the concerns, input, ideas, and suggestions from members and retirees regarding changes to benefits and contribution rates. This information was faithfully relayed to the Board and incorporated into their discussions and analysis of proposed changes.

**Preparation of a 2021 Legislative Package** – The Board has undertaken a multi-year effort to evaluate ways to improve the long-term financial health of the system, including reviewing and discussing various future scenarios with the system's professional actuary. In 2020, the Board continued their discussion and analysis with the professional actuary at 5 separate special and regular meetings. These Board meetings resulted in 11 separate packages that were narrowed down to 1 final package of changes for referral to the Legislature.

**Review of Asset Classes through the Investment Workplan** – In 2019, the Board reaffirmed the current investment asset allocation at the conclusion of the Asset-Liability Study. Going forward, management

suggested that a detailed analysis be conducted of each of the asset classes so that they could be fine tuned for performance. In 2020, the Board completed a review of the international equities asset class. The Trustees changed the benchmark for this asset class and conducted a search for a manager which resulted in the hiring of two international small capitalization managers.

### Financial Information and Management Responsibility

The financial statements of the System have been prepared by management, which is responsible for the integrity and fairness of the data presented, including those figures that are based on estimates and judgments. The 2020 Annual Financial Report has been prepared to conform to the accounting principles generally accepted in the United States.

The executive management of APERS is responsible for establishing and maintaining adequate internal control over financial reporting. The System's internal control over financial reporting is designed to provide reasonable assurance that transactions are executed in accordance with management's general or specific authorization and are recorded as necessary to maintain accountability for assets and to permit the preparation of financial statements in accordance with generally accepted accounting principles. APERS has written policies and procedures adopted by the Board and promulgated in accordance with the Arkansas Administrative Procedures Act.

### Investments

The investments of APERS are governed primarily by an investment authority known as the "prudent investor rule." The rule established a standard for all fiduciaries, which includes anyone who has investment authority with respect to a fund. The Board has established an Investment Policy Statement that guides management in the investment of fund assets. Through the diversification of the investment portfolio, the fund seeks to reduce overall risks and increase returns. A summary of the asset allocation can be found in the Investments Section.

For the fiscal year ending June 30, 2020, the fund recognized a positive 2.41% rate of return. For the last five years, the System's annualized rate of return has been 6.11%. Each quarter, the investment consultant provides a summary of performance compared to the established benchmarks and comparable funds. A comparable analysis of rates of return is presented in the Investments Section.

### Actuarial Analysis

A pension is well-funded when it has enough assets to meet the future obligations to plan participants. A greater level of funding results in a larger ratio of assets accumulated to the actuarial accrued liability. The advantage of a well-funded plan is that the participants can be assured that enough assets exist to pay all promised benefits to members and their beneficiaries.

The System's statutory funding objective is to meet long-term benefit promises through contributions that remain approximately level as a percentage of member payroll. According to the System actuary, "if the contributions to the System are level in concept and soundly executed, the System will pay all promised benefits when due—the ultimate test of financial soundness." The Board has established an Actuarial Funding Policy that targets a funding level of 100%.

The actuarial accrued liability and actuarial funding value of assets of the System as of June 30, 2020 amounted to \$11.51 billion and \$9.09 billion respectively. On a funding value of assets basis, the funding status of the System remained at 79% in fiscal 2020 as compared to fiscal 2019. A detailed discussion of funding and actuarial measures is provided in the Actuarial Section of this report.

## Professional Services

The Board retains independent consultants to perform professional services that are essential to the system's long-term strength and stability. Actuarial services are provided by GRS, investment consulting is provided by Callan, and the annual financial audit is conducted by Arkansas Legislative Audit in accordance with A.C.A. § 24-2-702.

## Awards and Acknowledgments

The Arkansas Public Employees Retirement System was awarded the Public Pension Standards Award for Funding and Administration for the 15th year in a row by the Public Pension Coordinating Council, a confederation of the National Association of State Retirement Administrators, The National Conference on Public Employee Retirement Systems, and the National Council on Teacher Retirement. This award is in recognition of meeting professional standards for plan funding and administration as set forth in the Public Pension Standards.

I would like to express my sincere thanks to the entire staff of APERS for their hard work and dedication throughout the year. Our team works diligently each day to provide professional service to our members and efficiently operate each division of the agency. In addition, I want to say thank you to the Trustees for their prudent leadership and the high expectations they set for the System.

Sincerely,



Duncan Baird  
Executive Director

## CHAIRPERSON'S LETTER

Dear APERS Members:

On behalf of the Board of Trustees, I am pleased to present the Annual Financial Report of the Arkansas Public Employees Retirement System for the fiscal year ended June 30, 2020. This report is designed to provide a detailed look at the financial, investment, and actuarial aspects of the System.

Throughout the year, the Board has worked diligently to fulfill our fiduciary responsibility to the System and has worked to maintain and build upon the strength of the System.

During this fiscal year, the Board moved forward with an investment work plan for reviewing the structure within each asset class. As part of this process, we made an adjustment to the benchmark used for international equities and began the process of hiring two International small-cap managers. This multi-year process of reviewing our asset classes will ensure that the System's investment portfolio is well-positioned for the future.

In addition, the Board began its work early in preparing for the 2021 legislative session. Though challenged by the pandemic, the Board still held a series of special meetings via Zoom during the year to review data and scenarios with our actuary. Through this process, the Board developed a package of legislative changes for the Legislature to consider. These changes incorporate feedback that we received from members and stakeholders, and they will provide a path to improved financial strength and stability over the long term.

As Board chair, I can assure you that each Trustee understands the importance of maintaining a strong retirement system in order to fulfill the promises made to our members. We continue working toward that goal at each Board meeting and throughout the year. I also recognize the dedication and fine work of the entire administrative staff of APERS. As a Board of Trustees, we appreciate the commitment of the staff to delivering high-quality, professional service to each APERS member and stakeholder.

Sincerely,



Candace Franks, Chair  
APERS Board of Trustees

## BOARD OF TRUSTEES

**Candace Franks, Chair**

State Employee Representative  
Expiration of Term, March 9, 2025

**Larry Walther, Vice Chair**

Secretary of the Department of Finance and Administration  
Ex-Officio Member

**David Hudson**

County Employee Representative  
Expiration of Term, March 9, 2021

**Joe Hurst**

Municipal Employee Representative  
Expiration of Term, March 9, 2022

**Dale Douthit**

State Employee Representative  
Expiration of Term, March 9, 2023

**Gary Carnahan**

Municipal Employee Representative  
Expiration of Term, March 9, 2024

**Daryl Bassett**

State Employee Representative  
Expiration of Term, March 9, 2026

**Dennis Milligan**

Treasurer of State  
Ex-Officio Member

**Andrea Lea**

Auditor of State  
Ex-Officio Member



## APERS SENIOR STAFF

**Duncan Baird**  
Executive Director

**Allison Woods**  
Deputy Director

**Jason Willett**  
Chief Financial Officer

**Carlos Borromeo**  
Chief Investment Officer

**Laura Gilson**  
Chief Legal Counsel

**Phillip Norton**  
Director of Information Technology

**Abbi Bruno**  
Director of Operations

**Jennifer Taylor**  
Director of Benefits Administration

**Jacobia Twiggs**  
Manager, Educational Outreach

**Jon Aucoin**  
Manager, Communications Section

**Cheryl Wilburn**  
Manager, Member and Retiree Services Section

**John Owens**  
Internal Auditor

**Usha Doolabh**  
Accounting Operations Manager, Investments

## PROFESSIONAL SERVICE PROVIDERS

### Custodian Bank

**The Bank of New York Mellon**  
Pittsburgh, PA 15258

### Actuary

**Gabriel, Roeder, Smith & Co.**  
Southfield, MI 48076

### Investment Consultant

**Callan Associates, Inc.**  
Chicago, IL 60602

### Investment Managers

**AQR Capital Management**  
Greenwich, CT 06830

### Artisan Partners

Milwaukee, WI 53202

### Baillie Gifford Overseas Ltd.

Edinburgh, Scotland

### Blackstone Alternative Asset Management, LP

New York, NY 10154

### CastleArk Management, LLC

Chicago, IL 60606

### Double Line Capital

Los Angeles, CA 90071

### Heitman America Real Estate

Chicago, IL 60606

### Horrell Capital Management

Little Rock, AR 72211

### INTECH

West Palm Beach, FL 33401

### Invesco Real Estate

Dallas, TX 75240

### LaSalle Investment Management

San Francisco, CA 94111

### Lazard Asset Management

New York, NY 10020

### LSV Asset Management

Chicago, IL

### MacKay Shields

New York, NY 10105

### Mellon Capital Management

Pittsburgh, PA 15258

### Newton Capital Management

New York, NY 10166-0005

### Pinnacle Forest Investments, LLC

Little Rock, AR 72211

### PGIM, Inc.

Newark, NJ 07102

### SSI Investment Management

Beverly Hills, CA 90210

### Stephens Investment Management Group

Houston, TX 77046

### TA Associates Realty

Boston, MA 02109

### Wellington Management Company

Boston, MA 02210

### Wells Fargo Asset Management

(formerly Golden Capital)  
Charlotte, NC 28262

# Financial Section

Management's Discussion and Analysis

Statement of Fiduciary Net Position

Statement of Changes in Fiduciary Net Position

Notes to the Financial Statements

Note 1: Plan Description

Note 2: Summary of Significant Accounting Policies

Note 3: Deposits and Investments

Note 4: Other Post-Employment Benefits

Note 5: Legally Required Reserves

Note 6: Net Pension Liability

Note 7: Deferred Retirement Option Plan

Note 8: Capital Assets

Required Supplementary Information

Schedule of Employer Contributions

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Schedule of Net Pension Liability

Schedule of Investment Returns

Schedule of Changes in Net Pension Liability and Related Ratios

Notes to Required Supplementary Information

Schedule of Administrative Expenses

Schedule of Investment Expenses

Payments for Professional Consultants



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## MANAGEMENT'S DISCUSSION AND ANALYSIS

To help facilitate a better understanding of the financial condition of the Arkansas Public Employees Retirement System (APERS or the System) as of June 30, 2020, the results of its operation for the fiscal year ended, and the fiscal policies that govern its significant business operations, management has prepared this narrative analysis. The narrative is intended to supplement the System's financial statements and, as such, should be read in conjunction with these statements, which are presented beginning on page 24.

### Overview of the Financial Statements

This overview is intended to serve as an introduction to the System's financial reporting. Collectively, all the information contained in the Financial Section of this annual report presents the net assets held in trust for pension benefits as of June 30, 2020.

The basic financial statements contained in the Financial Section of the annual report consist of the following:

### The Statement of Fiduciary Net Position

The *Statement of Fiduciary Net Position* (see page 24) reports the pension trust fund's assets, liabilities, and resulting net position such that assets – liabilities = net position at the end of the fiscal year. It is a snapshot of the financial position of the pension trust fund at that specific time. Below is a summary of the statement that includes total assets, total liabilities, and resulting net position for fiscal years 2019 and 2020.

#### *Summary of Fiduciary Net Position*

|   | 2020                    | 2019                    |
|---|-------------------------|-------------------------|
| <b>Assets</b>                                       |                         |                         |
| Cash and Cash Equivalents                           | \$ 178,653,677          | \$ 237,010,673          |
| Receivables   | 77,865,314              | 92,918,407              |
| Investments   | 8,566,566,609           | 8,572,265,974           |
| Securities Lending Collateral                       | 750,717,605             | 997,624,181             |
| Property and Equipment                              | 14,405,957              | 16,558,434              |
| Other Assets  | 288,944                 | 269,888                 |
| Total Assets  | 9,588,498,106           | 9,916,647,558           |
| <b>Liabilities</b>                                  |                         |                         |
| Other Liabilities                                   | 67,057,201              | 84,513,856              |
| Securities Lending Collateral                       | 752,430,215             | 998,806,043             |
| Total Liabilities                                   | 819,487,416             | 1,083,319,899           |
| <b>Net Position Restricted For Pension Benefits</b> | <b>\$ 8,769,010,690</b> | <b>\$ 8,833,327,659</b> |

**The Statement of Changes in Fiduciary Net Position**

The Statement of Changes in Fiduciary Net Position (page 25) reports the pension trust fund’s financial transactions that have occurred during the fiscal year such that additions – deductions = net change in net position. It supports the change that has occurred to the prior year’s net position value on the Statement of Fiduciary Net Position. Below is a summary of the statement that indicates the financial transactions of the trust fund for fiscal years 2019 and 2020.

*Summary of Changes in Fiduciary Net Position*

|                                | 2020                    | 2019                    |
|--------------------------------|-------------------------|-------------------------|
| <b>Additions</b>               |                         |                         |
| Employer Contributions         | \$ 298,918,947          | \$ 293,013,342          |
| Plan Member Contributions      | 71,470,967              | 68,206,685              |
| Supplemental Contributions     | 578,619                 | 561,765                 |
| Net Investment Income          | 174,561,773             | 450,493,098             |
| Other Additions                | 4,870,799               | 5,115,404               |
| <b>Total Contributions</b>     | <u>550,401,105</u>      | <u>817,390,295</u>      |
| <b>Deductions</b>              |                         |                         |
| Benefits                       | 587,453,797             | 555,352,597             |
| Refunds on Contributions       | 15,835,290              | 16,239,928              |
| Administrative Expenses        | 11,428,987              | 15,222,244              |
| <b>Total Deductions</b>        | <u>614,718,074</u>      | <u>586,814,769</u>      |
| <b>Net Increase (Decrease)</b> | (64,316,969)            | 230,575,527             |
| <b>Net Position</b>            |                         |                         |
| Beginning of the Year          | 8,833,327,659           | 8,602,752,132           |
| End of the Year                | <u>\$ 8,769,010,690</u> | <u>\$ 8,833,327,659</u> |

**Additions to Fiduciary Net Position**

The reserves needed to finance retirement benefits are accumulated through the collection of employer and employee contributions and through earnings on investments. Accumulations for fiscal year 2020 totaled approximately \$550.4 million (see the following table):

*Operating Additions*

|  | 2020                  | 2019                  |
|--|-----------------------|-----------------------|
| Employer Contributions                                     | \$ 298,918,947        | \$ 293,013,342        |
| Plan Member Contributions                                  | 71,470,967            | 68,206,685            |
| Supplemental Contributions                                 | 578,619               | 561,765               |
| Investment Earnings  | 174,561,773           | 450,493,098           |
| Miscellaneous Additions                                    | 580,375               | 569,970               |
| Transfers From Other Retirement Systems and State Agencies | 4,290,424             | 4,545,434             |
| <b>Total</b>   | <u>\$ 550,401,105</u> | <u>\$ 817,390,295</u> |

The overall decrease in additions was approximately \$267 million when compared to fiscal year 2019 and was due primarily to lower investment returns. The Investments Section of this report reviews investment activity and the results of the investment portfolio for fiscal year 2020.

### Deductions to Fiduciary Net Position

The primary deductions from the System include the payment of benefits to members and beneficiaries, the refund of contributions to former members, and the cost of administering the System. Deductions for fiscal year 2020 totaled approximately \$615 million (see the following table):

#### *Operating Deductions*

|                          | 2020                  | 2019                  |
|--------------------------|-----------------------|-----------------------|
| Benefit Payments         | \$ 587,453,797        | \$ 555,352,597        |
| Refunds of Contributions | 15,835,290            | 16,239,928            |
| Administrative Expenses  | <u>11,428,987</u>     | <u>15,222,244</u>     |
| <b>Total</b>             | <b>\$ 614,718,074</b> | <b>\$ 586,814,769</b> |

The overall increase in deductions was approximately \$28 million when compared with fiscal year 2019. The increase in benefit payments resulted primarily from an increase in both the number and average amount of benefits paid and from cost-of-living increases granted. The overall net decrease in the System's net position was approximately \$64 million during fiscal year 2020.

### The Notes to the Financial Statements

The Notes to the Financial Statements are provided as an integral component of the financial statements to help explain in narrative form some of the more complex or less obvious elements of the statements. Further, the Notes to the Financial Statements provide additional information that is essential for a comprehensive understanding of the System's financial condition and the results of its operations.

- Note 1 provides a general description of the System, including information regarding membership and employers.
- Note 2 summarizes significant accounting policies, including the basis of accounting, management's use of estimates, and other accounting policies.
- Note 3 describes deposits, discloses investment risks, and addresses securities lending as well as derivative instruments.
- Note 4 addresses other post-employment benefits (OPEB).
- Note 5 provides information regarding legally required reserves.
- Note 6 provides information regarding the System's net pension liability.
- Note 7 describes the System's Deferred Retirement Option Plan.
- Note 8 provides capital assets activity.

The required supplementary information provides additional detail and historical information considered to be useful in evaluating the condition of the plan administered by APERS. The System provides certain required schedules and related note disclosures that collectively demonstrate the System's annual progress

toward funding its actuarial accrued liability and disclose the annual employer contributions required and the percentage contributed.

The other supplementary schedules summarize the major categories of administrative and investment expenses and detail the amounts paid to professional consultants.

## Funding

The System's overall funding objective is to accumulate sufficient assets over time to meet its long term benefit obligations as they become due. Accordingly, collecting employer and member contributions and earning an adequate long term rate of return on its investments are essential components of the System's plan for accumulating the funds needed to finance future retirement benefits.

APERS' overall pension fund net position decreased during the fiscal year ended June 30, 2020 by \$64,316,969. This decrease can be primarily attributed to the decrease in the value of investments and their associated income.

## System Investments as of June 30, 2020

The investments of the pension trust fund generated a 2.41% return for the fiscal year, which is lower than the prior year's return of 5.78%. The 2.41% return placed APERS in the 69th percentile when compared with a median return of 3.26% for large public plans. Investment results over time are compared with the System's benchmarks in the schedule of comparative investment results located in the Investments Section of this annual report. Below is a summary of the performance of the System's assets by class:

- Domestic Equity: the System had \$3.632 billion in U.S. domestic equity securities, which is an increase of approximately 0.43% from fiscal year 2019. Domestic equity posted a return of 6.07% for the fiscal year. The Russell 3000 Index posted a return of 6.53%.
- International Equity: the System had \$2.165 billion in assets, which is a decrease of approximately 1.79% from fiscal year 2019. International Equity posted a return of -1.45%. The MSCI EAFE Index posted a return of -5.13%
- Fixed Income: the System had \$1.550 billion in assets which is an increase of approximately 7.11% from fiscal year 2019. Fixed Income posted a return of 6.81%. The Barclays Aggregate Index posted a return of 8.74%.
- Diversified Strategies: the System had \$445 million in assets, which is a decrease of approximately 1.90% from fiscal year 2019. Diversified Strategies posted a return of -1.17%.
- Real Assets: the System had \$1.231 billion in assets, which is a decrease of approximately 7.66% from fiscal year 2019. Real Assets posted a return of -4.37%.

## Securities Lending

The System earns additional investment income by lending investment securities to broker-dealers. This is done by the System's custodian bank, Bank of New York Mellon (BNYM). The broker-dealers provide collateral to BNYM and generally use the borrowed securities to cover short sales and failed trades for their clients. BNYM invests cash collateral to earn interest. For the fiscal year 2020, securities lending income to the System amounted to \$4.864 million.



### Actuarial Valuations and Funding Progress

An actuarial valuation of the System is performed annually as of June 30. The actuarial accrued liability and actuarial value of assets of the System as of June 30, 2020 amounted to \$11.51 billion and \$9.09 billion, respectively.

As of June 30, 2020, the System experienced a slight decrease in its funded status on a market value basis from 79% to 76%. On a funding basis, the System continued to remain at 79%.

### Requests for Information

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

Arkansas Public Employees Retirement System  
124 W. Capitol, Suite 400  
Little Rock, AR 72201

## STATEMENT OF FIDUCIARY NET POSITION

as of June 30, 2020

|  | 2020                   | 2019                   |
|--|------------------------|------------------------|
| <b>ASSETS</b>  |                        |                        |
| Cash and Cash Equivalents                                | \$ 178,653,677         | \$ 237,010,673         |
| Receivables  | 77,865,314             | 92,918,407             |
| Investments, At Fair Value                               |                        |                        |
| Government Securities                                    | 300,670,790            | 334,730,750            |
| Corporate Securities                                     | 3,876,308,981          | 3,743,915,795          |
| International Securities                                 | 2,274,739,727          | 2,320,173,896          |
| Core Plus Bond Fund                                      | 525,152,547            | 487,641,642            |
| Real Estate  | 965,834,008            | 1,024,948,753          |
| Diversified Strategies                                   | 429,122,315            | 436,767,652            |
| Timberland   | 87,471,711             | 87,551,690             |
| Global Energy Fund                                       | 97,370,766             | 124,292,584            |
| Commercial Loans   | 9,895,764              | 12,243,211             |
| Total Investments  | 8,566,566,609          | 8,572,265,974          |
| Securities Lending Collateral Investments, At Fair Value | 750,717,605            | 997,624,181            |
| Prepays and Other Assets                                 | 288,944                | 269,888                |
| Fixed Assets, Net  | 14,405,957             | 16,558,434             |
| <b>TOTAL ASSETS</b>                                      | <b>9,588,498,106</b>   | <b>9,916,647,558</b>   |
| <b>LIABILITIES</b>                                       |                        |                        |
| Accrued Expenses and Other Liabilities                   | 8,856,237              | 9,184,948              |
| Investment Principal Payable                             | 53,114,956             | 70,325,708             |
| Other Post Employment Benefits                           | 5,086,008              | 5,003,200              |
| Securities Lending Liability                             | 752,430,215            | 998,806,043            |
| <b>TOTAL LIABILITIES</b>                                 | <b>819,487,416</b>     | <b>1,083,319,898</b>   |
| <b>NET POSITION RESTRICTED FOR PENSION BENEFITS</b>      | <b>\$8,769,010,690</b> | <b>\$8,833,327,659</b> |

## STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

for the fiscal year ended June 30, 2020

|  | 2020                    | 2019                    |
|--|-------------------------|-------------------------|
| <b>ADDITIONS</b>   |                         |                         |
| Contributions  |                         |                         |
| Employer   | \$ 298,918,947          | \$ 293,013,342          |
| Plan Members   | 71,470,967              | 68,206,685              |
| Supplemental   | 578,619                 | 561,765                 |
| Total Contributions                                      | <u>370,968,532</u>      | <u>361,781,793</u>      |
| Investment Income  |                         |                         |
| Interest   | 18,390,071              | 31,764,698              |
| Dividends  | 93,845,724              | 89,935,832              |
| Investment Gain/Loss                                     | 55,145,650              | 314,185,114             |
| Security Lending Income                                  | 15,769,226              | 27,280,723              |
| Real Estate Income                                       | 36,762,972              | 42,695,133              |
| Other  | 0                       | 1,285,541               |
| Total Investment Income                                  | <u>219,913,643</u>      | <u>507,147,041</u>      |
| Less: Investment Expense                                 | <u>45,351,870</u>       | <u>56,653,942</u>       |
| Net Investment Income                                    | 174,561,773             | 450,493,099             |
| Other Sources  |                         |                         |
| Miscellaneous Additions                                  | 580,375                 | 569,970                 |
| Transfers from Other Public Employees Retirement Systems | 4,013,300               | 4,272,395               |
| Miscellaneous Transfers from State Agencies              | 277,124                 | 273,039                 |
| Total Other Additions                                    | <u>4,870,799</u>        | <u>5,115,404</u>        |
| <b>TOTAL ADDITIONS</b>                                   | 550,401,105             | 817,390,296             |
| <b>DEDUCTIONS</b>  |                         |                         |
| Benefits   | 587,453,797             | 555,352,597             |
| Refunds of Contributions                                 | 15,835,290              | 16,239,928              |
| Administrative Expenses                                  | 11,682,726              | 14,739,700              |
| <b>TOTAL DEDUCTIONS</b>                                  | <u>614,971,813</u>      | <u>586,332,225</u>      |
| <b>ADJUSTMENTS</b>                                       |                         |                         |
| Actuarial Adjustment to DJ Unfunded Liability            | 253,739                 | (482,544)               |
| <b>NET INCREASE (DECREASE)</b>                           | (64,316,969)            | 230,575,528             |
| <b>Net Position Restricted for Pension Benefits</b>      |                         |                         |
| Beginning of Year  | 8,833,327,659           | 8,602,752,132           |
| End of Year  | <u>\$ 8,769,010,690</u> | <u>\$ 8,833,327,659</u> |

NOTES TO THE FINANCIAL STATEMENTS

Note 1: Plan Description

General Information

The Arkansas Public Employees Retirement System (APERS or the System) is a cost-sharing, multiple employer, defined benefit pension plan established by authority of the Arkansas General Assembly with the passage of Act 177 of 1957. Its purpose is to provide retirement benefits for eligible employees and elected officials of state and local governmental entities in Arkansas. The laws governing the operations of APERS are set forth in Arkansas Code Annotated (A.C.A.), Title 24, Chapter 4, with related laws in Chapter 2 and Chapter 7.

The general administration and responsibility for the proper operation of the System is vested in the nine member Board of Trustees of the Arkansas Public Employees Retirement System (the Board). Membership includes three state and three non-state employees, all appointed by the Governor, and three ex-officio trustees, including the Auditor of State, the Treasurer of State, and the Director of the Department of Finance and Administration.

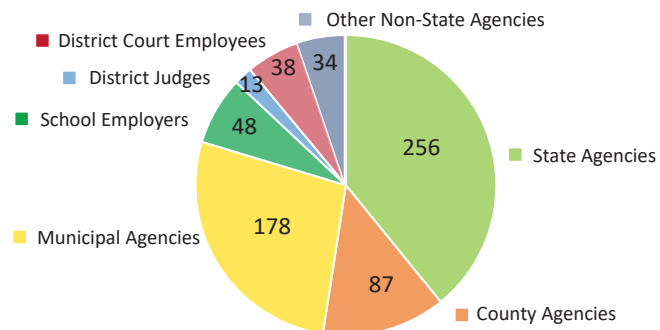
Reporting Entity

The executive director and administrative staff of APERS also serve as the executive director and administrative staff of two other state retirement systems, the Arkansas State Police Retirement System and the Arkansas Judicial Retirement System. These systems do not constitute part of the APERS reporting entity under the provisions of GASB Statement No. 14: The Financial Reporting Entity because these systems are legally separate, fiscally independent entities with separate boards of trustees. The nature of the relationship between these systems and APERS is merely a sharing of administrative resources and, as such, does not require inclusion of these systems in APERS financial statements.

Reporting Entities

|                 | 2020       | 2019       |
|-----------------|------------|------------|
| State           | 256        | 257        |
| County          | 87         | 87         |
| Municipal       | 178        | 180        |
| School          | 48         | 51         |
| District Judges | 13         | 14         |
| District Court  | 38         | 35         |
| Other Non-State | 34         | 32         |
| <b>Total</b>    | <b>654</b> | <b>656</b> |

Reporting Entities 2020



Membership

APERS covers all state employees who are not covered by another authorized plan, all county employees, municipal employees whose municipalities have elected coverage under the System, college and university employees, certain non-teaching school employees, and other public entities specifically defined by law.

*Membership*

|  | 2020   | 2019   |
|--|--------|--------|
| Retirees and Beneficiaries Receiving Benefits (includes DROP participants) | 39,805 | 38,543 |
| Terminated Plan Members Entitled to But Not Yet Receiving Benefits         | 14,711 | 14,862 |
| Active Plan Members  | 44,371 | 45,965 |

**Employer Contributions**

All participating employers are required to contribute a portion of their eligible employees' salaries into the System. The Board establishes the provisions for these employer contributions based on the rates the independent actuary determines are necessary to fund the System. Because of the cost of providing enhanced service credit to certain members classified as public safety employees, and pursuant to the provisions of Act 625 of 1983 and Act 1097 of 1993, certain agencies employing individuals in public safety positions are required to remit additional contributions in amounts determined by the actuary.

*Employer Contribution Rates*

|                                  | 2020   | 2019   |
|----------------------------------|--------|--------|
| State Division                   | 15.32% | 15.32% |
| Wildlife Subdivision             | 27.32  | 27.32  |
| State Capitol Police Subdivision | 15.32  | 15.32  |
| County Division                  | 15.32  | 15.32  |
| Municipal Division               | 15.32  | 15.32  |
| School Division                  | 4.00   | 4.00   |
| Other Non-State Division         | 15.32% | 15.32% |

**Employee Contributions**

The System was established as a contributory plan in which member-employees also contributed a portion of their salaries to the System. However, with the passage of Act 793 of 1977, existing members and previous members were offered the opportunity to choose to become non-contributory members. Anyone who joined the System subsequent to January 1, 1978 and had not previously been a member was automatically enrolled as a non-contributory member.

Act 2084 of 2005 directed APERS to establish a new contributory plan effective July 1, 2005. It required that all covered employees first hired on or after July 1, 2005 contribute 5% of their salary into the System. Employees hired before June 30, 2005 who were in the non-contributory plan were given the option to join the new contributory plan by December 31, 2005. Non-contributory members who did not join the new contributory plan by that deadline remain non-contributory members.

Members may have employee contributions in the System if (a) they were members of APERS on or before January 1, 1978, (b) they are members first hired after July 1, 2005, or (c) they have purchased service in the System. A member's employee contributions are refundable if the member terminates APERS-covered employment before a monthly benefit is payable. Employee contributions remaining on deposit with APERS earn interest (at the rate of 2% per year beginning July 1, 2020), which is included in the refund. Contribution refunds do not include contributions made by an employer.

## System Administration

The costs of administering the System are paid out of investment earnings.

## Benefits

Benefit provisions are established by state law and may be amended only by the Arkansas General Assembly. Members are eligible for full benefits under the following conditions:

- at age 65 with five years of actual service,
- at any age with 28 years of actual service,
- at age 60 with 20 years of actual service if under the old contributory plan (prior to July 1, 2005), or
- at age 55 with 35 years of credited service for local elected officials.

The normal retirement benefit amount, paid on a monthly basis, is determined by the member's final average salary and years of service. A member may retire with a reduced benefit at age 55 with at least five years of actual service or at any age with 25 years of actual service. APERS also provides for disability and survivor benefits.

## Note 2: Summary of Significant Accounting Policies

### Basis of Accounting

APERS' accounts and records are maintained using fund accounting principles, and its financial statements are prepared using the accrual basis of accounting. Expenses are recorded when the liability is incurred, revenues are recorded in the accounting period in which they are earned and become measurable, and investment purchases and sales are recorded as of their trade dates. Member and employer contributions are established by statute as a percentage of salaries and are recognized when due, pursuant to legal requirements. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

### Investments

The System is authorized to invest in eligible investments as approved by the Board as set forth in its investment policy. System investments are reported at fair value. Short-term investments, debt securities, and equity securities are reported at fair value, as determined by the System's custodial agent, using pricing services or prices quoted by independent brokers based on the latest reported sales prices at current exchange rates for securities traded on national or international exchanges. The fair value of the pro rata share of units owned by the System in equity index and commingled trust funds is determined by the respective fund trustee based on quoted sales prices of the underlying securities.

Net investment income (loss) includes net appreciation (depreciation) in the fair value of investments, interest income, dividend income, securities lending income and expenses, and investment expenses, which include investment management and custodial fees and all other significant investment related costs. The System's international investment managers may enter into forward foreign exchange contracts to protect against fluctuation in exchange rates between the trade date and the settlement date of foreign investment transactions. Any gains and losses on these contracts are included in income in the period in which the exchange rates change.

Investment securities and investment securities underlying commingled or mutual fund investments are exposed to various risks, such as interest rate and credit risks. Due to the risks associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities may occur in the near term, and those changes could materially affect the amounts reported in the *Statement of Fiduciary Net Position*.

### Use of Estimates

The preparation of the System's financial statements in conformity with accounting principles generally accepted in the U.S. requires the System administrator to make significant estimates and assumptions that affect various data in the report, including the following:

- The net position restricted for pensions at the date of the financial statements
- The net pension liability and other actuarial information presented in Note 6
- The required supplementary information as of the benefit information date
- The changes in fiduciary net position during the reporting period

Estimates may also be involved in formulating disclosures of contingent assets and liabilities at the date of the financial statements. Actual results could differ from these estimates.

### Cash and Cash Equivalents

Cash and cash equivalents include demand accounts, imprest accounts, cash in the state treasury, and short-term investment funds (STIF). The STIF accounts are created through daily sweeps of excess cash by the System's custodian bank into bank-sponsored commingled funds that are invested in U.S. Government and agency securities and other short-term investments. The STIF accounts had an average weighted maturity of 90 days or less and are stated at fair value.

### Capital Assets

Capital assets purchased and in the custody of APERS were recorded as expenditures at the time of purchase. Assets with costs exceeding \$5,000 and an estimated useful life exceeding one year are reported at historical cost, including ancillary costs (such as professional fees and costs, freight costs, preparation and setup costs, and installation costs). Depreciation is reported for capital assets based on a straight-line method with no salvage value. The estimated useful life generally assigned by APERS to capital assets held ranges from five to 20 years. A schedule of capital asset activity for the fiscal year can be found on page 48.

### Risks and Uncertainties

Certain data in this report – including contributions to the System and the net pension liability, as well as other actuarial information in Note 6 and the required supplementary information – has been formulated based on certain projections about interest rates, inflation rates, and employee compensation and demographics. Due to the dynamic nature of these factors, it is possible that these projections will need to be revised in the near term. Moreover, because of the uncertainties inherent in making such projections, the effect of any such changes could be material to the financial statements.

## Note 3: Deposits and Investments

### Deposits

Deposits are carried at cost and are included in “cash and cash equivalents.” Cash and cash equivalents include demand accounts, cash in state treasury, short-term investment funds, and petty cash. As of June 30, 2020, these totals were \$60,779, \$6,100,017, \$172,492,681, and \$200 respectively. State Treasury Management Law governs the management of funds held in the State Treasury (cash in state treasury), and it is the responsibility of the Treasurer of State to ensure the funds are adequately insured and collateralized.

### Custodial Credit Risk for Deposits

Custodial credit risk for deposits is the risk that, in the event of the failure of a depository financial institution, the System will not be able to recover deposits or collateral securities. The System’s policy is to place deposits only in collateralized or insured accounts. As of June 30, 2020, the System’s only deposits exposed to potential custodial credit risk were those holding its foreign currency balance of -\$333. The System holds foreign currency in banks outside the United States as a result of transactions by international investment managers.

### Investments

Arkansas Code Annotated §§ 24-2-601 – 24-2-619 authorize the Board to have full power to invest and reinvest monies of the System and to hold, purchase, sell, assign, transfer or dispose of any of the investments or proceeds of the investment in accordance with the prudent investor rule. Security transactions and any resulting gains or losses are accounted for on a trade basis. Net investment income includes net appreciation in the fair value of investments, interest income, dividend income, and total investment expense, which includes investment management fees, custodial fees, and all other significant investment-related costs.

Arkansas Code Annotated § 24-2-608 also states that the System shall seek to invest not less than 5% nor more than 10% of the System’s portfolio in Arkansas-related investments. APERS recognizes a legal responsibility to seek to invest in the Arkansas economy while realizing that its primary, legal, and fiduciary commitment is to beneficiaries of the retirement system. As stated in A.C.A. § 24-2-608 (d), “nothing in this section shall in any way limit or impair the responsibility of a fiduciary to invest in accordance with the prudent investor rule set forth in §§ 24-2-610 – 24-2-619.”

Investments are reported at fair value as determined by the custodian bank. The custodian bank’s determination of fair values includes, among other things, using pricing services or quotes by major independent brokers at current exchange rates as available. The schedule on the facing page reflects the fair value of investments.



*Statement of Invested Assets by Type (fair value as of June 30, 2020)*

|  | Combined         | APERS            | ASPRS          |
|--|------------------|------------------|----------------|
| <b>Government Securities</b>                                   |                  |                  |                |
| U.S. Government Securities                                     | \$ 156,797,099   | \$ 151,105,081   | \$ 5,692,017   |
| U.S. Fixed Futures   | (227,418)        | (219,162)        | (8,256)        |
| Agency Pooled  | 105,863,522      | 102,020,485      | 3,843,037      |
| Municipal Bonds  | 2,360,394        | 2,274,707        | 85,687         |
| Agency CMO   | 47,203,240       | 45,489,678       | 1,713,563      |
| <b>Corporate Securities</b>                                    |                  |                  |                |
| Collateralized Obligations                                     | 151,535,091      | 146,034,094      | 5,500,997      |
| U.S. Corporate Bonds   | 283,664,372      | 273,366,844      | 10,297,528     |
| Convertible Bonds  | 273,145,332      | 263,229,664      | 9,915,668      |
| Convertible Preferred Stock                                    | 42,546,318       | 41,001,810       | 1,544,508      |
| Common Stock   | 2,863,642,054    | 2,759,686,685    | 103,955,369    |
| U.S. Equity Index Fund   | 292,325,210      | 281,713,278      | 10,611,932     |
| Co-Mingled Funds   | 51,479,714       | 49,610,907       | 1,868,806      |
| High Yield Income Bond Fund                                    | 59,723,195       | 57,555,135       | 2,168,060      |
| Preferred Stock  | 4,265,406        | 4,110,564        | 154,842        |
| <b>International Securities</b>                                |                  |                  |                |
| Global Government Fixed  | 2,457,112        | 2,367,914        | 89,198         |
| Global Corporate Bonds   | 83,194,014       | 80,173,922       | 3,020,093      |
| Equity Securities  | 1,336,384,362    | 1,287,871,200    | 48,513,161     |
| Global Preferred Stock   | 24,461,963       | 23,573,950       | 888,013        |
| Global Co-Mingled Funds  | 87,123,135       | 83,960,408       | 3,162,727      |
| International Equity Index Fund                                | 758,289,624      | 730,762,344      | 27,527,280     |
| Global Collateralized Obligations                              | 18,436,538       | 17,767,259       | 669,280        |
| Global Convertible Bonds                                       | 23,915,162       | 23,046,999       | 868,163        |
| Emerging Market  | 26,165,590       | 25,215,731       | 949,858        |
| <b>Core Plus Bond Fund</b>                                     | 544,934,658      | 525,152,547      | 19,782,110     |
| <b>Real Estate</b>   | 1,002,216,265    | 965,834,008      | 36,382,257     |
| <b>Diversified Strategies</b>                                  | 445,287,037      | 429,122,315      | 16,164,722     |
| <b>Timberland</b>  | 90,766,706       | 87,471,711       | 3,294,995      |
| <b>Global Energy Fund</b>                                      | 101,038,651      | 97,370,766       | 3,667,885      |
| <b>Commercial Loans</b>  | 10,268,530       | 9,895,764        | 372,766        |
| <b>Total Investments</b>                                       | 8,889,262,876    | 8,566,566,609    | 322,696,267    |
| <b>Securities Lending Collateral Investments at Fair Value</b> |                  |                  |                |
| Commercial Paper   | 169,067,795      | 162,930,330      | 6,137,465      |
| Receivables/Payables   | 212,660          | 204,940          | 7,720          |
| Repurchase Agreements  | 74,201,404       | 71,507,759       | 2,693,645      |
| Floating Rate Notes  | 330,784,145      | 318,776,086      | 12,008,059     |
| Asset Backed Securities  | 204,730,579      | 197,298,490      | 7,432,089      |
| <b>Total Securities Lending Collateral Investments</b>         | 778,996,583      | 750,717,605      | 28,278,978     |
| <b>Total Invested Assets</b>                                   | \$ 9,668,259,459 | \$ 9,317,284,214 | \$ 350,975,245 |

## Investment Policy

A summary of APERS' investment policy, including its asset allocation guidelines, can be found in the Investment Section of this report, which begins on page 59.

## Custodial Credit Risk for Investments

Custodial credit risk for investments is the risk that, in the event of failure of the counterparty to a transaction, the System will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. Investment securities are exposed to custodial credit risk if the securities are (a) uninsured, (b) not registered in the name of the government, and (c) held by either the counterparty or the counterparty's trust department or agent but not in the System's name. Arkansas Code Annotated § 24-2-606 does address the custodianship of assets, and the investment policy states that "the custodian bank shall, by nominee agreement, hold any and all securities for the beneficial interest of the APERS fund." As of June 30, 2020, there were no investments exposed to custodial credit risk.

## Credit Risk for Investments

Credit risk of investments is the risk that the issuer or other counterparty will not fulfill its obligation to the holder of the investment. Credit risk exposure is dictated by each investment manager's agreement. This credit risk is measured by the credit quality of investment in debt securities as described by nationally recognized statistical rating organizations. Each portfolio is managed in accordance with investment guidelines that are specific as to permissible credit quality ranges, exposure levels within individual security quality rating tiers, and the average credit quality of the overall portfolio.

The schedule on the facing page indicates the System's exposure to credit risk for investments.

*The System's Exposure to Credit Risk (as of June 30, 2020)\**

| Moody's Credit Ratings            | Aaa            | Aa         | A          | Baa         | Ba         | B          | Caa or below | Not Rated     | Base Market Value |
|-----------------------------------|----------------|------------|------------|-------------|------------|------------|--------------|---------------|-------------------|
| <b>Government Securities</b>      | \$ 301,647,709 | 0          | 0          | 1,586,867   | 0          | 0          | 0            | 2,174,249     | \$ 305,408,825    |
| U.S. Government Securities        | 156,797,099    | 0          | 0          | 0           | 0          | 0          | 0            | 0             | 156,797,099       |
| Agency CMO                        | 38,987,088     | 0          | 0          | 1,586,867   | 0          | 0          | 0            | 2,401,666     | 42,975,622        |
| Agency Pooled                     | 105,863,522    | 0          | 0          | 0           | 0          | 0          | 0            | 0             | 105,863,522       |
| U.S. Fixed Futures                | 0              | 0          | 0          | 0           | 0          | 0          | 0            | (227,418)     | (227,418)         |
| <b>Corporate Securities</b>       | 26,636,398     | 15,880,440 | 61,861,236 | 151,389,287 | 43,427,313 | 38,836,038 | 10,575,928   | 406,549,877   | 755,156,519       |
| Collateralized Obligations        | 25,400,410     | 7,910,502  | 3,269,433  | 4,050,651   | 2,633,438  | 11,382,171 | 6,748,271    | 90,140,216    | 151,535,091       |
| Convertible Bonds                 | 0              | 0          | 3,390,953  | 7,028,266   | 1,782,014  | 3,467,791  | 0            | 257,476,308   | 273,145,332       |
| Preferred Stock                   | 0              | 0          | 540,525    | 3,061,581   | 663,300    | 0          | 0            | 0             | 4,265,406         |
| Convertible Preferred Stock       | 0              | 0          | 0          | 0           | 0          | 0          | 0            | 42,546,318    | 42,546,318        |
| U.S. Corporate Bonds              | 1,235,988      | 7,969,938  | 54,660,326 | 137,248,789 | 38,348,562 | 23,986,077 | 3,827,657    | 16,387,036    | 283,664,372       |
| <b>International Securities</b>   | 932,018        | 2,937,435  | 20,287,082 | 55,188,390  | 22,678,822 | 7,753,309  | 968,947      | 43,422,414    | 154,168,416       |
| Emerging Market                   | 0              | 0          | 3,556,377  | 12,131,808  | 4,062,697  | 764,002    | 525,813      | 5,124,893     | 26,165,590        |
| Global Collateralized Obligations | 932,018        | 0          | 478,956    | 7,051,198   | 918,599    | 0          | 0            | 9,055,767     | 18,436,538        |
| Global Government Fixed           | 0              | 1,062,840  | 776,772    | 435,000     | 182,500    | 0          | 0            | 0             | 2,457,112         |
| Global Convertible Bonds          | 0              | 0          | 0          | 0           | 4,886,138  | 0          | 0            | 19,029,025    | 23,915,162        |
| Global Corporate Bonds            | 0              | 1,874,596  | 15,474,976 | 35,570,384  | 12,628,889 | 6,989,307  | 443,134      | 10,212,729    | 83,194,014        |
| <b>Floating Rate Fund</b>         | 0              | 0          | 0          | 0           | 0          | 0          | 0            | 15,952,803    | 15,952,803        |
| <b>Core Plus Bond Fund</b>        | 0              | 0          | 0          | 0           | 0          | 0          | 0            | 544,934,658   | 544,934,658       |
| <b>Commercial Loans</b>           | 0              | 0          | 0          | 0           | 2,984,067  | 5,609,547  | 0            | 1,674,916     | 10,268,530        |
| <b>Municipal Bonds</b>            | 0              | 2,059,775  | 300,619    | 0           | 0          | 0          | 0            | 0             | 2,360,394         |
| <b>Co-Mingled Funds</b>           | 0              | 0          | 0          | 0           | 0          | 0          | 0            | 35,526,910    | 35,526,910        |
| <b>High Yield Income Fund</b>     | 0              | 0          | 0          | 0           | 0          | 0          | 0            | 59,723,195    | 59,723,195        |
| <b>Grand Total</b>                | \$ 329,216,125 | 20,877,650 | 82,448,937 | 208,164,544 | 69,090,202 | 52,198,894 | 11,544,875   | 1,109,959,023 | \$ 1,883,500,250  |

| S&P Credit Ratings                | AAA           | AA          | A          | BBB         | BB         | B          | CCC or below | Not Rated     | Base Market Value |
|-----------------------------------|---------------|-------------|------------|-------------|------------|------------|--------------|---------------|-------------------|
| <b>Government Securities</b>      | \$ 0          | 163,947,588 | 0          | 0           | 0          | 0          | 0            | 141,461,237   | \$ 305,408,825    |
| U.S. Government Securities        | 0             | 19,096,977  | 0          | 0           | 0          | 0          | 0            | 137,700,122   | 156,797,099       |
| Agency CMO                        | 0             | 38,987,088  | 0          | 0           | 0          | 0          | 0            | 3,988,533     | 42,975,622        |
| Agency Pooled                     | 0             | 105,863,522 | 0          | 0           | 0          | 0          | 0            | 0             | 105,863,522       |
| U.S. Fixed Futures                | 0             | 0           | 0          | 0           | 0          | 0          | 0            | (227,418)     | (227,418)         |
| <b>Corporate Securities</b>       | 28,819,042    | 8,315,711   | 66,751,667 | 175,488,699 | 47,939,259 | 44,790,533 | 19,858,734   | 363,192,873   | 755,156,519       |
| Collateralized Obligations        | 23,298,750    | 2,406,407   | 8,203,481  | 2,501,683   | 213,238    | 5,490,098  | 13,287,436   | 96,133,998    | 151,535,091       |
| Convertible Bonds                 | 0             | 0           | 5,852,187  | 7,341,882   | 11,213,181 | 20,292,852 | 3,467,791    | 224,977,439   | 273,145,332       |
| Preferred Stock                   | 0             | 0           | 0          | 3,602,106   | 663,300    | 0          | 0            | 0             | 4,265,406         |
| Convertible Preferred Stock       | 0             | 0           | 0          | 6,244,763   | 0          | 0          | 0            | 36,301,555    | 42,546,318        |
| U.S. Corporate Bonds              | 5,520,292     | 5,909,305   | 52,696,000 | 155,798,265 | 35,849,541 | 19,007,582 | 3,103,508    | 5,779,881     | 283,664,372       |
| <b>International Securities</b>   | 0             | 2,824,589   | 21,395,617 | 55,620,069  | 22,616,148 | 8,673,274  | 1,039,406    | 41,999,313    | 154,168,416       |
| Emerging Market                   | 0             | 0           | 3,118,742  | 11,196,017  | 5,383,389  | 1,146,919  | 242,085      | 5,078,438     | 26,165,590        |
| Global Collateralized Obligations | 0             | 964,370     | 3,611,612  | 2,441,884   | 416,063    | 0          | 0            | 11,002,611    | 18,436,538        |
| Global Government Fixed           | 0             | 1,062,840   | 0          | 435,000     | 182,500    | 0          | 0            | 776,772       | 2,457,112         |
| Global Convertible Bonds          | 0             | 0           | 0          | 1,693,856   | 6,992,588  | 1,337,875  | 0            | 13,890,843    | 23,915,162        |
| Global Corporate Bonds            | 0             | 797,379     | 14,665,263 | 39,853,313  | 9,641,609  | 6,188,480  | 797,321      | 11,250,649    | 83,194,014        |
| <b>Floating Rate Fund</b>         | 0             | 0           | 0          | 0           | 0          | 0          | 0            | 15,952,803    | 15,952,803        |
| <b>Core Plus Bond Fund</b>        | 0             | 0           | 0          | 0           | 0          | 0          | 0            | 544,934,658   | 544,934,658       |
| <b>Commercial Loans</b>           | 0             | 0           | 0          | 324,782     | 4,007,097  | 5,936,651  | 0            | 0             | 10,268,530        |
| <b>Municipal Bonds</b>            | 0             | 2,059,775   | 300,619    | 0           | 0          | 0          | 0            | 0             | 2,360,394         |
| <b>Co-Mingled Funds</b>           | 0             | 0           | 0          | 0           | 0          | 0          | 0            | 35,526,910    | 35,526,910        |
| <b>High Yield Income Fund</b>     | 0             | 0           | 0          | 0           | 0          | 0          | 0            | 59,723,195    | 59,723,195        |
| <b>Grand Total</b>                | \$ 28,819,042 | 177,147,662 | 88,447,903 | 231,433,551 | 74,562,504 | 59,400,458 | 20,898,140   | 1,202,790,990 | \$ 1,883,500,250  |

|                                      |                |             |             |   |   |   |           |             |                |
|--------------------------------------|----------------|-------------|-------------|---|---|---|-----------|-------------|----------------|
| <b>Securities Lending Collateral</b> | \$ 173,964,404 | 168,880,710 | 307,268,414 | 0 | 0 | 0 | 1,594,025 | 127,289,031 | \$ 778,996,583 |
|--------------------------------------|----------------|-------------|-------------|---|---|---|-----------|-------------|----------------|

\*Figures are APERS and ASPRS combined. Totals may not add due to rounding.

## Concentration of Credit Risk for Investments

The concentration of credit risk is the risk of loss attributed to the magnitude of the System's investment in a single issuer (not including investments issued or guaranteed by the U.S. government or investments in mutual funds or external investment pools). The System has a formal investment policy for concentration of credit risk. None of the System's investments in any one issuer (other than those issued or guaranteed by the U.S. government) represented more than 5% of total investments.

## Interest Rate Risk for Investments

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of investments. Investments can be highly sensitive to changes in interest rates due to their terms or characteristics. Interest rate risk is the greatest risk faced by an investor in the debt securities market since the price of a debt security will often move in the opposite direction of the change in interest rates.

The System's external fixed income investment managers use the measurement of effective duration to mitigate the interest rate risk of the fixed income investments. Each fixed income investment manager monitors and reports the effective duration monthly. The effective duration of the investment portfolio is required to be +/- 10% of the benchmark's duration. The benchmark for the U.S. fixed income markets is the Barclays Capital U.S. Aggregate Bond Index.

As of June 30, 2020, the System had the following debt security investments and maturities (facing page):

*Debt Security Investments and Maturities (as of June 30, 2020)\**

| Investment Type                      | Investment Maturity (In Years) |                       |                       |                       |                       | Fund - No Maturities  |
|--------------------------------------|--------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|                                      | Fair Value*                    | Less than 1           | 1 - 5                 | 6 - 10                | More than 10          |                       |
| <b>Government Securities</b>         |                                |                       |                       |                       |                       |                       |
| U.S. Government Securities           | \$ 156,797,099                 | \$ 2,021,598          | \$ 46,155,264         | \$ 57,276,326         | \$ 51,343,911         | \$ 0                  |
| Agency CMO                           | 42,975,622                     | 0                     | 0                     | 3,988,533             | 38,987,088            | 0                     |
| Agency Pooled                        | 105,863,522                    | 1,919                 | 0                     | 8,286,189             | 97,575,413            | 0                     |
| U.S. Fixed Futures                   | (227,418)                      | (227,418)             | 0                     | 0                     | 0                     | 0                     |
| <b>Corporate Securities</b>          |                                |                       |                       |                       |                       |                       |
| Collateralized Obligations           | 151,535,091                    | 0                     | 11,300,687            | 6,571,799             | 133,662,605           | 0                     |
| Convertible Bonds                    | 273,145,332                    | 5,967,035             | 187,501,861           | 68,595,177            | 11,081,259            | 0                     |
| U.S. Corporate Bonds                 | 283,664,372                    | 531,232               | 74,641,127            | 125,508,294           | 82,983,719            | 0                     |
| Preferred Stock                      | 4,265,406                      | 0                     | 540,525               | 0                     | 3,724,881             | 0                     |
| Convertible Preferred Stock          | 42,546,318                     | 42,546,318            | 0                     | 0                     | 0                     | 0                     |
| <b>International Securities</b>      |                                |                       |                       |                       |                       |                       |
| Emerging Market                      | 26,165,590                     | 202,100               | 6,258,607             | 11,300,527            | 8,404,355             | 0                     |
| Global Collateralized Obligations    | 18,436,538                     | 0                     | 0                     | 6,322,078             | 12,114,460            | 0                     |
| Global Government Fixed              | 2,457,112                      | 0                     | 1,683,610             | 591,002               | 182,500               | 0                     |
| Global Convertible Bonds             | 23,915,162                     | 1,693,856             | 14,247,334            | 6,190,060             | 1,783,912             | 0                     |
| Global Corporate Bonds               | 83,194,014                     | 3,629,153             | 27,413,114            | 35,800,920            | 16,350,828            | 0                     |
| Floating Rate Fund                   | 15,952,803                     | 0                     | 0                     | 0                     | 0                     | 15,952,803            |
| Core Plus Bond Fund                  | 544,934,658                    | 0                     | 0                     | 0                     | 0                     | 544,934,658           |
| Commercial Loans                     | 10,268,530                     | 0                     | 8,595,936             | 1,672,594             | 0                     | 0                     |
| Municipal Bonds                      | 2,360,394                      | 0                     | 152,983               | 0                     | 2,207,410             | 0                     |
| Co-Mingled Funds                     | 35,526,910                     | 0                     | 0                     | 0                     | 0                     | 35,526,910            |
| High Yield Income Fund               | 59,723,195                     | 59,723,195            | 0                     | 0                     | 0                     | 0                     |
|                                      | <u>\$ 1,883,500,250</u>        | <u>\$ 116,088,988</u> | <u>\$ 378,491,048</u> | <u>\$ 332,103,499</u> | <u>\$ 460,402,343</u> | <u>\$ 596,414,371</u> |
| <b>Securities Lending Collateral</b> |                                |                       |                       |                       |                       |                       |
| Asset-Backed Securities              | \$ 204,730,579                 | \$ 186,645,033        | \$ 16,491,520         | \$ 0                  | \$ 1,594,025          |                       |
| Commercial Paper                     | 169,067,795                    | 169,067,795           | 0                     | 0                     | 0                     |                       |
| Floating Rate Notes                  | 330,784,146                    | 323,551,886           | 7,232,260             | 0                     | 0                     |                       |
| Repo                                 | 74,201,404                     | 74,201,404            | 0                     | 0                     | 0                     |                       |
|                                      | <u>\$ 778,783,923</u>          | <u>\$ 753,466,118</u> | <u>\$ 23,723,780</u>  | <u>\$ 0</u>           | <u>\$ 1,594,025</u>   |                       |

**Foreign Currency Risk**

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment. The System's currency risk resides within the international equity investments as well as within the fixed income investments and the fixed income managers. The System's policy is to allow the external investment managers to decide what action to take regarding their respective portfolio's foreign currency exposure using currency forward contracts. The System has a formal investment policy for foreign currency risk which limits foreign currency exposure to 10% of the investment manager's respective portfolio.

The System's exposure to foreign currency risk on June 30, 2020, was as follows (next page):

\*Figures are APERS and ASPRS combined. Totals may not add due to rounding.

*Foreign Currency Risk (as of June 30, 2020)\**

| Currency               | %              | Equities                | Cash            | Forward Contracts   | Fair Value              |
|------------------------|----------------|-------------------------|-----------------|---------------------|-------------------------|
| Australian Dollar      | 1.29%          | \$ 17,812,449           | \$ 0            | \$ 0                | \$ 17,812,449           |
| Brazilian Real         | 1.19           | 16,383,610              | 0               | 0                   | 16,383,610              |
| British Pound Sterling | 12.74          | 175,353,594             | 8               | (7,598)             | 175,346,004             |
| Canadian Dollar        | 6.13           | 84,322,328              | 0               | 0                   | 84,322,328              |
| Chinese Yuan Renminbi  | 6.18           | 85,128,446              |                 | (103,379)           | 85,025,067              |
| Danish Krone           | 1.65           | 22,642,814              | 3               | 0                   | 22,642,817              |
| Euro Currency          | 34.54          | 475,387,511             | (189)           | (39,749)            | 475,347,573             |
| Hong Kong Dollar       | 2.74           | 37,670,059              | 0               | 0                   | 37,670,059              |
| Indian Ruphia          | 0.00           | 0                       | 0               | 0                   | 0                       |
| Israeli Shekel         | 1.22           | 16,798,945              | 0               | 0                   | 16,798,945              |
| Japanese Yen           | 12.08          | 166,206,014             | 18              | 37,120              | 166,243,151             |
| Liberian Dollar        | 0.15           | 2,112,333               | 0               | 0                   | 2,112,333               |
| Malaysian Ringgit      | 0.00           | 0                       | 0               | 0                   | 0                       |
| Mauritian Rupee        | 0.09           | 1,230,380               | 0               | 0                   | 1,230,380               |
| Mexican New Peso       | 0.18           | 2,493,409               | 0               | 0                   | 2,493,409               |
| Norwegian Krone        | 0.27           | 3,649,420               | 4               | 0                   | 3,649,424               |
| New Zealand Dollar     | 0.48           | 6,542,444               | 0               | 0                   | 6,542,444               |
| Papua New Guinea Kina  | 0.00           | 0                       | 0               | 0                   | 0                       |
| Philippines Peso       | 0.00           | 0                       | 0               | 0                   | 0                       |
| Russian Ruble          | 0.00           | 0                       | 0               | 0                   | 0                       |
| Singapore Dollar       | 1.06           | 14,636,288              | 0               | 0                   | 14,636,288              |
| South African Rand     | 0.00           | 0                       | 0               | 0                   | 0                       |
| South Korean Won       | 4.69           | 64,488,216              | 0               | 0                   | 64,488,216              |
| Swedish Krone          | 2.31           | 31,819,169              | 0               | 0                   | 31,819,169              |
| Swiss Franc            | 9.42           | 129,678,292             | (173)           | (163)               | 129,677,956             |
| Taiwan Dollar          | 1.32           | 18,129,945              | 0               | 0                   | 18,129,945              |
| Thailand Baht          | 0.27           | 3,726,572               | 0               | 0                   | 3,726,572               |
|                        | <u>100.00%</u> | <u>\$ 1,376,212,238</u> | <u>\$ (330)</u> | <u>\$ (113,769)</u> | <u>\$ 1,376,098,139</u> |

**Asset-Backed Securities**

Asset-backed securities (ABSs) are bonds or notes backed by loan paper or accounts receivable originated by banks, credit card companies, or other credit providers. The System’s ability to recover the amount of principal invested in these securities depends on the performance and quality of the trust assets.

**Mortgage-Backed Securities**

A mortgage-backed security (MBS) is a type of asset-backed security that is secured by a mortgage or collection of mortgages. MBSs depend on the underlying pool of mortgage loans to provide cash flow to make principal and interest payments on the security to its holders. The payments are usually periodic, similar to coupon payments. MBSs are subject to credit risk, prepayment risk, and extension risk.

A collateralized mortgage obligation (CMO) is an MBS that comprises classes of bonds created by prioritizing

\*Figures are APERS and ASPRS combined. Totals may not add due to rounding.

the cash flows of the underlying mortgage pool. CMOs may be collateralized by whole-loan mortgages, mortgage pass-through securities, or stripped mortgage-backed securities.

The System invests in MBSs and CMOs for diversification and to enhance fixed income returns. These instruments are reported at fair value in the Statement of Fiduciary Net Position.

### Corporate Bonds

Corporate bonds are a debt security issued by a corporation. The backing for the bond is usually the payment ability of the company, which is typically money to be earned from future operations.

### Convertible Corporate Bonds

Convertible bonds convey an option to the bondholders to be exchanged for another asset, generally a fixed number of shares of common stock at a pre-stated price.

### Pooled Funds

Pooled funds are funds from many individual investors that are aggregated for the purposes of investment and benefit from economies of scale. The System could be indirectly exposed to credit and market risks associated with forward currency contracts to the extent that these pooled funds hold forward currency contracts for purposes of managing exposure to fluctuations in foreign exchange rates. APERS and ASPRS have approximately \$87 million invested in international pooled funds.

### Securities Lending

Arkansas Code Annotated § 24-2-602 and the Board's investment policy permit the System to participate in a securities lending program to augment investment income. The System lends its securities to brokers-dealers and other entities with a simultaneous agreement to return the collateral for the same securities in the future.

U.S. securities are loaned versus collateral valued at 101.24% of the market value of the securities plus any accrued interest for domestic loans. Non-U.S. securities are loaned versus collateral valued at 101.40% of the market value of the securities plus any accrued interest. Collateral is marked-to-market daily if price movements exceed certain minimal thresholds.

As of June 30, 2020, the cash collateral investments had an average weighted maturity of 28 days, whereas the weighted average loan maturity was 2 days. Investments with cash collateral were approximately \$780.7 million (market value).

### Derivative Instruments

The System adheres to *GASB Statement No. 53: Accounting and Financial Reporting for Derivative Instruments*, which addresses the recognition, measurement, and disclosure of information regarding derivative instruments entered into by state and local governments.

Derivative instruments are financial contracts or agreements whose values depend on the values of one or more underlying assets, reference rates, or financial indexes. Derivative instruments include futures contracts, forward contracts, swap contracts, options contracts, and forward foreign currency exchange. APERS, through

its external investment managers, could hold such instruments.

APERS does comply with GASB No. 53 and will disclose its exposure to derivative instruments if there is exposure. APERS had no exposure to any GASB No. 53 Derivative Instruments at June 30, 2020.

### Foreign Currency Forward Contracts

A foreign currency forward is a contractual agreement between two parties to pay or receive specific amounts of foreign currency at a future date in exchange for another currency at an agreed upon exchange rate. Forward commitments are not standardized and carry credit risk due to the possible nonperformance by one of the counterparties. The maximum potential loss is the aggregate face value in U.S. dollars at the time the contract was opened. These transactions are entered in order to hedge risks from foreign currency rate fluctuation and to facilitate trade settlement of foreign security transactions. Forwards carry foreign currency risk resulting from adverse fluctuations in foreign exchange rates.

#### Foreign Currency Forwards (as of June 30, 2020)\*

|                       | Pay | Receive | Notional Value         | Market Value           | Unrealized Gain/Loss |
|-----------------------|-----|---------|------------------------|------------------------|----------------------|
| Swiss Franc           | CHF | USD     | \$ (33,958)            | \$ (34,120)            | \$ (163)             |
| Chinese Yuan Renminbi | CNY | USD     | (23,434,354)           | (23,558,321)           | (123,968)            |
| Euro Currency         | EUR | USD     | (1,186,603)            | (1,226,050)            | (39,447)             |
| British Pound         | GBP | USD     | (2,132,343)            | (2,139,941)            | (7,598)              |
| Japanese Yen          | JPY | USD     | (6,475,974)            | (6,438,854)            | 37,120               |
| U.S. Dollar           | USD | CNY     | 1,605,348              | 1,625,937              | 20,589               |
| U.S. Dollar           | USD | EUR     | 184,910                | 184,607                | (303)                |
|                       |     |         | <u>\$ (31,472,974)</u> | <u>\$ (31,586,742)</u> | <u>\$ (113,769)</u>  |

### Financial Futures

A financial future is an agreement to purchase or sell a specific amount of an asset at a specified delivery or maturity date for an agreed upon price. These derivative securities are used to improve yield, adjust duration of the portfolio, circumvent changes in interest rates, or to replicate an index. Futures contracts are standardized and traded on organized exchanges, thereby reducing credit risk.

#### Financial Futures (as of June 30, 2020)\*

| Futures Contracts                | Expiration | Notional Value      | Fair Value          | Unrealized Gain/(Loss) |
|----------------------------------|------------|---------------------|---------------------|------------------------|
| U.S. 2-year Treasury Note        | Sept 2020  | \$ 51,880,156       | \$ 51,894,610       | \$ 14,453              |
| U.S. 5-year Treasury Note        | Sept 2020  | (19,301,771)        | (19,364,297)        | (62,526)               |
| U.S. 10-year Treasury Note       | Sept 2020  | (6,803,721)         | (6,819,422)         | (15,701)               |
| U.S. 10-year Ultra Treasury Note | Sept 2020  | (36,181,831)        | (36,378,891)        | (197,060)              |
| U.S. Ultra Long Bond Treasury    | Sept 2020  | 13,928,585          | 13,962,000          | 33,415                 |
|                                  |            | <u>\$ 3,521,418</u> | <u>\$ 3,294,000</u> | <u>\$ (227,418)</u>    |

\*Figures are APERS and ASPRS combined. Totals may not add due to rounding.



### Fair Value Measurements

The Arkansas Public Employees Retirement System categorizes their fair value measurements within the fair value hierarchy by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset and give the highest priority to unadjusted quoted prices in active markets for identical assets of liabilities (Level 1 measurements) and the lower priority to unobservable inputs (Level 3 measurements).

- Level 1 – Unadjusted quoted prices for identical instruments in active markets.
- Level 2 – Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs are observable.
- Level 3 – Valuations derived from valuation techniques in which significant inputs are unobservable.

Investments that are measured at fair value using the net asset value per share (or its equivalent) as a practical expedient are not classified in the fair value hierarchy.

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

Assets classified in Level 1 of the fair value hierarchy are valued directly from a predetermined primary external pricing vendor. Assets classified in Level 2 are subject to pricing by an alternative pricing source due to lack of information available by the primary vendor. Real estate, timberland, and partnership assets classified in Level 3, due to lack of an independent pricing source, are valued using an internal fair value as provided by the investment manager.

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

*Investments and Derivative Instruments at Fair Value (as of June 30, 2020)*

|                                  | Fair Value              | Level 1                 | Level 2                 | Level 3             |
|----------------------------------|-------------------------|-------------------------|-------------------------|---------------------|
| <b>Investments at Fair Value</b> |                         |                         |                         |                     |
| U.S. Domestic Equities           | \$ 2,710,967,507        | \$ 2,710,967,507        | \$ 0                    | \$ 0                |
| Convertible Securities           | 303,014,577             | 35,991,778              | 267,022,799             | 0                   |
| Preferred Securities             | 2,950,440               | 0                       | 2,950,440               | 0                   |
| International Equities           | 1,420,550,798           | 1,420,550,798           | 0                       | 0                   |
| Lazard                           | 0                       | 0                       | 0                       | 0                   |
| Convertible Securities           | 24,266,996              | 1,216,898               | 23,050,098              | 0                   |
| Preferred Securities             | 24,734,073              | 23,573,950              | 1,160,124               | 0                   |
| Fixed Income                     | 123,774,127             | 0                       | 123,774,127             | 0                   |
| Loans/JV interest                | 1,298,884               | 0                       | 0                       | 1,298,884           |
| Domestic Fixed Income            | 0                       | 0                       | 0                       | 0                   |
| Global Bond Fund                 | 34,237,219              | 34,237,219              | 0                       | 0                   |
| Infrastructure Fund              | 0                       | 0                       | 0                       | 0                   |
| U.S. Government Securities       | 149,156,872             | 149,156,872             | 0                       | 0                   |
| Futures                          | (219,162)               | (219,162)               | 0                       | 0                   |
| Fixed Income Fund                | 15,373,688              | 15,373,688              | 0                       | 0                   |
| Corporate Bonds                  | 1,160,490,374           | 0                       | 1,160,490,374           | 0                   |
| Loans/JV interest                | 8,596,880               | 0                       | 0                       | 8,596,880           |
| <b>Total Investments</b>         | <b>\$ 5,979,193,274</b> | <b>\$ 4,390,849,548</b> | <b>\$ 1,578,447,962</b> | <b>\$ 9,895,764</b> |

**Securities Lending Collateral Investments at Fair Value**

|  |                         |                         |                         |                     |
|--|-------------------------|-------------------------|-------------------------|---------------------|
| Repo                                       | \$ 71,507,759           | \$ 0                    | \$ 71,507,759           | \$ 0                |
| Commercial Paper                           | 162,930,330             | 0                       | 162,930,330             | 0                   |
| Floating Rate Notes                        | 318,776,086             | 0                       | 318,776,086             | 0                   |
| Asset Backed Floating Securities           | 197,298,490             | 0                       | 197,298,490             | 0                   |
| <b>Total Securities Lending Collateral</b> | <b>750,512,665</b>      | <b>0</b>                | <b>750,512,665</b>      | <b>0</b>            |
| <b>Total Investments at Fair Value</b>     | <b>\$ 6,729,705,939</b> | <b>\$ 4,390,849,548</b> | <b>\$ 2,328,960,627</b> | <b>\$ 9,895,764</b> |

**Investments at the Net Asset Value (NAV)**

|                                     |                         |
|-------------------------------------|-------------------------|
| High Yield Core Fund                | \$ 9,595,892            |
| Defensive Bond Fund                 | 47,959,243              |
| Domestic Equity Index Funds         | 281,713,279             |
| Core Plus Bond Fund                 | 525,152,549             |
| Timberland                          | 81,621,250              |
| Global Energy Plus Fund             | 97,370,766              |
| Global Equity Pooled Funds          |                         |
| MCM REIT Index                      | 96,917,920              |
| MCM ACWI ex-US Index                | 730,762,346             |
| Real Estate                         |                         |
| Invesco Core                        | 451,884,561             |
| Heitman Core                        | 289,041,974             |
| Heitman Value Add                   | 32,458,312              |
| TA Fund X                           | 3,272,229               |
| TA Fund XI                          | 48,297,173              |
| TA Fund XII                         | 5,850,461               |
| LaSalle Fund Fund VI                | 9,745,478               |
| LaSalle Fund Fund VII               | 34,216,364              |
| Diversified Strategies              |                         |
| AQR Global Risk Premium             | 131,908,926             |
| Newton Global Real Return           | 120,579,433             |
| Blackstone                          | 176,633,957             |
| <b>Total Investments at the NAV</b> | <b>\$ 3,174,982,113</b> |

Investments classified as level 1 in the preceding table are exchange-traded securities whose values are based on published market prices and quotations from either national security exchanges or active markets for those securities.

Investments classified as level 2 in the preceding table include publicly traded debt securities and exchange traded stocks in inactive markets. Investments in this category are sourced from reputable pricing vendors using pricing matrix models and techniques. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices. Fair value is defined as the quoted market value on the last trading day of the period. These prices are obtained from various pricing sources by APERS custodian bank which maintains the book of record for all investments.

Investments classified as level 3 in the preceding table are unobservable, meaning that the assets lack an independent pricing source. Values are provided by the investment manager or an external pricing source such as an independent appraiser.

#### Investments Measured at the Net Asset Value (NAV)

The fair value of investments that are organized as commingled funds or limited partnerships have no readily ascertainable fair value. The value is determined by using the net asset value per share or its equivalent. Commingled fund values are based on each investor's proportionate share of the total underlying assets in the fund less any liabilities for client withdrawals, investment purchases or other accrued expenses. Limited partnership values are based on the capital account balance the general partner reports at the end of each reporting period, adjusted by subsequent contributions, distributions, management fees, and changes in values of foreign currency and published market prices for certain securities. Even though the limited partnerships and commingled funds issue annual financial statements audited by independent auditors, the year-end for the state and these entities do not always agree. There are inherent uncertainties in estimating fair values for these types of investments, and it is possible that the estimates will change in the near-term or the subsequent sale of assets will be different from the reported net asset value. With certain exceptions, mainly the equity and the fixed income funds, these investments cannot be redeemed, or, have certain restrictions regarding redemption. The real estate investments distributions are through the liquidation of the underlying assets or net operating cash flows. Each investment has a different redemption frequency and notice period as noted in the following table (facing page):

*Investments Measured at the Net Asset Value (as of June 30, 2020)*

|  | Fair Value              | Strategy Type                  | Fund Life of Non-redeemable Mandates | Unfunded Commitments  | Redemption Frequency (if currently eligible) | Redemption Notice Period | Other Redemption Restrictions               | Restriction Time Remaining                                    |
|--|-------------------------|--------------------------------|--------------------------------------|-----------------------|--|--------------------------|---|---|
| <b>High Yield Core Fund</b>              | \$ 9,595,892            | Active High Yield Fixed Income | N/A                                  | \$ none               | monthly                                      | T + 3                    | N/A   | N/A   |
| <b>Defensive Bond Fund</b>               | 47,959,243              | Income Oriented                | N/A                                  | none                  | daily  | T + 1                    | N/A   | N/A   |
| <b>Domestic Equity Index Funds</b>       | 281,713,279             | S & P 500 Index                | N/A                                  | none                  | daily  | T + 3                    | N/A   | N/A   |
| <b>Core Plus Bond Fund</b>               | 525,152,549             | Active Global Fixed Income     | N/A                                  | none                  | daily  | T + 3                    | N/A   | N/A   |
| <b>Timberland</b>                        | 81,621,250              | Timber                         | N/A                                  | none                  | none   | N/A                      | N/A   | partnership terminates in December 2027                       |
| <b>Global Energy Fund</b>                | 97,370,766              | Global Energy stocks           | N/A                                  | none                  | daily  | T + 3                    | N/A   | N/A   |
| <b>International Equity Pooled Funds</b> |                         |                                |                                      |                       |  |                          |   |   |
| MCM REIT Index                           | 96,917,920              | Global Real Estate securities  | N/A                                  | none                  | daily  | T + 1                    | N/A   | N/A   |
| MCM ACWI ex-US Index                     | 730,762,346             | International Equities         | N/A                                  | none                  | daily  | T + 1                    | N/A   | N/A   |
| <b>Real Estate</b>                       |                         |                                |                                      |                       |  |                          |   |   |
| Invesco                                  | 451,884,561             | Core Real Estate               | N/A                                  | none                  | quarterly                                    | T + 45                   | N/A   | N/A   |
| Heitman                                  | 289,041,974             | Core Real Estate               | N/A                                  | none                  | quarterly                                    | T + 90                   | N/A   | N/A   |
| Heitman Value Partners IV                | 32,458,312              | Value Add Real Estate          | N/A                                  | 39,788,531            | 7-year lock up                               | N/A                      | N/A   | the lock up period starts on the day of the last capital call |
| TA Fund X                                | 3,272,229               | Value Add Real Estate          | N/A                                  | none                  | 7-year lock up                               | N/A                      | N/A   | currently in capital redistribution phase                     |
| TA Fund XI                               | 48,297,173              | Value Add Real Estate          | N/A                                  | none                  | 7-year lock up                               | N/A                      | N/A   | the lock up period starts on the day of the last capital call |
| TA Fund XII                              | 5,850,461               | Value Add Real Estate          | N/A                                  | 65,049,629            | 7-year lock up                               | N/A                      | N/A   | the lock up period starts on the day of the last capital call |
| LaSalle Fund Fund VI                     | 9,745,478               | Value Add Real Estate          | N/A                                  | 1,376,712             | 7-year lock up                               | N/A                      | N/A   | currently in capital redistribution phase                     |
| LaSalle Fund Fund VII                    | 34,216,364              | Value Add Real Estate          | N/A                                  | 3,190,944             | 7-year lock up                               | N/A                      | N/A   | the lock up period starts on the day of the last capital call |
| <b>Diversified Strategies</b>            |                         |                                |                                      |                       |  |                          |   |   |
| AQR Global Risk Premium                  | 131,908,926             | Risk Premia                    | N/A                                  | none                  | weekly and monthly                           | T + 2                    | N/A   | N/A   |
| Newton Global Real Return                | 120,579,433             | Global Real Return             | N/A                                  | none                  | daily  | T + 3                    | N/A   | N/A   |
| Blackstone                               | 176,633,957             | Fund of Funds                  | N/A                                  | none                  | last day of each quarter                     | 1yr; 2yrs; 3yrs; >3yrs   | 55% liquidity; then 20%; then 15%; then 10% | N/A   |
| <b>Total</b>                             | <b>\$ 3,174,982,113</b> |                                |                                      | <b>\$ 108,029,104</b> |  |                          |   |   |

### High Yield Core Fund

The High Yield Active Core philosophy is centered on the belief that the best risk-adjusted returns and, ultimately, the best absolute returns are generated by a strategy of yield capture and error avoidance.

### Defensive Bond Fund

The investment objective is to exploit different sources of return available in high yield corporate securities in a way that generates risk-adjusted returns superior to those available from conventional high yield securities. The investment strategy is based on the assumption and observation that numerous market inefficiencies exist throughout the capital markets (particularly in the high yield bond markets) and that the prudent, active and systematic exploitation of these inefficiencies can generate returns consistent with these objectives.

### Domestic Equity Index Funds

This is an S&P 500 Index fund.

### Core Plus Bond Fund

The Core Plus Fixed Income Strategy seeks excess return from multiple sources, including sector allocation and subsector and security selection. Duration, yield curve, and currency positioning is moderate. The largest component of the Core Plus Fixed Income risk budget is allocated to portfolio strategies that have consistently generated the highest return for the lowest unit of risk over time, such as sector allocation and subsector security selection. The Core Plus Fixed Income portfolios may emphasize spread product in the sector allocation process and therefore may hold larger-than-benchmark allocations to corporate bonds, structured product, high yield bonds, and emerging markets debt. As a result, the strategy would likely outperform in a 'risk on' environment where corporate bonds, for example, are outperforming. The reverse would also likely be true. The Core Plus Fixed Income portfolios take an actively-managed, relative-value driven approach. The Strategy is expected to perform best in markets with excess spread dislocations that it can capitalize on through relative value trading.

### Timberland

An objective of a timber investment is to provide the fund with diversification from traditional asset classes. The goal of the timber investment is to get a stable core-type return with very low or little volatility.

### Global Energy Fund

The fund seeks to invest globally in opportunities found in the energy industry. The fund invests, both long and short, in the equity securities, and related instruments, of energy and energy related businesses, including companies that are not in the Benchmark, which are expected to outperform the energy sector as a whole.

### International Equity Pooled Funds

- The MCM EB DV Non-SL REIT Index Fund — This REIT Index Fund seeks to match the performance and the characteristics of the Dow Jones U.S. Select REIT Index which tracks the performance of publicly traded REITs and REIT-like securities and designed to serve as a proxy for direct real estate investments.

- MCM ACWI ex-US Index — The MSCI ACWI ex USA Index captures large and mid-cap representation across 22 of 23 Developed Markets (DM) countries (excluding the U.S.) and 24 Emerging Markets (EM) countries. With 2,166 constituents, the index covers approximately 85% of the global equity opportunity set outside the U.S.
- Fidelity Select International Strategy — The Select International strategy utilizes a disciplined investment approach that capitalizes on fundamental research by combining qualitative stock selection with quantitative risk control. The available investment universe is comprised of stocks in Japan, the United Kingdom, Europe ex UK, and Asia Pacific ex Japan rated attractive by Fidelity’s analysts. The strategy uses a quantitative model to match the regional weights of the portfolio to the index. This approach is designed to diversify specific risk, reduces tracking error and factor risk, and controls transaction costs.

## Real Estate

This asset class provides diversification to the total portfolio and strives to reduce total fund volatility while also enhancing the total return of the portfolio. Real estate has a low, and in some cases, negative, correlation with other major investment asset classes. The following are the strategies that comprise the Real Estate asset class and are explained in greater detail:

- Invesco Core Real Estate (ICRE) — The ICRE strategy is a portfolio of U.S. properties diversified by property type and geographic location, with an emphasis on attractive current income returns and the opportunity for both income and capital growth. It is based on top-down economic fundamentals combined with bottom-up local market intelligence.
- Heitman America Real Estate Trust (HART) — The HART strategy creates a high-quality, low-risk portfolio of stabilized, income-producing assets diversified by property type and economic exposure through acquiring assets in infill locations within major metropolitan areas, focusing on strong site attributes such as proximity to amenities and transportation networks, and ensuring that assets are well constructed with features that will appeal to tenants over long periods of time.
- TA Realty Funds X, XI, and XII — TA Realty has managed value-add, commingled real estate funds for approximately 30 years. They have investments in 35 markets, and 4 property types (office, industrial, multifamily, and retail). The firm has developed and refined a consistent approach focused on creating diversified real estate portfolios that can generate strong cash flow, benefit from an intensive asset management approach and result in the long-term creating of value of the life of the fund(s).
- LaSalle Funds VI and VII — The Funds pursue non-core properties that exhibit strong fundamentals and are expected to generate both income and appreciation. The sectors that are focused on are office, multifamily, retail, industrial, and specialty.
- Heitman Value Partners IV (“HPV IV”) is the fourth offering in Heitman’s North American value-add series. It is a closed-end, commingled fund that will pursue a diverse set of real estate opportunities with value-added business plans. The objective is to provide investors with attractive risk-adjusted returns. The strategy seeks to benefit from Heitman’s extensive research, real estate, and capital markets expertise to identify emerging investment opportunities and trends before they are fully appreciated by the broader market. The Fund will execute investment strategies that capitalize on those opportunities.

### Diversified Strategies

This asset class provides diversification to the total portfolio and strives to reduce total fund volatility while also enhancing the total return of the portfolio. The following are the strategies that comprise the Diversified Strategies asset class and are explained in greater detail:

- **Global Risk Premium Tactical Fund (GRPT)** — The AQR Global Risk Premium Tactical Fund seeks to efficiently deliver exposure to a broadly diversified set of global risk premia. In many institutional portfolios, equity risk is the predominant risk, a concentration driven by the need for high expected return that cannot be satisfied in a traditionally constrained, well-diversified portfolio. Rather than diversifying by capital, this strategy seeks to diversify based on risk across global equities, global nominal bonds, inflation sensitive assets, and credit/default related assets. Starting from this strategic risk-parity base, GRPT then employs modest tactical tilts across sub-sectors and across individual exposures, attempting to exploit temporary opportunities which may arise within markets. Following basic financial theory, AQR designed its Risk Parity strategies based on what they believe to be the most optimal liquid portfolio of global market betas, and AQR offers that same portfolio at various levels of leverage to target a desired amount of risk as approximated by ex-ante volatility. AQR's approach employs modest leverage to scale up a lower-risk, broadly-diversified portfolio.
- **Newton Global Real Return (US\$)** — Newton's global real return US\$ strategy is an actively managed, unconstrained, multi-asset strategy, which aims to achieve a return of one-month USD LIBOR +4 % p.a. over rolling five-year periods. The strategy seeks to add value through security selection and asset type flexibility and it also has an emphasis on capital preservation. The strategy is long only, does not use leverage or short securities and is daily valued.
- **Blackstone (Fund of Funds)** — The System hired Blackstone to manage a fund-of-funds strategy. As the name suggests Blackstone invests APERS funds in other hedge funds. The number of funds that APERS invests in varies on market conditions. The types of strategies that are contained within the APERS portfolio also vary. For full disclosure purposes on June 30 there were fundamental equity strategies, event driven strategies, fundamental credit strategies, credit trading strategies, distressed credit strategies, RMBS strategies, structured ABS strategies, multi-strat strategies, commodity strategies, macro rates strategies, thematic macro strategies, quantitative strategies, CTA strategies, and special situation strategies in the portfolio.

### Note 4: Other Post-Employment Benefits

*GASB Statement No. 75: Accounting and Financial Reporting by Employers for Post Employment Benefits Other Than Pensions*, requires that OPEB expense of proprietary and fiduciary funds be recognized on the accrual basis in the fund financial statements. APERS is considered a fiduciary fund in the state-wide comprehensive annual financial report.

The 2020 charge of \$58,203 is a prorated amount from the Arkansas Department of Finance and Administration based on a state-wide actuarial study. The amount charged to APERS is based on budgeted employees of the agency. *The State of Arkansas 2020 Comprehensive Annual Financial Report* will contain the complete OPEB footnote required by GASB Statement No.75.



Note 5: Legally Required Reserves

By law, APERS must maintain reserve accounts showing the equity in the System’s net position restricted for benefits. Significant reserve accounts and a brief description of those accounts are as follows:

- The Members’ Deposit Account (MDA) represents members’ contributions held in trust until member retirement, at which time contributions are transferred to the Retirement Reserve Account, described below.
- The MDA Interest Reserve Account represents the accumulated interest paid on the MDA held in trust until member retirement, at which time interest on member contributions is transferred to the Retirement Reserve Account, described below.
- The Employers’ Accumulation Account accumulates employers’ contributions to be used in providing the reserves required for transfer to the Retirement Reserve Account as members retire or become eligible for disability benefits.
- The Retirement Reserve Account is the account to which member contributions, interest on those contributions, and employer contributions are transferred upon member retirement.
- The Deferred Annuity Account is the amount set up to cover estimated retirement benefits to inactive vested members who are not currently receiving benefit payments.

As a by-product of achieving level contribution financing, actuarial accrued liabilities usually become increasingly well funded over a period of years. Funded ratios in the 70% to 90% range are common in public sector retirement plans.

The reserve strength of APERS remains strong both by absolute and relative measures. Sufficient assets were available to pay estimated retirement benefits applicable to retired individuals or beneficiaries currently receiving benefits and inactive vested individuals who are not currently receiving benefits.

*Reserve Balances (as of June 30, 2020)\**

| Account                                   | System Total            |
|---|-------------------------|
| Members’ Deposit Account                  | \$ 464,165,972          |
| Members' Deposit Account Interest Reserve | 89,346,264              |
| Employer Accumulation Account             | 1,683,714,597           |
| Retirement Reserve                        | 5,883,564,444           |
| Deferred Annuity                          | 542,692,998             |
| DROP Reserve                              | 85,272,616              |
| Delinquent Receivable Reserve             | 73                      |
| Refund Overpayment Receivable Reserve     | 351                     |
| Outlawed Warrants                         | 80,515                  |
| Partial Purchase of Service Reserve       | 1,605                   |
| Dec 31, 2004 Accrued Liability Reserve    | 20,171,055              |
| Petty Cash Reserve                        | 200                     |
| <b>Total</b>                              | <b>\$ 8,769,010,690</b> |

\*Before recommended actuarial transfers. Totals may not add due to rounding.



## Note 6: Net Pension Liability

*Net Pension Liability (as of June 30, 2020)*

|  | Fiscal 2020       | Fiscal 2019       |
|--|-------------------|-------------------|
| Total pension liability  | \$ 11,632,595,177 | \$ 11,245,856,457 |
| Plan fiduciary net position  | \$ 8,769,010,690  | \$ 8,833,327,660  |
| Net pension liability  | \$ 2,863,584,487  | \$ 2,412,528,797  |
| Plan fiduciary net position as a percentage of total pension liability | 75.38%            | 78.55%            |

**Long-Term Expected Return on Plan Assets**

The System's policy in regard to the allocation of its invested assets was established by the Board and is reviewed at least annually to determine if the asset allocation is consistent with an acceptable level of risk and volatility.

The long-term expected rate of return on pension plan investments was determined using a building block method in which best-estimate ranges of expected future real rates of return are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the current asset allocation percentage and by adding expected price inflation. Best estimates of arithmetic real rates of return for the 10-year period from 2020 to 2029 were based upon capital market assumptions provided by the System's investment consultant. For each major asset class that is included in the pension plan's current asset allocation as of June 30, 2020, these best estimates are summarized in the following table:

*Long-Term Expected Return on Plan Assets by Class (as of June 30, 2020)*

| Asset Class                                  | Current Allocation | Long-Term Expected Real Rate of Return |
|--|--------------------|--|
| Broad Domestic Equity                        | 37%                | 6.22%                                  |
| International Equity                         | 24                 | 6.69                                   |
| Real Estate                                  | 16                 | 4.81                                   |
| Absolute Return                              | 5                  | 3.05                                   |
| Domestic Fixed                               | 18                 | 0.57                                   |
| Total  | 100%               |  |
| Total Real Rate of Return                    |                    | 4.93%                                  |
| Plus: Price Inflation - Actuary's Assumption |                    | 2.50                                   |
| Less: Investment Expenses (Passive)          |                    | 0.00                                   |
| Net Expected Return                          |                    | 7.43%                                  |

**Discount Rate**

A single discount rate of 7.15% was used to measure the total pension liability. This single discount rate was based on the expected rate of return on pension plan investments of 7.15%. The projection of cash flows used to determine this single discount rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on these assumptions, the pension plan’s fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

**Sensitivity of the Net Pension Liability**

Regarding the sensitivity of the net pension liability to changes in the single discount rate, the following presents the plan’s net pension liability, calculated using a single discount rate of 7.15%, as well as what the plan’s net pension liability would be if it were calculated using a single discount rate that is 1-percentage-point lower or 1-percentage-point higher:

*Sensitivity of the Net Pension Liability as of June 30, 2020*

|          | 1% Decrease   | Current Discount Rate | 1% Increase      |
|----------|---------------|-----------------------|------------------|
|          | 6.15%         | 7.15%                 | 8.15%            |
| APERS \$ | 4,361,451,033 | \$ 2,863,584,487      | \$ 1,627,505,456 |

**Note 7: Deferred Retirement Option Plan**

A Deferred Retirement Option Plan (DROP) is available to members of the System as authorized by A.C.A. §§ 24-4-801 - 24-4-806. In lieu of terminating employment and accepting a retirement benefit under the System, any member who has at least 28 years of actual service in the System can elect to participate in the DROP. The DROP allows a member to defer the receipt of retirement benefits for a maximum of seven years. During that time, a percentage of a member’s chosen benefit is deposited into an account that accrues interest at a rate of 2% annually. The System had a balance of \$85,272,616 in the DROP reserve as of June 30, 2020.

**Note 8: Capital Assets**

*Capital Asset Activity for the Year Ended June 30, 2020*

|                               | Beginning Balance | Additions      | Retirements | Ending Balance |
|-------------------------------|-------------------|----------------|-------------|----------------|
| Fixed Assets                  | \$ 21,431,644     | \$ 26,037      | \$ 25,293   | \$ 21,432,388  |
| Less Accumulated Depreciation | (4,873,210)       | (2,178,514)    | 25,293      | (7,026,431)    |
| Total                         | \$ 16,558,434     | \$ (2,152,477) | \$ 0        | \$ 14,405,957  |

## REQUIRED SUPPLEMENTARY INFORMATION

The following data on historical trends indicate the System's progress in accumulating sufficient assets to pay benefits when due. It is required supplemental information.

### Schedule of Employer Contributions

#### *Employer Contributions in Millions for Fiscal Years Ended June 30*

| Fiscal Year | Actuarially Determined Contribution | Actual Contribution* | Contribution Deficiency (Excess) | Covered Payroll | Actual Contribution as a % of Covered Payroll |
|-------------|-------------------------------------|----------------------|----------------------------------|-----------------|---|
| 2011        | \$ 197.6                            | \$ 197.6             | \$ 0                             | \$ 1,626        | 12.15%  |
| 2012        | 231.4                               | 231.4                | 0                                | 1,689           | 13.70   |
| 2013        | 251.4                               | 251.4                | 0                                | 1,696           | 14.82   |
| 2014        | 264.1                               | 264.1                | 0                                | 1,748           | 15.11   |
| 2015        | 263.3                               | 263.3                | 0                                | 1,757           | 14.98   |
| 2016        | 264.2                               | 264.2                | 0                                | 1,795           | 14.72   |
| 2017        | 261.3                               | 261.3                | 0                                | 1,788           | 14.61   |
| 2018        | 276.3                               | 276.3                | 0                                | 1,849           | 14.94   |
| 2019        | 293.0                               | 293.0                | 0                                | 1,936           | 15.13   |
| 2020        | \$ 298.9                            | \$ 298.9             | \$ 0                             | \$ 1,929        | 15.49%  |

\*Actual contributions are based on covered payroll at the time of the contribution. This payroll is not reported to the actuary. The covered payroll shown on this page is the valuation payroll. Based upon the limitations of this schedule, the final column cannot be compared to the contribution rates actually charged to APERS participating employers.

## Notes to Schedule of Contributions

Method and Assumptions used to determine Fiscal Year 2020 Contribution Rates:

|                               |   |
|-------------------------------|---|
| Valuation Date                | June 30, 2018 (excluding District Judges)<br>June 30, 2019 (District Judges)  |
| Actuarial Cost Method         | Entry Age Normal  |
| Amortization Method           | Level Percentage of Payroll, Closed (Level Dollar, Closed for District Judges New Plan and Paid Off Old Plan and District Judges Still Paying Old Plan)   |
| Remaining Amortization Period | 26 years (7.6 years for District Judges New Plan/Paid Off Old Plan and 16 years for District Judges Still Paying Old Plan)  |
| Asset Valuation Method        | 4-Year smoothed market; 25% corridor (market value for Still Paying Old Plan)   |
| Inflation                     | 3.25% wage inflation and 2.5% price inflation   |
| Salary Increases              | 3.25% to 9.85% including inflation (3.25% to 6.96% including inflation for District Judges)   |
| Investment Rate of Return     | 7.15%   |
| Retirement Age                | Experience-based table of rates that are specific to the type of eligibility condition  |
| Mortality                     | Based on the RP-2006 Healthy Annuitant benefit weighted generational mortality tables for males and females. Mortality rates are multiplied by 135% for males and 125% for females and are adjusted for fully generational mortality improvements using Scale MP-2017 |
| Notes and Other Information   | None  |

## Schedule of the Net Pension Liability

*Net Pension Liability for Fiscal Years Ended June 30*

| Fiscal Year | Total Pension Liability | Fiduciary Net Position | Net Pension Liability | Fiduciary Net Position as a % of Total Pension Liability | Covered Payroll  | Net Pension Liability as a % of Covered Payroll |
|-------------|-------------------------|------------------------|-----------------------|--|------------------|---|
| 2014        | \$ 8,950,456,656        | \$ 7,531,544,420       | \$ 1,418,912,236      | 84.15%   | \$ 1,748,350,136 | 81.16%  |
| 2015        | 9,391,975,712           | 7,550,242,341          | 1,841,733,371         | 80.39  | 1,757,056,813    | 104.82  |
| 2016        | 9,762,106,222           | 7,370,758,150          | 2,391,348,072         | 75.50  | 1,795,174,463    | 133.21  |
| 2017        | 10,612,937,270          | 8,028,796,790          | 2,584,140,480         | 75.65  | 1,788,074,570    | 144.52  |
| 2018        | 10,808,687,173          | 8,602,752,132          | 2,205,935,041         | 79.59  | 1,849,202,619    | 119.29  |
| 2019        | 11,245,856,457          | 8,833,327,660          | 2,412,528,797         | 78.55  | 1,936,042,263    | 124.61  |
| 2020        | \$ 11,632,595,177       | \$ 8,769,010,690       | \$ 2,863,584,487      | 75.38%   | \$ 1,929,343,374 | 148.42%   |

## Schedule of Investment Returns

*Annual Money-Weighted Rate of Return Net of Investment Expense for Fiscal Years Ended June 30*

| Fiscal Year | Return  |
|-------------|---------|
| 2014        | 18.97%  |
| 2015        | 2.28%   |
| 2016        | (0.06)% |
| 2017        | 11.89%  |
| 2018        | 9.90%   |
| 2019        | 5.31%   |
| 2020        | 2.00%   |

Schedule of Changes in Net Pension Liability and Related Ratios

| Year Ended June 30   | 2020                     | 2019                     |
|--|--------------------------|--------------------------|
| <b>Total Pension Liability</b>   |                          |                          |
| Service Cost   | \$ 198,416,559           | \$ 189,567,873           |
| Interest   | 789,604,504              | 759,163,751              |
| Benefit Changes  | 0                        | (62,984)                 |
| Differences Between Expected And Actual Experience                           | 2,007,866                | 60,093,169               |
| Assumption Changes   | 0                        | 0                        |
| Benefit Payments, including refunds of employee contributions                | (603,290,209)            | (571,592,525)            |
| <b>Net Change In Total Pension Liability</b>                                 | <b>\$ 386,738,720</b>    | <b>\$ 437,169,284</b>    |
| <b>Total Pension Liability, Beginning of Year</b>                            | <b>11,245,856,457</b>    | <b>10,808,687,173</b>    |
| <b>Total Pension Liability, End of Year (A)</b>                              | <b>\$ 11,632,595,177</b> | <b>\$ 11,245,856,457</b> |
| <b>Fiduciary Net Position</b>  |                          |                          |
| Contributions - Employer   | \$ 298,919,954           | \$ 292,951,695           |
| Contributions - Member   | 70,923,737               | 67,221,706               |
| Net Investment Income  | 174,561,773              | 450,493,099              |
| Benefit Payments, including refunds of employee contributions                | (603,290,209)            | (571,592,525)            |
| Administrative Expense   | (11,681,604)             | (14,739,700)             |
| Other Additions  | 6,249,379                | 6,241,253                |
| <b>Net Change In Fiduciary Net Position</b>                                  | <b>(64,316,970)</b>      | <b>230,575,528</b>       |
| <b>Fiduciary Net Position, Beginning of Year</b>                             | <b>\$ 8,833,327,660</b>  | <b>\$ 8,602,752,132</b>  |
| <b>Fiduciary Net Position, End of Year (B)</b>                               | <b>\$ 8,769,010,690</b>  | <b>\$ 8,833,327,660</b>  |
| <b>Net Pension Liability, End of Year (A) - (B)</b>                          | <b>\$ 2,863,584,487</b>  | <b>\$ 2,412,528,797</b>  |
| <b>Fiduciary Net Position as a Percentage of the Total Pension Liability</b> | <b>75.38%</b>            | <b>78.55%</b>            |
| <b>Covered-Employee Payroll</b>  | <b>\$ 1,929,343,374</b>  | <b>\$ 1,936,042,263</b>  |
| <b>Net Pension Liability as a Percentage of Covered-Employee Payroll</b>     | <b>148.42%</b>           | <b>124.61%</b>           |

|    | 2018           | 2017              | 2016             | 2015             | 2014             |
|----|----------------|-------------------|------------------|------------------|------------------|
| \$ | 181,557,602    | \$ 174,663,657    | \$ 169,112,934   | \$ 168,811,990   | \$ 160,924,334   |
|    | 745,846,405    | 719,134,258       | 692,210,941      | 682,217,546      | 658,535,986      |
|    | 0              | 0                 | 0                | 0                | 0                |
|    | (6,960,593)    | 62,849,281        | 2,912,566        | (137,672,890)    | (23,038,076)     |
|    | (180,097,868)  | 416,146,405       | 0                | 192,273,597      | 214,798,742      |
|    | (544,595,643)  | (521,962,553)     | (494,105,931)    | (464,111,187)    | (424,003,992)    |
| \$ | 195,749,903    | \$ 850,831,048    | \$ 370,130,510   | \$ 441,519,056   | \$ 587,216,994   |
|    | 10,612,937,270 | 9,762,106,222     | 9,391,975,712    | 8,950,456,656    | 8,363,239,662    |
| \$ | 10,808,687,173 | \$ 10,612,937,270 | \$ 9,762,106,222 | \$ 9,391,975,712 | \$ 8,950,456,656 |
| \$ | 276,282,425    | \$ 261,334,560    | \$ 264,216,252   | \$ 263,332,831   | \$ 264,050,160   |
|    | 63,430,545     | 57,711,427        | 55,000,117       | 50,750,458       | 47,215,843       |
|    | 782,326,766    | 862,824,701       | (4,260,175)      | 168,929,698      | 1,207,897,156    |
|    | (544,595,643)  | (521,962,553)     | (494,105,931)    | (464,111,187)    | (424,003,992)    |
|    | (11,497,216)   | (9,495,869)       | (6,929,103)      | (6,949,282)      | (6,854,975)      |
|    | 8,008,465      | 7,626,374         | 6,594,649        | 6,745,403        | 8,302,355        |
|    | 573,955,342    | 658,038,640       | (179,484,191)    | 18,697,921       | 1,096,606,547    |
| \$ | 8,028,796,790  | \$ 7,370,758,150  | \$ 7,550,242,341 | \$ 7,531,544,420 | \$ 6,434,937,873 |
| \$ | 8,602,752,132  | \$ 8,028,796,790  | \$ 7,370,758,150 | \$ 7,550,242,341 | \$ 7,531,544,420 |
| \$ | 2,205,935,041  | \$ 2,584,140,480  | \$ 2,391,348,072 | \$ 1,841,733,371 | \$ 1,418,912,236 |
|    | 79.59%         | 75.65%            | 75.50%           | 80.39%           | 84.15%           |
| \$ | 1,849,202,619  | \$ 1,788,074,570  | \$ 1,795,174,463 | \$ 1,757,056,813 | \$ 1,748,350,136 |
|    | 119.29%        | 144.52%           | 133.21%          | 104.82%          | 81.16%           |

NOTES TO REQUIRED SUPPLEMENTARY INFORMATION

Schedule of Administrative Expenses (for the year ended June 30, 2020)

|                                      | 2020                 | 2019                 |
|--------------------------------------|----------------------|----------------------|
| <b>Personnel Services</b>            |                      |                      |
| Salaries and Wages                   | \$ 3,655,540         | \$ 3,658,706         |
| Employee Benefits                    | 826,617              | 826,699              |
| Insurance                            | 408,240              | 413,280              |
| Other                                | 4,357                | 8,891                |
| <b>Total Personnel Services</b>      | <u>4,894,754</u>     | <u>4,907,576</u>     |
| <b>Communications</b>                |                      |                      |
| Postage                              | 173,494              | 222,997              |
| Telecommunications                   | 62,436               | 73,099               |
| Printing and Advertising             | 31,597               | 46,906               |
| Freight and Express                  | 549                  | 253                  |
| Subscriptions and Publications       | 8,049                | 3,871                |
| <b>Total Communications</b>          | <u>276,125</u>       | <u>347,126</u>       |
| <b>Purchases</b>                     |                      |                      |
| Office Supplies                      | 128,986              | 92,039               |
| <b>Total Purchases</b>               | <u>128,986</u>       | <u>92,039</u>        |
| <b>Services and Charges</b>          |                      |                      |
| Professional Fees and Services       | 277,000              | 253,100              |
| Rent Expense                         | 804,495              | 858,565              |
| Travel and Conference Fees           | 22,934               | 28,988               |
| Taxes, Licenses and Permits          | 499                  | 400                  |
| Repairing and Servicing              | 359,224              | 348,295              |
| Insurance and Surety Bonds           | 7,812                | 4,999                |
| Bank and Federal Service Charges     | 58,138               | 57,017               |
| Other Services and Charges           | 83,174               | 85,876               |
| <b>Total Services and Charges</b>    | <u>1,613,277</u>     | <u>1,637,239</u>     |
| <b>Bad Debt Expense</b>              | 65,265               | 716,682              |
| <b>Depreciation Expense</b>          | 2,178,514            | 2,175,693            |
| <b>Post Employment Benefits</b>      | 58,203               | 1,656,182            |
| <b>Data Processing Charges</b>       | <u>2,467,603</u>     | <u>3,207,163</u>     |
| <b>Total Administrative Expenses</b> | <u>\$ 11,682,727</u> | <u>\$ 14,739,700</u> |



## Schedule of Investment Expenses

| Expenses for the Fiscal Years Ended June 30 | 2020                 | 2019                 |
|---|----------------------|----------------------|
| Investment Consultant Fee                   | \$ 301,761           | \$ 301,085           |
| Money Manager Fees*                         | 32,838,081           | 32,679,184           |
| Custodian Bank Fees                         | 497,640              | 504,279              |
| Other Investment Expenses+                  | 11,714,388           | 23,169,394           |
| Total Investment Expenses#                  | <u>\$ 45,351,870</u> | <u>\$ 56,653,942</u> |

\*For fees paid to investment managers, please see the schedule of investment fees shown on page 74 in the Investments Section of this report.

+Decrease due to smaller securities lending portfolio and expense.

#Total investment expenses include international withholding taxes, which are not included in the schedule of investment fees referenced above.

## Payments for Professional Consultants

| Expenses for the Fiscal Years Ended June 30 | 2020              | 2019                |
|---|-------------------|---------------------|
| Gabriel, Roeder, Smith & Company            | \$ 277,000        | \$ 253,100          |
| Linea Solutions                             | 0                 | 1,082,390           |
| Total                                       | <u>\$ 277,000</u> | <u>\$ 1,335,490</u> |

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# Investments Section

Chief Investment Officer's Report

Investment Consultant's Report

Investment Policy Summary  
Review of Investment Policies  
Asset Allocation  
Actual vs Target allocation

Schedule of Manager Distribution

Portfolio Characteristics

Schedule of Comparative Investment Results by Year

Schedule of Comparative Annualized Investment Results

Ten Largest Holdings

Schedule of Brokerage Commissions

Schedule of Investment Fees

*S&P closed at 10058.77 on June 30, 2020.*



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## CHIEF INVESTMENT OFFICER'S REPORT

Dear Members,

Oh behalf of the APERS Investment Department, it is my pleasure to present the Investment Section of the APERS Annual Financial Report for the fiscal year ended June 30, 2020.

### Performance and Stability

For fiscal year 2020, the APERS investment portfolio closed with total investments and cash of \$9,025,426,027. The investment return for the fiscal year was 2.41%.

Positive performance in domestic equities and fixed income was able to overcome negative performance by international equities, diversified strategies, and real assets.

Domestic equities as an asset class contributed 6.06% to the performance of the investment fund. The Dow Jones was able to set a new high in February 2020, right before the Coronavirus COVID-19 pandemic caused the financial markets to tumble in March 2020. The markets were able to rebound and post a positive gain for the fund at the end of the fiscal year (June 2020.)

Diversified strategies turned in -1.17% of the total performance of the investment fund. Fixed income as an asset class contributed 6.81 to the total performance of the investment fund.

International equities and real assets posted returns of -1.45% and -4.37% respectively to the total performance of the fund.

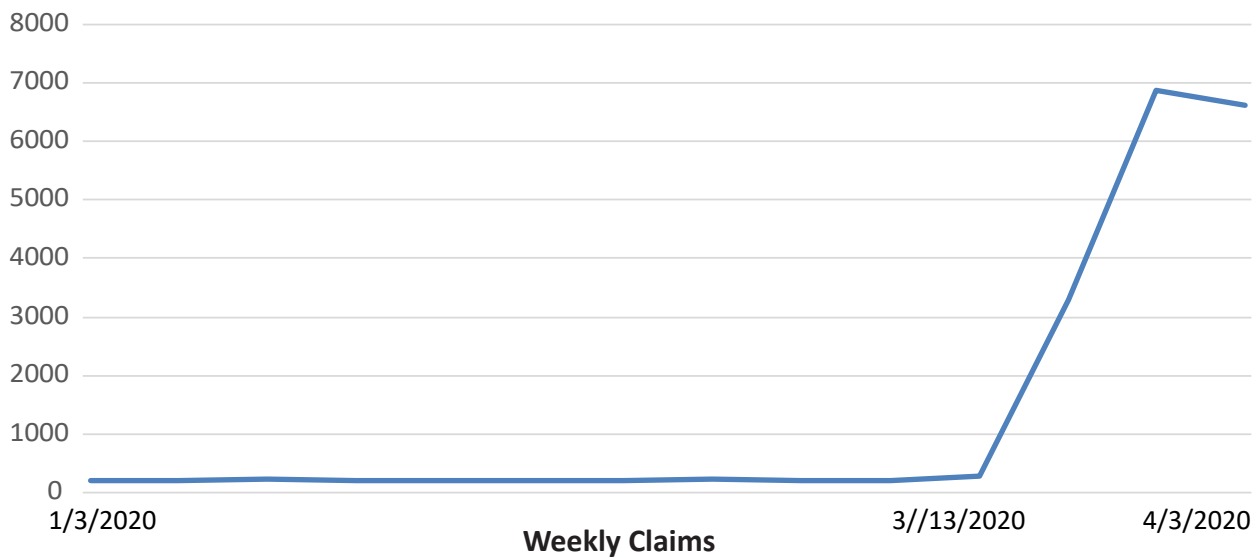
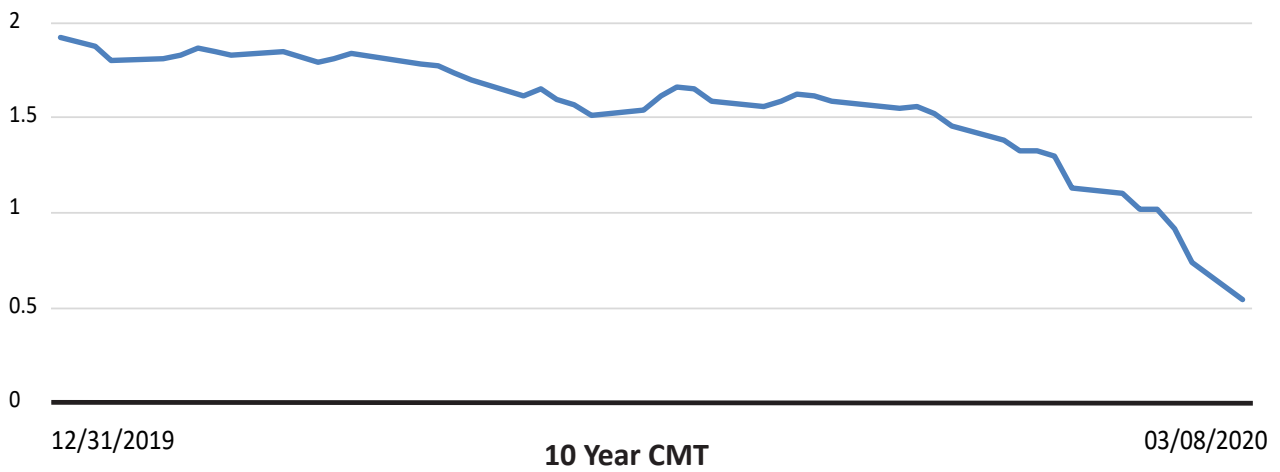
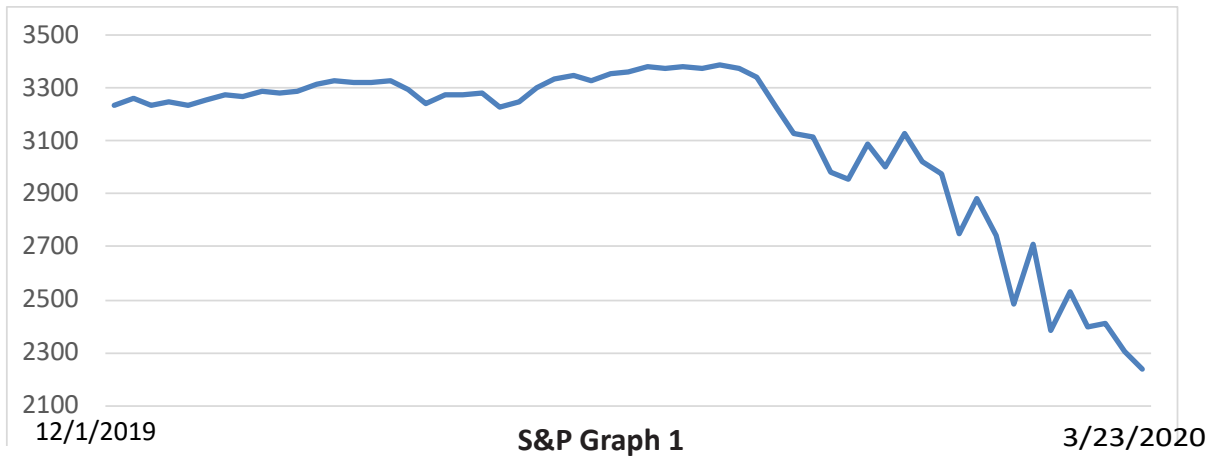
### Fiscal Year 2020 Global Financial Market Recap

I normally would spend time recapping the first and second quarters of fiscal year 2020. I would point out that at the end of the 2019 fiscal year the portfolio was up 6.40%. As good it was to finish 2019 with a strong first half performance, fiscal year 2020 will be remembered for one thing, the Novel Coronavirus (COVID-19) pandemic which erased all gains for the financial markets in a matter of days.

On February 19, 2020 the S&P 500 Index set a new all-time high of 3,386. A month later, on March 23, 2020 the S&P 500 closed at 2,237. The index suffered a 33% peak-to-trough sell-off.

In response to the coronavirus economic disruption, the Federal Reserve announced two emergency rate cuts in the first quarter of 2020. U.S. Treasury interest rates plunged. To relieve the economic contraction fiscal policy stepped in, and Congress passed the CARES Act at the end of March. The fiscal support package totaled over \$2 trillion. It was an attempt to cushion the economic blow of the virus and the new social distancing policies. Oil prices plunged given the pandemic's economic disruption as well as a tit-for-tat price war between Saudi Arabia and Russia. The March non-farm payroll figure saw the U.S. labor markets lose 701,000 jobs, wiping out the jobs added in January and February. Worse was the record 6.6 million that filed for unemployment benefits in the week ending March 28.

They say a picture is worth a thousand words, the following graphs illustrate how the markets reacted in March to the COVID-19 pandemic.



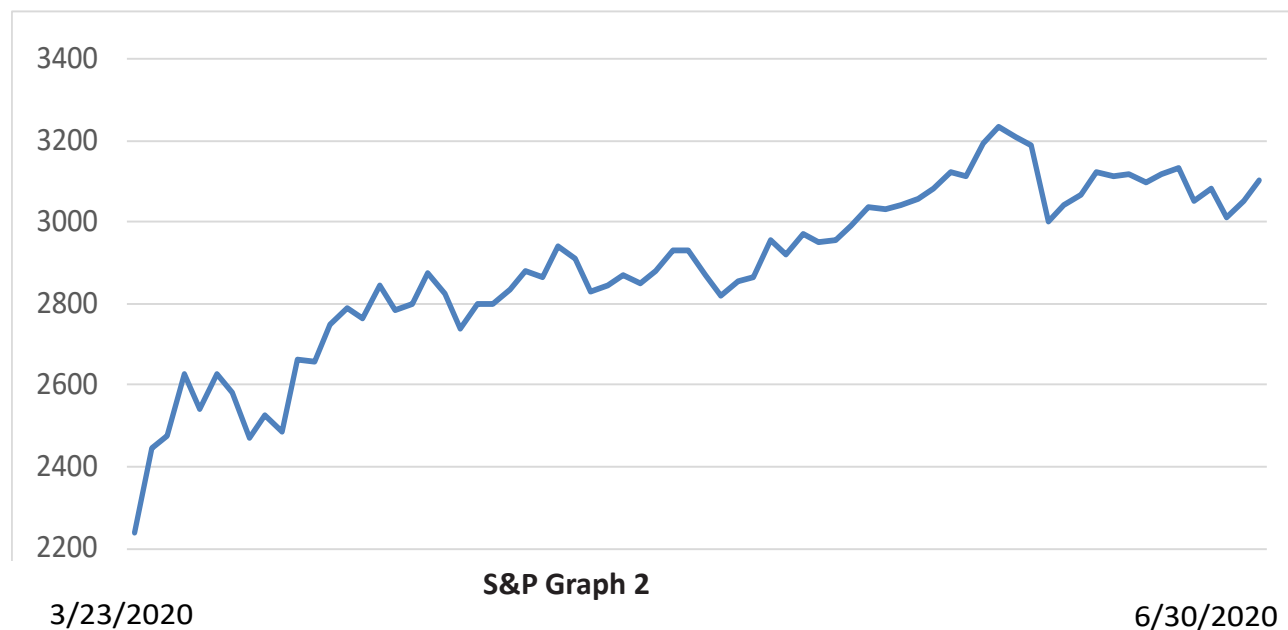
As the fourth quarter of the fiscal year began, the economic impact of COVID-19 could clearly be seen. In April 2020, 20.5 million non-farm payroll jobs were lost, the largest drop ever recorded. The unemployment rate reached 14.7% and more than 33 million Americans filed for unemployment claims. First quarter GDP contracted 5.0%, and second quarter GDP contracted 32.9%.

Those workers who were laid off in March and April started to come back in May as non-farm payrolls added 2.5 million jobs. In June the labor markets added 4.8 million jobs, and the unemployment rate nudged down to 11.1%. The fiscal year ended showing signs of easing pressure on the global markets. Retail sales grew a record 18%. Durable goods orders increased 16% in May. Housing got a boost from relatively low mortgage rates. Pending home sales were up 44%.

As rapidly as the global markets fell in March, they were able to reverse course. However, it took a tsunami of central bank support and fiscal stimulus to fuel confidence and inject liquidity into the markets. The U.S. Federal Reserve cut rates to zero, commenced QE (quantitative easing), instituted multiple facilities to backstop money markets, credit markets, and therefore the economy. Total fiscal stimulus approached \$3 trillion, which was nearly 14% of U.S. GDP. Speculation of a “V-shaped” recovery started to be discussed.

However, I will issue a disclaimer as well as a warning. The positive performance was concentrated. Five stocks represent a bulk of the S&P’s return. Jobless claims continued to hover around 1.5 million people per week with those receiving state benefits at around 18 million. There are still certain segments of the economy that have not participated in the strong rebound and are likely to be impacted for a prolonged period. Hotels, restaurants, airlines, and many small businesses have been among the hardest hit.

As a result, the S&P 500 posted its best quarter since 1998 with a 20.5% return, nearly erasing its first quarter loss.



## Investments

Arkansas Public Employees Retirement System Annual Financial Report 2020

Any economic recovery will be uncertain as COVID-19 infections continue at an alarming rate. Business re-openings may be reversed. The upcoming 2021 fiscal year will be choppy.

I would like to thank each of our Trustees, the ultimate fiduciaries of APERS. APERS' staff is committed to placing the system in the best position to continue to face the challenges of the global financial markets and to ensure that the APERS assets are positioned to provide long-term financial stability for you, the members.

Respectfully yours,

A handwritten signature in black ink that reads "Carlos Borromeo". The signature is written in a cursive, flowing style.

Carlos Borromeo  
Chief Investment Officer



## INVESTMENT CONSULTANT'S REPORT



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

Main 312.346.3536  
Fax 312.346.1356

[www.callan.com](http://www.callan.com)

October 2, 2020

Dear Trustees:

We are pleased to provide a brief review of the progress of the APERS Retirement Plan for the fiscal year ending June 30, 2020.

#### **Introduction and Background**

As with all retirement plans, there are three factors which influence performance:

- Manager Investment Strategies
- Investment Policy adopted by the Fund
- The Investment Environment

During the fiscal year ending June 30, 2020, asset class returns were mixed. The Russell 3000 Index, a broad-based U.S. equity index, returned 6.53% for the year while the MSCI EAFE Index, an international equity index, was down 5.13%. Fixed income markets, as measured by the Bloomberg Aggregate Index, added 8.74% during the fiscal year. The real estate market, as measured by the NCREIF Total Index, was up 2.69%.

#### **Fund Progress and Results**

The APERS portfolio structure is based on the Fund's Investment Policy. The target asset mix is established based on an analysis of the financial needs of the Fund and the Trustees' tolerance for investment risk. The target asset mix and the actual allocation as of June 30, 2020, are listed below:

|                        | <u>Target</u> | <u>Actual</u> |
|------------------------|---------------|---------------|
| Domestic Equity        | 37%           | 40%           |
| International Equity   | 24%           | 24%           |
| Domestic Fixed         | 18%           | 17%           |
| Diversified Strategies | 5%            | 5%            |
| Real Assets            | 16%           | 14%           |

For fiscal year ended June 30, 2020, the total fund rate of return, including gains, losses and income was 2.41%. The performance calculations presented above were prepared by Callan LLC using a time-weighted rate of return methodology based upon the market value of assets and are GIPS compliant.

Over the past five years, the Fund has had an annualized return of 6.11%. The return was below the actuarially assumed interest rate of 7.15%.

## Callan

2

At the beginning of the fiscal year, the assets of the fund totaled \$9.2 billion; at June 30, 2020, the Fund assets totaled \$9.1 billion. The Fund experienced a decrease in value, despite positive investment returns, due to benefit payments distributed during the fiscal year.

### **Summary**

The operations of the investment program continue to function within the long-term guidelines established by the Board of Trustees.

Sincerely,



Brianne R. Weymouth, CAIA  
Senior Vice President

## INVESTMENT POLICY SUMMARY

The investment objective of the Arkansas Public Employees Retirement System (APERS) shall be to

1. Protect the APERS fund (the fund) so that its assets are preserved for providing benefits to participants and their beneficiaries, and
2. Maximize total return – either in the form of income or capital appreciation or both – in a manner that is consistent with prudent risk taking on the amounts available to provide such benefits.

For this purpose, short-term fluctuations in value shall be considered secondary to long-term investment results. The long-term return objective for the fund shall be to achieve a real rate of return of 4.5%. This is the return over the rate of inflation (as measured by the Consumer Price Index). This objective is not to be a goal from year to year but is intended as a long-term guideline to those involved in investing the fund's assets.

An additional overall investment objective will be to achieve a total fund return of at least the actuarial rate of 7.15%. The investments of the fund shall be so diversified as to minimize the risk of large losses, unless under particular circumstances it is clearly prudent not to do so. Investments will be further diversified by hiring an appropriate number of managers whose investment styles are varied enough to provide a balance to the overall risk of the fund.

### Review of Investment Process

1. On a timely basis, at least twice a year, the Board will review actual results achieved by the investment managers (with a perspective toward a three to five-year period or a peak-to-peak or trough-to-trough market cycle) to determine whether their performance
  - a. followed APERS' investment philosophy and policy guidelines,
  - b. achieved the investment objectives, and
  - c. compared satisfactorily with the performance of other similarly managed funds.
2. In addition to reviewing each investment manager's results, the Board will periodically re-evaluate its progress in achieving its objectives for the total fund and its equity, fixed-income, and international equity segments.
3. The periodic re-evaluation will also consider the continuing appropriateness of
  - a. the manager structure,
  - b. the allocation of assets among the managers, and
  - c. the investment objectives for the fund's assets.
4. The Board may appoint investment consultants to assist in the ongoing evaluation process. The consultants selected by the Board are expected to be familiar with the investment practices of other similar retirement plans and will be responsible for suggesting appropriate changes in the fund's investment program over time.

## Asset Allocation

In order to ensure that the System's investments are prudently diversified, the Board has established the following asset allocation on guidelines:

### Asset Allocation Guidelines

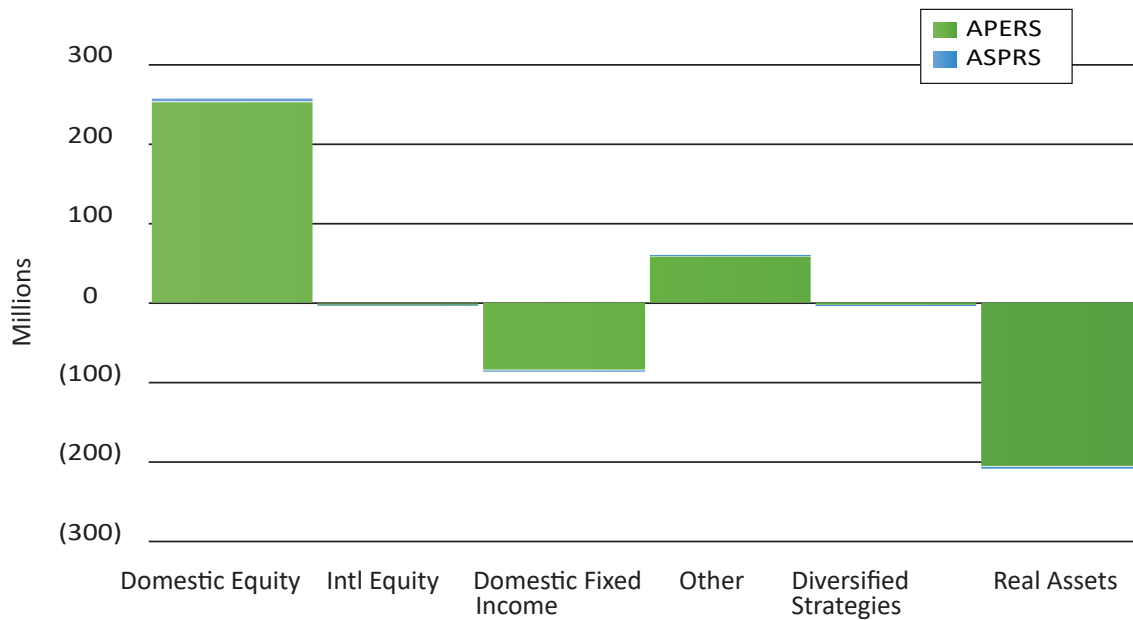
| Asset Type             | Allocation Target | Lower and Upper Limits |
|------------------------|-------------------|------------------------|
| Equities               | 37%               | 32% - 42%              |
| International Equities | 24%               | 19% - 29%              |
| Fixed Income           | 18%               | 13% - 23%              |
| Diversified Strategies | 5%                | 0% - 10%               |
| Real Assets            | 16%               | 11% - 21%              |
|                        | 100%              |                        |

### Actual vs. Target Allocation (as of June 30, 2020)

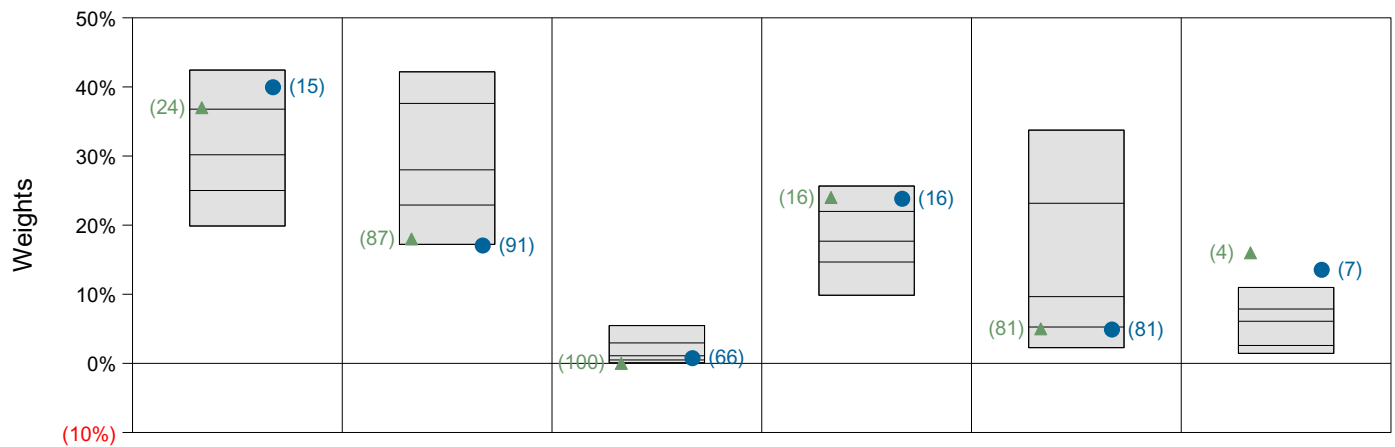
| Asset Class            | \$\$\$ Actual | \$\$\$ APERS | Weight Actual | Target | % Difference | \$\$\$ Difference | APERS \$\$\$ Difference |
|------------------------|---------------|--------------|---------------|--------|--------------|-------------------|-------------------------|
| Domestic Equity        | \$ 3,632,992  | \$ 3,501,108 | 40.0%         | 37.0%  | 3.0%         | \$ 268,397        | \$ 258,654              |
| Int'l Equity           | \$ 2,165,607  | \$ 2,086,992 | 23.8%         | 24.0%  | (0.2)%       | \$ (16,832)       | \$ (16,221)             |
| Domestic Fixed Income  | \$ 1,550,524  | \$ 1,494,237 | 17.1%         | 18.0%  | (0.9)%       | \$ (86,306)       | \$ (83,173)             |
| Other                  | \$ 68,072     | \$ 65,601    | 0.7%          | 0.0%   | 0.7%         | \$ 68,072         | \$ 65,601               |
| Diversified Strategies | \$ 445,287    | \$ 429,122   | 4.9%          | 5.0%   | (0.1)%       | \$ (9,388)        | \$ (9,047)              |
| Real Assets            | \$ 1,231,016  | \$ 1,186,328 | 13.5%         | 16.0%  | (2.5)%       | \$ (223,943)      | \$ (215,813)            |
| Total                  | \$ 9,093,498  | \$ 8,763,388 | 100.0%        | 100.0% |              |                   |                         |

| Asset Class            | \$\$\$ Actual | \$\$\$ ASPRS | Weight Actual | Target | % Difference | \$\$\$ Difference | ASPRS \$\$\$ Difference |
|------------------------|---------------|--------------|---------------|--------|--------------|-------------------|-------------------------|
| Domestic Equity        | \$ 3,632,992  | \$ 131,884   | 40.0%         | 37.0%  | 3.0%         | \$ 268,397        | \$ 9,743                |
| Int'l Equity           | \$ 2,165,607  | \$ 78,615    | 23.8%         | 24.0%  | (0.2)%       | \$ (16,832)       | \$ (611)                |
| Domestic Fixed Income  | \$ 1,550,524  | \$ 56,287    | 17.1%         | 18.0%  | (0.9)%       | \$ (86,306)       | \$ (3,133)              |
| Other                  | \$ 68,072     | \$ 2,471     | 0.7%          | 0.0%   | 0.7%         | \$ 68,072         | \$ 2,471                |
| Diversified Strategies | \$ 445,287    | \$ 16,165    | 4.9%          | 5.0%   | (0.1)%       | \$ (9,388)        | \$ (341)                |
| Real Assets            | \$ 1,231,016  | \$ 44,688    | 13.5%         | 16.0%  | (2.5)%       | \$ (223,943)      | \$ (8,130)              |
| Total                  | \$ 9,093,498  | \$ 330,110   | 100.0%        | 100.0% |              |                   |                         |

Actual vs. Target Allocation (as of June 30, 2020)



The illustration below shows the average percentage of asset allocations by asset type for the Public Plan Sponsor Database. Due to different asset allocations of public plans, percentages will not equal 100%.



|                  | Domestic Equity | Domestic Fixed-Income | in house | Intl Equity | Other Alternatives | Real Assets |
|------------------|-----------------|-----------------------|----------|-------------|--------------------|-------------|
| 10th Percentile  | 42.44           | 42.19                 | 5.47     | 25.66       | 33.75              | 10.98       |
| 25th Percentile  | 36.78           | 37.61                 | 2.96     | 21.99       | 23.16              | 7.86        |
| Median           | 30.18           | 28.00                 | 1.10     | 17.68       | 9.66               | 6.09        |
| 75th Percentile  | 25.01           | 22.91                 | 0.50     | 14.66       | 5.26               | 2.59        |
| 90th Percentile  | 19.88           | 17.22                 | 0.08     | 9.86        | 2.27               | 1.44        |
| ● Fund           | 39.95           | 17.05                 | 0.75     | 23.81       | 4.90               | 13.54       |
| ▲ Target         | 37.00           | 18.00                 | 0.00     | 24.00       | 5.00               | 16.00       |
| % Group Invested | 97.83%          | 98.55%                | 79.09%   | 97.10%      | 39.44%             | 23.19%      |

## SCHEDULE OF MANAGER DISTRIBUTION (for the year ended June 30, 2020)

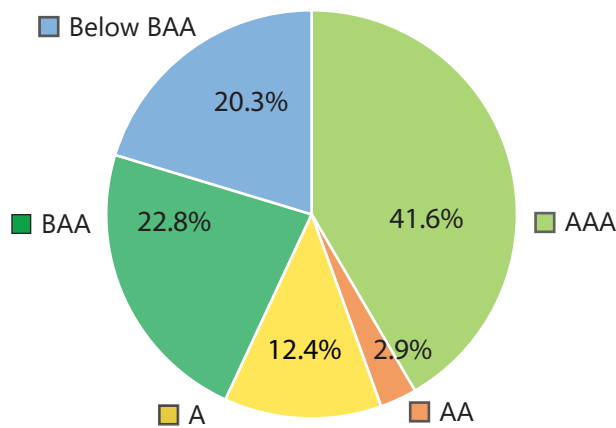
| Asset Allocation                        | Market Value            | % of Total     | APERS                   | ASPRS                 |
|---|-------------------------|----------------|-------------------------|-----------------------|
| <b>Domestic Equity</b>                  |                         |                |                         |                       |
| MCM S&P 500 Index Fund                  | \$ 292,325,246          | 3.21%          | \$ 281,713,314          | \$ 10,611,933         |
| LSV Asset Management                    | 196,177,983             | 2.16           | 189,056,369             | 7,121,614             |
| CastleArk Management                    | 662,166,664             | 7.28           | 638,128,822             | 24,037,842            |
| Golden Capital Management               | 219,966,493             | 2.42           | 211,981,313             | 7,985,180             |
| INTECH                                  | 592,661,269             | 6.52           | 571,146,598             | 21,514,671            |
| Wellington Management Co.               | 402,828,210             | 4.43           | 388,204,821             | 14,623,389            |
| Westwood Management                     | 0                       | 0.00           | 0                       | 0                     |
| Lazard Asset Management                 | 386,109,165             | 4.25           | 372,092,708             | 14,016,458            |
| SSI Investment Management               | 351,447,432             | 3.86           | 338,689,258             | 12,758,174            |
| Horrell Capital Management              | 132,022,663             | 1.45           | 127,230,003             | 4,792,660             |
| Stephens Investment Management Group    | 397,286,460             | 4.37           | 382,864,247             | 14,422,214            |
|   | <u>\$ 3,632,991,587</u> | <u>39.95%</u>  | <u>\$ 3,501,107,453</u> | <u>\$ 131,884,134</u> |
| <b>International Equity</b>             |                         |                |                         |                       |
| Mellon ACWI ex-US Fund                  | \$ 758,289,684          | 8.34%          | \$ 730,762,403          | \$ 27,527,280         |
| Lazard Asset Management                 | 454,065,772             | 4.99           | 437,582,367             | 16,483,405            |
| Artisan Partners                        | 425,212,019             | 4.68           | 409,776,058             | 15,435,962            |
| Baillie Gifford                         | 527,752,854             | 5.80           | 508,594,475             | 19,158,379            |
| Manning & Napier                        | 286,869                 | 0.00           | 276,455                 | 10,414                |
| Fidelity                                | 0                       | 0.00           | 0                       | 0                     |
|   | <u>\$ 2,165,607,198</u> | <u>23.81%</u>  | <u>\$ 2,086,991,759</u> | <u>\$ 78,615,439</u>  |
| <b>Fixed Income</b>                     |                         |                |                         |                       |
| Doubleline Capital                      | \$ 479,486,950          | 5.27%          | \$ 462,080,710          | \$ 17,406,239         |
| MacKay Shields                          | 526,102,200             | 5.79           | 507,003,743             | 19,098,457            |
| Prudential Investments                  | 544,934,658             | 5.99           | 525,152,549             | 19,782,109            |
|   | <u>\$ 1,550,523,807</u> | <u>17.05%</u>  | <u>\$ 1,494,237,002</u> | <u>\$ 56,286,805</u>  |
| <b>Real Assets</b>                      |                         |                |                         |                       |
| INVESCO Real Estate                     | \$ 472,768,790          | 5.20%          | \$ 455,606,432          | \$ 17,162,358         |
| MCM REIT Index Fund                     | 100,568,746             | 1.11           | 96,917,920              | 3,650,827             |
| TA Associates Realty Fund X             | 3,395,491               | 0.04           | 3,272,229               | 123,262               |
| TA Associates Realty Fund XI            | 50,116,492              | 0.55           | 48,297,173              | 1,819,319             |
| TA Associates Realty Fund XII           | 6,070,844               | 0.07           | 5,850,461               | 220,383               |
| CastleArk Management                    | 33,132,705              | 0.36           | 31,929,928              | 1,202,777             |
| CastleArk Management Global Energy Fund | 101,038,651             | 1.11           | 97,370,766              | 3,667,885             |
| Pinnacle Forest Investments             | 84,695,862              | 0.93           | 81,621,250              | 3,074,612             |
| Heitman Real Estate Trust LP            | 299,929,972             | 3.30           | 289,041,974             | 10,887,998            |
| Heitman Value Partners                  | 33,680,993              | 0.37           | 32,458,312              | 1,222,681             |
| LaSalle Inc & Growth VI LP              | 10,112,583              | 0.11           | 9,745,478               | 367,105               |
| LaSalle Inc & Growth VII LP             | 35,505,269              | 0.39           | 34,216,364              | 1,288,905             |
|   | <u>\$ 1,231,016,399</u> | <u>13.54%</u>  | <u>\$ 1,186,328,287</u> | <u>\$ 44,688,111</u>  |
| <b>Diversified Strategies</b>           |                         |                |                         |                       |
| AQR Capital                             | \$ 136,877,838          | 1.51%          | \$ 131,908,926          | \$ 4,968,912          |
| Blackstone Hedge                        | 183,287,628             | 2.02           | 176,633,957             | 6,653,671             |
| Newton Capital                          | 125,121,572             | 1.38           | 120,579,433             | 4,542,138             |
|   | <u>\$ 445,287,037</u>   | <u>4.90%</u>   | <u>\$ 429,122,316</u>   | <u>\$ 16,164,721</u>  |
| <b>Short-term Investment Fund</b>       |                         |                |                         |                       |
|   | <u>\$ 68,071,675</u>    | <u>0.75%</u>   | <u>\$ 57,798,320</u>    | <u>\$ 10,273,355</u>  |
| <b>Composite Fund</b>                   | <u>\$ 9,093,497,703</u> | <u>100.00%</u> | <u>\$ 8,755,585,137</u> | <u>\$ 337,912,566</u> |

Totals may not add due to rounding.

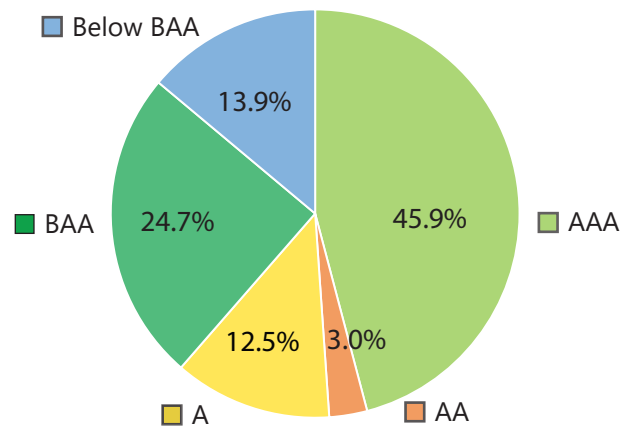
PORTFOLIO CHARACTERISTICS

| Fiscal Years Ended June 30                    | 2020      | 2019      |
|---|-----------|-----------|
| <b>Selected Bond Characteristics</b>          |           |           |
| Yield to Maturity (Market)                    | 2.78%     | 3.15%     |
| Current Yield                                 | 3.09%     | 3.53%     |
| Average Coupon Rate                           | 3.48%     | 3.73%     |
| Average Maturity                              | 8.13 yrs. | 7.41 yrs. |
| <b>Quality Breakdown</b>                      |           |           |
| AAA (includes Govts & Agencies)               | 41.6%     | 45.9%     |
| AA  | 2.9%      | 3.0%      |
| A   | 12.4%     | 12.5%     |
| BAA   | 22.8%     | 24.7%     |
| Below BAA                                     | 20.3%     | 13.9%     |
| <b>Selected Stock Characteristics</b>         |           |           |
| Average P/E Ratio                             | 27.13x    | 23.8x     |
| Estimated Earnings Growth Rate (Next 5 Years) | 12.35%    | 14.82%    |
| Current Yield                                 | 1.42%     | 1.52%     |

Quality Breakdown 2020



Quality Breakdown 2019



## SCHEDULE OF COMPARATIVE INVESTMENT RESULTS BY YEAR

| Fiscal Years Ended                             | 2020    | 2019   | 2018   | 2017   | 2016    | 2015    | 2014   |
|--|---------|--------|--------|--------|---------|---------|--------|
| <b>Total Fund</b>                              |         |        |        |        |         |         |        |
| APERS  | 2.41%   | 5.78%  | 10.25% | 12.30% | 0.30%   | 2.45%   | 19.68% |
| Callan Total Public Fund Median                | 3.26    | 6.19   | 8.23   | 12.42  | 0.54    | 3.24    | 16.30  |
| APERS Benchmark                                | 4.91    | 6.68   | 8.40   | 12.90  | 0.27    | 2.77    | 17.37  |
| <b>Equities</b>                                |         |        |        |        |         |         |        |
| APERS  | 6.06%   | 8.12%  | 16.27% | 17.52% | (0.38)% | 7.25%   | 24.48% |
| Callan Total Equity Database Median            | 3.18    | 7.73   | 15.02  | 19.48  | (1.58)  | 7.17    | 25.26  |
| Russell 3000 Index                             | 6.53    | 8.98   | 14.78  | 18.51  | 2.14    | 7.29    | 25.22  |
| <b>International Equities</b>                  |         |        |        |        |         |         |        |
| APERS  | (1.45)% | 1.98%  | 7.22%  | 18.39% | (6.88)% | (2.38)% | 24.43% |
| Callan Total Non-U.S. Equities Database Median | (4.14)  | 0.57   | 8.05   | 20.86  | (8.20)  | (1.80)  | 23.34  |
| MSCI-EAFE Index                                | (5.13)  | 1.08   | 6.84   | 20.27  | (10.16) | (4.22)  | 23.57  |
| <b>Fixed Income</b>                            |         |        |        |        |         |         |        |
| APERS  | 6.81%   | 8.57%  | 0.79%  | 3.04%  | 5.06%   | 1.32%   | 7.03%  |
| Callan Total Fixed Income Database Median      | 6.93    | 7.34   | 0.26   | 1.16   | 4.48    | 1.59    | 5.54   |
| Bloomberg Aggregate Index                      | 8.74    | 7.87   | (0.40) | (0.31) | 6.00    | 1.86    | 4.37   |
| <b>Diversified Strategies</b>                  |         |        |        |        |         |         |        |
| APERS  | (1.17)% | 10.20% | 6.43%  | 5.51%  | 2.86%   | 1.97%   | 13.91% |
| Callan Int'l/Global Balanced Database Median   | 0.55    | 2.31   | 6.53   | 7.54   | (1.73)  | 0.59    | 13.59  |
| <b>Real Assets</b>                             |         |        |        |        |         |         |        |
| APERS  | (4.37)% | 1.72%  | 11.34% | 3.27%  | 8.29%   | 0.19%   | 14.51% |
| Consumer Price Index - U + 4%                  | 4.65    | 5.65   | 6.87   | 5.63   | 5.01    | 4.13    | 6.07   |



## SCHEDULE OF COMPARATIVE ANNUALIZED INVESTMENT RESULTS

*Investment Results for Fiscal Year Ended June 30, 2020 and the Preceding 3 and 5 Year Periods\**

|  | 2020    | 3-Year<br>Annualized | 5-Year<br>Annualized |
|--|---------|----------------------|----------------------|
| <b>Total Fund</b>                                    |         |                      |                      |
| APERS  | 2.41%   | 6.10%                | 6.11%                |
| Callan Total Public Fund Median                      | 3.26    | 5.81                 | 6.02                 |
| Inflation (Consumer Price Index)                     | 1.65    | 1.72                 | 1.56                 |
| APERS Benchmark                                      | 4.91    | 6.65                 | 6.55                 |
| <b>Equities</b>                                      |         |                      |                      |
| APERS  | 6.06%   | 10.06%               | 9.32%                |
| Callan Total Equity Database Median                  | 3.18    | 8.70                 | 8.88                 |
| Russell 3000 Index                                   | 6.53    | 10.04                | 10.03                |
| <b>International Equities</b>                        |         |                      |                      |
| APERS  | (1.45)% | 2.52%                | 3.50%                |
| Callan Total Non-U.S. Equities Database Median       | (4.14)  | 1.53                 | 2.92                 |
| MSCI-EAFE Index                                      | (5.13)  | 0.81                 | 2.05                 |
| <b>Fixed Income</b>                                  |         |                      |                      |
| APERS  | 6.81%   | 5.34%                | 4.82%                |
| Callan Total Fixed Income Database Median            | 6.93    | 4.89                 | 4.31                 |
| Bloomberg Aggregate Index                            | 8.74    | 5.32                 | 4.30                 |
| <b>Diversified Strategies</b>                        |         |                      |                      |
| APERS  | (1.17)% | 5.04%                | 4.69%                |
| Callan International/Global Balanced Database Median | 0.55    | 3.07                 | 3.81                 |
| <b>Real Assets</b>                                   |         |                      |                      |
| APERS  | (4.37)% | 2.69%                | 3.91%                |
| Consumer Price Index - U + 4%                        | 4.65    | 5.72                 | 5.56                 |

\*Source: Callan Associates Inc. Returns are reported gross of fees.

## TEN LARGEST HOLDINGS (for the year ended June 30, 2020)\*

| Domestic Fixed Income Holdings    | Par Value     | Market Value         | APERS                | ASPRS               |
|-----------------------------------|---------------|----------------------|----------------------|---------------------|
| 1 U.S. Treasury 2.00 02/15/2050   | \$ 14,910,000 | \$ 17,075,379        | \$ 16,455,512        | \$ 619,867          |
| 2 U.S. Treasury 0.25% 06/15/2023  | 11,330,000    | 11,353,906           | 10,941,739           | 412,167             |
| 3 U.S. Treasury 4.375% 11/15/2039 | 6,431,000     | 10,112,233           | 9,745,141            | 367,092             |
| 4 FNMA 2.500% 07/01/2046          | 9,675,542     | 9,993,287            | 9,630,513            | 362,774             |
| 5 U.S. Treasury 0.25% 05/31/2025  | 9,500,000     | 9,488,505            | 9,144,055            | 344,450             |
| 6 U.S. Treasury 1.625% 08/15/2029 | 8,500,000     | 9,274,605            | 8,937,920            | 336,685             |
| 7 U.S. Treasury 0.875% 01/15/2029 | 7,627,306     | 8,689,485            | 8,374,041            | 315,444             |
| 8 U.S. Treasury 0.50% 05/31/2027  | 7,970,000     | 7,978,129            | 7,688,509            | 289,620             |
| 9 U.S. Treasury 1.75% 11/30/2021  | 7,330,000     | 7,493,532            | 7,221,504            | 272,029             |
| 10 FHLMC 3.000% 03/01/2042        | 6,989,909     | 7,489,268            | 7,217,394            | 271,874             |
| <b>Total</b>                      |               | <u>\$ 98,948,331</u> | <u>\$ 95,356,328</u> | <u>\$ 3,592,003</u> |

| Domestic Equity Holdings       | Shares  | Market Value          | APERS                 | ASPRS                |
|--------------------------------|---------|-----------------------|-----------------------|----------------------|
| 1 Microsoft Corporation        | 700,223 | \$ 142,502,383        | \$ 137,329,290        | \$ 5,173,093         |
| 2 Apple Inc.                   | 283,062 | 103,261,018           | 99,512,457            | 3,748,561            |
| 3 Amazon.Com Inc.              | 28,673  | 79,103,646            | 76,232,041            | 2,871,605            |
| 4 Alphabet Inc. Class A Shares | 31,579  | 44,780,601            | 43,154,985            | 1,625,616            |
| 5 McDonald's Corporation       | 241,390 | 44,529,213            | 42,912,723            | 1,616,491            |
| 6 Medtronic PLC                | 466,197 | 42,750,265            | 41,198,353            | 1,551,912            |
| 7 Lowe's Cos. Inc.             | 284,957 | 38,503,390            | 37,105,647            | 1,397,742            |
| 8 Alphabet Inc. Class C Shares | 26,587  | 37,583,649            | 36,219,295            | 1,364,354            |
| 9 S&P Global Inc.              | 111,175 | 36,629,939            | 35,300,206            | 1,329,733            |
| 10 Nvidia Corporation          | 87,031  | 33,063,947            | 31,863,666            | 1,200,281            |
| <b>Total</b>                   |         | <u>\$ 602,708,050</u> | <u>\$ 580,828,663</u> | <u>\$ 21,879,387</u> |

| International Equity Holdings     | Shares    | Market Value          | APERS                 | ASPRS               |
|-----------------------------------|-----------|-----------------------|-----------------------|---------------------|
| 1 Samsung Electronics Co. Ltd.    | 598,165   | \$ 26,256,904         | \$ 25,303,732         | \$ 953,173          |
| 2 ABB Ltd.                        | 1,087,838 | 24,487,979            | 23,599,021            | 888,958             |
| 3 Naver Corporation               | 92,751    | 20,588,204            | 19,840,815            | 747,389             |
| 4 Compass Group PLC               | 1,382,433 | 18,994,452            | 18,304,920            | 689,533             |
| 5 UBS Group AG                    | 1,577,847 | 18,158,853            | 17,499,654            | 659,199             |
| 6 Fresenius Medical Care AG & Co. | 197,214   | 16,900,519            | 16,287,000            | 613,519             |
| 7 Novartis AG                     | 172,050   | 14,965,290            | 14,422,024            | 543,267             |
| 8 CIE Financiere Richemont SA     | 228,526   | 14,576,657            | 14,047,498            | 529,159             |
| 9 ASML Holding NV                 | 37,324    | 13,703,795            | 13,206,323            | 497,472             |
| 10 Sanofi                         | 133,889   | 13,631,714            | 13,136,858            | 494,856             |
| <b>Total</b>                      |           | <u>\$ 182,264,369</u> | <u>\$ 175,647,845</u> | <u>\$ 6,616,525</u> |

\*By market value. Totals may not add due to rounding.

## SCHEDULE OF BROKERAGE COMMISSIONS (for the year ended June 30, 2020)

| Brokerage Firm                             | Number of<br>Shares Traded | Total<br>Commission | Commission<br>Per Share | APERS               | ASPRS            |
|--|----------------------------|---------------------|-------------------------|---------------------|------------------|
| J.P. Morgan Securities, NY                 | 8,899,443                  | \$ 169,058          | \$ 0.02                 | \$ 162,921          | \$ 6,137         |
| Citigroup Global Markets Inc., NY          | 4,687,125                  | 139,185             | 0.03                    | 134,133             | 5,053            |
| Morgan Stanley & Co. Inc., NY              | 5,706,792                  | 118,404             | 0.02                    | 114,106             | 4,298            |
| Credit Suisse, New York                    | 12,754,516                 | 115,395             | 0.01                    | 111,205             | 4,189            |
| Merrill Lynch Pierce Fenner Smith Inc., NY | 8,098,964                  | 103,003             | 0.01                    | 99,264              | 3,739            |
| Goldman Sachs & Co., NY                    | 7,498,877                  | 99,942              | 0.01                    | 96,314              | 3,628            |
| UBS Securities LLC, Stamford               | 4,225,891                  | 71,009              | 0.02                    | 68,431              | 2,578            |
| Sanford Bernstein & Co., NY                | 4,359,207                  | 70,328              | 0.02                    | 67,775              | 2,553            |
| Jefferies & Co. Inc., NY                   | 4,080,380                  | 61,240              | 0.02                    | 59,017              | 2,223            |
| Liquidnet Inc., NY                         | 2,817,937                  | 54,752              | 0.02                    | 52,764              | 1,988            |
| Barclays Capital Inc., New Jersey          | 2,058,863                  | 51,309              | 0.02                    | 49,447              | 1,863            |
| Investment Tech Group Inc., NY             | 3,047,562                  | 49,747              | 0.02                    | 47,941              | 1,806            |
| Piper Jaffray & Co., Jersey City           | 2,036,770                  | 49,186              | 0.02                    | 47,400              | 1,786            |
| RBC Capital Markets LLC                    | 3,718,228                  | 47,513              | 0.01                    | 45,788              | 1,725            |
| Instinet Clearing Services Inc., NY        | 2,910,369                  | 47,028              | 0.02                    | 45,321              | 1,707            |
| BMO Capital Markets, NY                    | 1,356,038                  | 42,939              | 0.03                    | 41,381              | 1,559            |
| Knight Equity Markets LP, NY               | 1,806,142                  | 42,374              | 0.02                    | 40,835              | 1,538            |
| SG Securities                              | 1,942,482                  | 37,155              | 0.02                    | 35,806              | 1,349            |
| William Blair & Co., Chicago               | 1,172,598                  | 35,202              | 0.03                    | 33,924              | 1,278            |
| ISI Group, NY                              | 1,258,227                  | 33,763              | 0.03                    | 32,538              | 1,226            |
| Robert W. Baird & Co. Inc., Milwaukee      | 968,186                    | 32,900              | 0.03                    | 31,705              | 1,194            |
| Pershing Securities, LTD                   | 2,808,924                  | 28,616              | 0.01                    | 27,577              | 1,039            |
| MacQuarie Securities                       | 2,517,416                  | 27,316              | 0.01                    | 26,325              | 992              |
| National Financial Services Corp., NY      | 1,146,303                  | 26,246              | 0.02                    | 25,293              | 953              |
| Wells Fargo Securities LLC                 | 871,007                    | 26,151              | 0.03                    | 25,201              | 949              |
| Others (including 95 brokerage firms)      | 26,789,428                 | 430,984             | 0.02                    | 415,339             | 15,646           |
|  | <u>119,537,675</u>         | <u>\$ 2,010,746</u> |                         | <u>\$ 1,937,752</u> | <u>\$ 72,994</u> |

Totals may not add due to rounding.

SCHEDULE OF INVESTMENT FEES (for the year ended June 30, 2020)

| Investment Category                  | Market Value            | Fee                  | Basis Points | APERS                   |                      | ASPRS                 |                     |
|--------------------------------------|-------------------------|----------------------|--------------|-------------------------|----------------------|-----------------------|---------------------|
|                                      |                         |                      |              | Market Value            | Fee                  | Market Value          | Fee                 |
| <b>Domestic Equity</b>               |                         |                      |              |                         |                      |                       |                     |
| MCM S&P 500 Index Fund               | \$ 292,325,246          | \$ 60,072.35         | 0.02         | \$ 281,713,314          | \$ 57,892            | \$ 10,611,933         | \$ 2,181            |
| MCM RU2000 Value Fund                | 0                       | 0                    |              | 0                       | 0                    | 0                     | 0                   |
| LSV Asset Management                 | 196,177,983             | 1,282,200            | 0.65         | 189,056,369             | 1,235,654            | 7,121,614             | 46,546              |
| CastleArk Management                 | 662,166,664             | 1,854,751            | 0.28         | 638,128,822             | 1,787,420            | 24,037,842            | 67,331              |
| Golden Capital Management            | 219,966,493             | 471,725              | 0.21         | 211,981,313             | 454,601              | 7,985,180             | 17,124              |
| INTECH                               | 592,661,269             | 1,987,206            | 0.34         | 571,146,598             | 1,915,067            | 21,514,671            | 72,139              |
| Wellington Management Co.            | 402,828,210             | 1,260,600            | 0.31         | 388,204,821             | 1,214,838            | 14,623,389            | 45,762              |
| * Westwood Management                | 0                       | 0                    |              | 0                       | 0                    | 0                     | 0                   |
| Lazard Asset Management              | 386,109,165             | 1,144,007            | 0.30         | 372,092,708             | 1,102,478            | 14,016,458            | 41,530              |
| SSI Investment Management            | 351,447,432             | 1,263,052            | 0.36         | 338,689,258             | 1,217,201            | 12,758,174            | 45,851              |
| Horrell Capital Management           | 132,022,663             | 218,987              | 0.17         | 127,230,003             | 211,038              | 4,792,660             | 7,950               |
| Stephens Inv. Management Group       | 397,286,460             | 2,299,661            | 0.58         | 382,864,247             | 2,216,179            | 14,422,214            | 83,482              |
|                                      | <u>\$ 3,632,991,587</u> | <u>\$ 11,842,261</u> |              | <u>\$ 3,501,107,453</u> | <u>\$ 11,412,366</u> | <u>\$ 131,884,134</u> | <u>\$ 429,895</u>   |
| <b>International Equity</b>          |                         |                      |              |                         |                      |                       |                     |
| Mellon ACWI ex-US Fund               | \$ 758,289,684          | \$ 429,821           | 0.06         | \$ 730,762,403          | \$ 414,218           | \$ 27,527,280         | \$ 15,603           |
| Lazard Asset Management              | 454,065,772             | 1,499,235            | 0.33         | 437,582,367             | 1,444,810            | 16,483,405            | 54,425              |
| Artisan Partners                     | 425,212,019             | 2,385,773            | 0.56         | 409,776,058             | 2,299,165            | 15,435,962            | 86,608              |
| Baillie Gifford                      | 527,752,854             | 1,919,290            | 0.36         | 508,594,475             | 1,849,616            | 19,158,379            | 69,674              |
| *# Manning & Napier                  | 286,869                 | 0                    | 0.00         | 276,455                 | 0                    | 10,414                | 0                   |
| *# Fidelity                          | 0                       | 0                    |              | 0                       | 0                    | 0                     | 0                   |
|                                      | <u>\$ 2,165,607,198</u> | <u>\$ 6,234,119</u>  |              | <u>\$ 2,086,991,759</u> | <u>\$ 6,007,809</u>  | <u>\$ 78,615,439</u>  | <u>\$ 226,310</u>   |
| <b>Fixed Income</b>                  |                         |                      |              |                         |                      |                       |                     |
| Doubleline Capital                   | \$ 479,486,950          | \$ 839,661           | 0.18         | \$ 462,080,710          | \$ 809,180           | \$ 17,406,239         | \$ 30,481           |
| Mackay Shields CP II                 | 526,102,200             | 1,004,628            | 0.19         | 507,003,743             | 968,158              | 19,098,457            | 36,470              |
| Prudential Investments               | 544,934,658             | 1,046,089            | 0.19         | 525,152,549             | 1,008,114            | 19,782,109            | 37,975              |
|                                      | <u>\$ 1,550,523,807</u> | <u>\$ 2,890,378</u>  |              | <u>\$ 1,494,237,002</u> | <u>\$ 2,785,452</u>  | <u>\$ 56,286,805</u>  | <u>\$ 104,926</u>   |
| <b>Real Assets</b>                   |                         |                      |              |                         |                      |                       |                     |
| INVESCO Real Estate                  | \$ 472,768,790          | \$ 1,646,000         | 0.35         | \$ 455,606,432          | \$ 1,586,247         | \$ 17,162,358         | \$ 59,753           |
| *# INVESCO Global REITs              | 0                       | 0                    |              | 0                       | 0                    | 0                     | 0                   |
| MCM REIT Index Fund                  | 100,568,746             | 65,827               | 0.07         | 96,917,920              | 63,437               | 3,650,827             | 2,390               |
| + TA Associates Realty Fund X        | 3,395,491               | 435,029              | 12.81        | 3,272,229               | 419,237              | 123,262               | 15,792              |
| + TA Associates Realty Fund XI       | 50,116,492              | 1,384,384            | 2.76         | 48,297,173              | 1,334,128            | 1,819,319             | 50,256              |
| ++ TA Associates Realty Fund XII     | 6,070,844               | 573,333              | 9.44         | 5,850,461               | 552,520              | 220,383               | 20,813              |
| CastleArk Mgmt. Global Energy Fnd    | 33,132,705              | 375,798              | 1.13         | 31,929,928              | 362,156              | 1,202,777             | 13,642              |
| CastleArk Mgmt. Global Energy Plus   | 101,038,651             | 1,264,818            | 1.25         | 97,370,766              | 1,218,903            | 3,667,885             | 45,915              |
| Pinnacle Forest Investments          | 84,695,862              | 781,151              | 0.92         | 81,621,250              | 752,794              | 3,074,612             | 28,357              |
| Heitman Real Estate Trust LP         | 299,929,972             | 2,176,754            | 0.73         | 289,041,974             | 2,097,734            | 10,887,998            | 79,020              |
| + Heitman Value Partners             | 33,680,993              | 300,578              | 0.89         | 32,458,312              | 289,666              | 1,222,681             | 10,912              |
| + LaSalle Inc & Growth VI LP         | 10,112,583              | 91,445               | 0.90         | 9,745,478               | 88,126               | 367,105               | 3,320               |
| + LaSalle Inc & Growth VII LP        | 35,505,269              | 465,317              | 1.31         | 34,216,364              | 448,425              | 1,288,905             | 16,892              |
|                                      | <u>\$ 1,231,016,399</u> | <u>\$ 9,560,433</u>  |              | <u>\$ 1,186,328,287</u> | <u>\$ 9,213,372</u>  | <u>\$ 44,688,111</u>  | <u>\$ 347,061</u>   |
| <b>Diversified Strategies</b>        |                         |                      |              |                         |                      |                       |                     |
| AQR Capital                          | \$ 136,877,838          | \$ 950,007           | 0.69         | \$ 131,908,926          | \$ 915,520           | \$ 4,968,912          | \$ 34,487           |
| Blackstone Hedge                     | 183,287,628             | 1,842,729            | 1.01         | 176,633,957             | 1,775,834            | 6,653,671             | 66,894              |
| Newton Capital                       | 125,121,572             | 752,991              | 0.60         | 120,579,433             | 725,656              | 4,542,138             | 27,335              |
|                                      | <u>\$ 445,287,037</u>   | <u>\$ 3,545,726</u>  |              | <u>\$ 429,122,316</u>   | <u>\$ 3,417,010</u>  | <u>\$ 16,164,721</u>  | <u>\$ 128,716</u>   |
| <b>Other Investment Service Fees</b> |                         |                      |              |                         |                      |                       |                     |
| Bank of New York Mellon (Custodian)  |                         | \$ 516,386           |              |                         | \$ 497,640           |                       | \$ 18,746           |
| Callan Associates (Consultant)       |                         | 313,128              |              |                         | 301,761              |                       | 11,367              |
| <b>Total Investment Service Fees</b> |                         | <u>\$ 34,902,432</u> |              |                         | <u>\$ 33,635,411</u> |                       | <u>\$ 1,267,021</u> |

\* Terminated manager / # terminated strategy / + management fee is base fee plus performance fee / == management fee accrued, new account to be funded.

# Actuarial Section

Actuary's Certification Letter

Summary of Actuarial Assumptions

Single Life Retirement Values

Seperations from Active Employment Before Retirement

Probabilities of Retirement for Members eligible to Retire

State and Local Government Division

General Assembly Division

Short Condition Test

Ten-Year Comparative Statement

Analysis of Experience

Changes in Unfunded Actuarial Accrued Liability

Gains/(Losses) by Risk Area

Summary of Plan Provisions

*Russel Index closed at 1441.37 on June 30, 2020.*



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## ACTUARY'S CERTIFICATION LETTER

800.521.0498 | P: 248.799.9000 | [www.grsconsulting.com](http://www.grsconsulting.com)

November 30, 2020

Board of Trustees  
 Arkansas Public Employees Retirement System  
 Little Rock, Arkansas

Dear Board Members:

***The basic financial objective of the Arkansas Public Employees Retirement System (APERS) as provided in the Arkansas Code is to establish and receive contributions which, expressed as percents of active member payroll, will remain approximately level from generation to generation of Arkansas citizens and when combined with present assets and future investment return will be sufficient to meet the financial obligations of APERS to present and future benefit recipients.*** The progress towards meeting this financial objective is illustrated in the Schedule of Funding Progress and the Schedule of Employer Contributions.

We performed an actuarial valuation and issued an actuarial valuation report for APERS as of June 30, 2020. The purpose of the June 30, 2020 annual actuarial valuation was to determine the contribution requirements for the year beginning July 1, 2022 and to measure the System's funding progress. The actuarial valuation report should not be relied upon for any other purpose. The valuation process develops contribution rates that are sufficient to fund the plan's normal cost (i.e., the cost assigned by the valuation method to the year of service about to be rendered) as well as to fund unfunded actuarial accrued liabilities as a level percent of active member payroll (level dollar for the District Judges portion of APERS) over a period of up to thirty years. The most recent valuations were completed based upon population data, asset data, and plan provisions as of June 30, 2020. In addition, a separate report was issued (dated October 30, 2020) to provide actuarial information for GASB Statement No. 67 and GASB Statement No. 68.

The APERS administrative staff provides the actuary with data for the actuarial valuation. The actuary relies on the data after reviewing it for internal and year-to-year consistency. The actuary summarizes and tabulates population data in order to analyze longer term trends. The plan's external auditor also audits the actuarial data annually. We are not responsible for the accuracy or completeness of the data provided by staff.

The actuarial valuation report and GASB Statement Nos. 67 and 68 report contain the following supporting schedules for use in the Actuarial and Financial Sections of the Comprehensive Annual Financial Report:

**Actuarial Section**

- Summary of Assumptions Used
- Summary of Actuarial Methods and Assumptions
- Active Member Valuation Data
- Short Condition Test
- Analysis of Financial Experience
- Analysis of Financial Experience – Gains and Losses by Risk Area

Board of Trustees  
 Arkansas Public Employees Retirement System  
 November 30, 2020  
 Page 2

**Financial Section**

- Schedule of Funding Progress
- Schedule of Changes in Net Pension Liability and Related Ratios
- Schedule of the Net Pension Liability
- Schedule of Contributions
- Notes to Schedule of Contributions

For actuarial valuation purposes, assets are valued on a market related basis that recognizes each year's difference between actual and assumed investment return over a closed four-year period with the exception of the old plan still paying District Judges portion of APERS, where assets are valued on a market basis.

Actuarial valuations are based upon assumptions regarding future activity in specific risk areas including the rates of investment return and payroll growth, eligibility for the various classes of benefits, and longevity among retired lives. These assumptions are adopted by the Board after considering the advice of the actuary and other professionals. The assumptions and the methods comply with the requirements of the Actuarial Standards of Practice. Each actuarial valuation takes into account all prior differences between actual and assumed experience in each risk area and adjusts the contribution rates as needed. The June 30, 2020 valuations were based upon assumptions that were recommended in connection with a study of experience covering the period 2012-2017. The investment return assumption was changed for the June 30, 2017 valuation and the demographic assumptions were changed for the June 30, 2018 valuation.

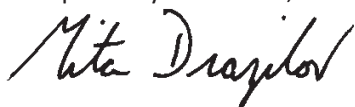
***On the basis of the June 30, 2020 actuarial valuations and the benefits and contribution rates then in effect, it is our opinion that the Arkansas Public Employees Retirement System continues to satisfy the general financial objective of level contribution financing.***

Future actuarial measurements may differ significantly from those presented in the annual valuations due to such factors as experience differing from that anticipated by actuarial assumptions, or changes in plan provisions, actuarial assumption/methods or applicable law. Due to the limited scope of the assignment, we did not perform an analysis of the potential range of future measurements.

The signing individuals are independent of the plan sponsor.

Mita D. Drazilov and Heidi G. Barry are Members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

Respectfully submitted,



Mita D. Drazilov, ASA, FCA, MAAA



Heidi G. Barry, ASA, FCA, MAAA



David L. Hoffman



## SUMMARY OF ACTUARIAL ASSUMPTIONS\*

### Economic Assumptions

The investment return rate used in making the valuation was 7.15% per year, compounded annually (net after investment expenses). This rate of return is not the assumed real rate of return. The real rate of return is the portion of investment return which is more than the wage inflation rate. Considering the assumed wage inflation rate of 3.25%, the 7.15% investment return rate translates to an assumed net real rate of return of 3.90%. The wage inflation assumption was first used for the June 30, 2015 valuation, including also the District Judges division. The investment return assumption was first used for the June 30, 2017 valuation, including also the District Judges division.

Pay increase assumptions for individual active members are shown on pages E-8 and E-10. Part of the assumption for each age is for a merit and/or seniority increase, and the other 3.25% recognizes wage inflation. The wage inflation assumption consists of 2.50% for price inflation and 0.75% for real wage growth. These assumptions were first used for the June 30, 2018 valuation and for the District Judges division for the June 30, 2015 valuation.

Total active member payroll is assumed to increase 3.25% a year, which is the portion of the individual pay increase assumptions attributable to wage inflation. This assumption was first used for the June 30, 2015 valuation and for the District Judges division for the June 30, 2015 valuation.

The number of active members is assumed to continue at the present number.

### Non-Economic Assumptions

The mortality tables used to measure retired life mortality were the RP-2006 Healthy Annuitant benefit weighted generational mortality tables for males and females. The disability post-retirement mortality tables used were the RP-2006 Disabled Retiree benefit weighted generational mortality tables for males and females. The death-in-service mortality tables used were the RP-2006 Employee benefit weighted generational mortality tables for males and females. Mortality rates are multiplied by 135% for males and 125% for females and are adjusted for fully generational mortality improvements using Scale MP-2017. This assumption was first used for the June 30, 2018 valuation.

The probabilities of retirement for members eligible to retire are shown on pages E-4 through E-7. These probabilities were first used for the June 30, 2018 valuation and for the June 30, 2007 valuation for the District Judges division.

The probabilities of withdrawal from service, death-in-service and disability are shown for sample ages on pages E-8 through E-10. These probabilities were first used for the June 30, 2018 valuation and for the District Judges division for the June 30, 2018 valuation.

The individual entry-age normal actuarial cost method of the valuation was used in determining liabilities and normal cost.

Differences in the past between assumed experience and actual experience (actuarial gains and losses) become part of actuarial accrued liabilities.

\*The data referenced in this section is taken from the actuary's report, *Arkansas Public Employees Retirement System Actuarial Valuation and Experience Gain/(Loss) Analysis June 30, 2020*, prepared by Gabriel Roeder Smith & Co. A PDF copy of the report is available for download at [www.apers.org](http://www.apers.org).

Unfunded actuarial accrued liabilities are amortized to produce contribution amounts (principal and interest) which are level percent-of-payroll contributions. For the District Judges division, unfunded actuarial accrued liabilities are amortized as a level dollar contribution.

Recognizing the special circumstances of the General Assembly division, modifications of the above assumptions were made where appropriate.

Present assets (cash & investments) were valued on a market related basis in which differences between actual and assumed returns are phased-in over a four-year period (including District Judges New Plan and Paid Off Old Plan). The funding value of assets may not deviate from the market value of assets by more than 25%. District Judges Still Paying Old Plan present assets (cash & investments) were valued on a market value basis. The data about persons now covered and about present assets were furnished by the System's administrative staff. Although examined for general reasonableness, the data was not audited by the Actuary.

The actuarial valuation computations were made by or under the supervision of a Member of the American Academy of Actuaries (MAAA).

## SINGLE LIFE RETIREMENT VALUES

| Sample<br>Attained Ages | Present Value of<br>\$1.00 Monthly for Life |           | Present Value of<br>\$1.00 Monthly for Life<br>Increasing 3% Annually |           | Future Life<br>Expectancy (Years)<br>2020* |            |
|-------------------------|---|-----------|---|-----------|--|------------|
|                         | Men   | Women     | Men   | Women     | Men  | Women      |
| 40                      | \$ 156.04                                   | \$ 159.90 | \$ 229.33   | \$ 239.04 | 41.05 yrs.                                 | 44.75 yrs. |
| 45                      | 150.92                                      | 155.90    | 216.34  | 227.64    | 36.15                                      | 39.77      |
| 50                      | 144.42                                      | 150.52    | 201.40  | 214.01    | 31.39                                      | 34.85      |
| 55                      | 136.40                                      | 143.37    | 184.56  | 197.93    | 26.82                                      | 30.01      |
| 60                      | 126.59                                      | 134.42    | 165.79  | 179.69    | 22.45                                      | 25.36      |
| 65                      | 114.88                                      | 123.53    | 145.33  | 159.53    | 18.36                                      | 20.96      |
| 70                      | 101.09                                      | 110.25    | 123.32  | 137.25    | 14.55                                      | 16.80      |
| 75                      | 85.16                                       | 94.51     | 100.11  | 113.27    | 11.06                                      | 12.94      |
| 80                      | 67.86                                       | 76.97     | 76.92   | 88.85     | 8.00                                       | 9.52       |
| 85                      | \$ 50.77                                    | \$ 59.12  | \$ 55.66  | \$ 65.87  | 5.48 yrs.                                  | 6.66 yrs.  |

| Sample<br>Attained<br>Ages | Benefit<br>Increasing<br>3.0% Yearly | Portion of Age 60<br>Lives Still Alive* |       |
|----------------------------|--------------------------------------|---|-------|
|                            |                                      | Men                                     | Women |
| 60                         | \$100                                | 100%                                    | 100%  |
| 65                         | 116                                  | 93                                      | 96    |
| 70                         | 134                                  | 84                                      | 89    |
| 75                         | 155                                  | 72                                      | 80    |
| 80                         | \$180                                | 56%                                     | 66%   |

\*Applicable to calendar year 2020. Life expectancies and rates in future years are determined by the fully generational MP-2017 projection scale.

SEPARATIONS FROM ACTIVE EMPLOYMENT BEFORE RETIREMENT

State and Local Government Division as of June 30, 2020

| Sample<br>Ages | Years<br>of<br>Service | Percentage of Active Members<br>Separating Within the Next Year |       |        |       |            |       | Pay Increase Assumptions<br>For An Individual Employee |                   |                       |
|----------------|------------------------|---|-------|--------|-------|------------|-------|--|-------------------|-----------------------|
|                |                        | Withdrawal  |       | Death* |       | Disability |       | Merit &<br>Seniority                                   | Base<br>(Economy) | Increase<br>Next Year |
|                |                        | Men   | Women | Men    | Women | Men        | Women |  |                   |                       |
|                | 0                      | 40.0%   | 40.0% |        |       |            |       |  |                   |                       |
|                | 1                      | 25.0  | 25.0  |        |       |            |       |  |                   |                       |
|                | 2                      | 20.0  | 20.0  |        |       |            |       |  |                   |                       |
|                | 3                      | 15.0  | 15.0  |        |       |            |       |  |                   |                       |
|                | 4                      | 12.0  | 12.0  |        |       |            |       |  |                   |                       |
| 20             | 5+                     | 11.0  | 11.0  | 0.05%  | 0.02% | 0.01%      | 0.01% | 6.60%  | 3.25%             | 9.85%                 |
| 25             |                        | 11.0  | 11.0  | 0.07   | 0.02  | 0.04       | 0.04  | 5.16   | 3.25              | 8.41                  |
| 30             |                        | 9.7   | 9.7   | 0.07   | 0.03  | 0.07       | 0.07  | 3.30   | 3.25              | 6.55                  |
| 35             |                        | 6.8   | 6.8   | 0.08   | 0.04  | 0.09       | 0.09  | 2.28   | 3.25              | 5.53                  |
| 40             |                        | 4.8   | 4.8   | 0.09   | 0.06  | 0.13       | 0.13  | 1.70   | 3.25              | 4.95                  |
| 45             |                        | 3.7   | 3.7   | 0.13   | 0.08  | 0.17       | 0.17  | 1.38   | 3.25              | 4.63                  |
| 50             |                        | 3.0   | 3.0   | 0.22   | 0.13  | 0.34       | 0.34  | 1.00   | 3.25              | 4.25                  |
| 55             |                        | 2.1   | 2.1   | 0.37   | 0.22  | 0.60       | 0.60  | 0.68   | 3.25              | 3.93                  |
| 60             |                        | 1.3%  | 1.3%  | 0.66%  | 0.34% | 0.85%      | 0.85% | 0.42%  | 3.25%             | 3.67%                 |

\*Applicable to calendar year 2020. Rates in future years are determined by the above rates and the MP-2017 projection scale. Pay increase rates are age based only, and not service based.

## PROBABILITIES OF RETIREMENT FOR MEMBERS ELIGIBLE TO RETIRE

State and Local Government Division as of June 30, 2020

| Retirement Ages<br>(with less than 28<br>years of service) | Percentage of Eligible*<br>Active Members Retiring<br>Within Next Year |         |
|--|--|---------|
|  | Unreduced  | Reduced |
| 55   |  | 2.5%    |
| 56   |  | 2.5     |
| 57   |  | 3.0     |
| 58   |  | 3.5     |
| 59   |  | 4.0     |
| 60   |  | 5.0     |
| 61   |  | 5.5     |
| 62   |  | 20.0    |
| 63   |  | 20.0    |
| 64   |  | 15.0%   |
| 65   | 22%  |         |
| 66   | 25   |         |
| 67   | 23   |         |
| 68   | 18   |         |
| 69   | 18   |         |
| 70   | 18   |         |
| 71   | 18   |         |
| 72   | 18   |         |
| 73   | 18   |         |
| 74-84  | 20   |         |
| 85 & Over  | 100%   |         |

\*A member was assumed eligible for unreduced retirement after attaining age 65 with 5 years of service or 28 years regardless of age. A member was assumed eligible for reduced retirement after attaining age 55 with 10 or more years of service.

PROBABILITIES OF RETIREMENT FOR MEMBERS ELIGIBLE TO RETIRE

General Assembly Division as of June 30, 2020

| Retirement Ages | Percentages of Eligible* Active Members Retiring Within Next Year |
|-----------------|---|
| 50              | 30%   |
| 51              | 30  |
| 52              | 30  |
| 53              | 30  |
| 54              | 30  |
| 55              | 30  |
| 56              | 30  |
| 57              | 30  |
| 58              | 30  |
| 59              | 30  |
| 60              | 30  |
| 61              | 30  |
| 62              | 50  |
| 63              | 30  |
| 64              | 30  |
| 65              | 50  |
| 66              | 30  |
| 67-79           | 20  |
| 80 & Over       | 100   |

\*Member may retire at age 50 with 20 or more years of service, age 60 with 16 or more years of service, or age 65 with 8 or more years of service.

## SHORT CONDITION TEST

The APERS funding objective is to meet long-term benefit promises through contributions that remain approximately level from year to year as a percentage of member payroll. If the contributions to the System are level in concept and soundly executed, the System will pay all promised benefits when due — the ultimate test of financial soundness. Testing for level contribution rates is the long-term condition test.

A short condition test is one means of checking a system's progress under its funding program. In a short condition test, the System's present assets (cash and investments) are compared with

1. Active member contributions on deposit,
2. The liabilities for future benefits to present retired lives, and
3. The liabilities for service already rendered by active members.

In a system that has been following the discipline of level percent-of-payroll financing, the liabilities for active member contributions on deposit (liability 1) and the liabilities for future benefits to present retired lives (liability 2) will be fully covered by present assets (except in unusual circumstances). In addition, the liabilities for service already rendered by active members (liability 3) will be partially covered by the remainder of present assets. The larger the funded portion of liability 3, the stronger the condition of the System. Liability 3 being fully funded is uncommon.

Ten-Year Comparative Statement

For Fiscal Years Ended June 30 (dollars in millions)

| Valuation Date:<br>June 30              | Entry Age Accrued Liability        |                                   |   | Valuation Assets | Portion of Present Values Covered By Present Assets |      |      |       |
|---|------------------------------------|-----------------------------------|---|------------------|---|------|------|-------|
|   | (1)<br>Active Member Contributions | (2)<br>Retirees and Beneficiaries | (3)<br>Active Members (Employer Financed Portion) |                  | (1)   | (2)  | (3)  | Total |
| State Division (including subdivisions) |                                    |                                   |   |                  |   |      |      |       |
| 1998@                                   | \$ 17.2                            | \$ 640.3                          | \$ 1,395.9  | \$ 2,328.5       | 100%  | 100% | 119% | 113%  |
| 1999@#                                  | 16.9                               | 784.0                             | 1,634.2   | 2,637.1          | 100   | 100  | 112  | 108   |
| 2000                                    | 15.8                               | 747.5                             | 1,865.7   | 2,943.3          | 100   | 100  | 117  | 112   |
| Local Government Division               |                                    |                                   |   |                  |   |      |      |       |
| 1998@                                   | \$ 8.8                             | \$ 337.9                          | \$ 501.1  | \$ 968.1         | 100%  | 100% | 124% | 114%  |
| 1999#                                   | 8.8                                | 446.9                             | 587.9   | 1,074.7          | 100   | 100  | 105  | 103   |
| 2000                                    | 7.6                                | 440.0                             | 706.0   | 1,178.1          | 100   | 100  | 103  | 102   |
| State And Local Government Division     |                                    |                                   |   |                  |   |      |      |       |
| 2011@                                   | \$ 119.2                           | \$ 3,268.3                        | \$ 4,327.8  | \$ 5,462.6       | 100%  | 100% | 48%  | 71%   |
| 2012                                    | 122.1                              | 3,518.7                           | 4,521.9   | 5,625.4          | 100   | 100  | 44   | 69    |
| 2013@                                   | 147.9                              | 3,855.2                           | 4,281.1   | 6,159.3          | 100   | 100  | 50   | 74    |
| 2014@                                   | 176.3                              | 4,246.7                           | 4,440.6   | 6,894.9          | 100   | 100  | 56   | 78    |
| 2015@                                   | 201.1                              | 4,654.5                           | 4,439.2   | 7,351.7          | 100   | 100  | 56   | 79    |
| 2016                                    | 228.4                              | 4,929.2                           | 4,505.1   | 7,768.9          | 100   | 100  | 58   | 80    |
| 2017                                    | 291.1                              | 5,547.3                           | 4,671.8   | 8,157.0          | 100   | 100  | 50   | 78    |
| 2017@                                   | 291.1                              | 5,460.9                           | 4,568.5   | 8,157.0          | 100   | 100  | 53   | 79    |
| 2018                                    | 334.7                              | 5,717.9                           | 4,641.7   | 8,416.4          | 100   | 100  | 51   | 79    |
| 2019                                    | 376.0                              | 6,015.8                           | 4,737.0   | 8,738.7          | 100   | 100  | 50   | 79    |
| 2020                                    | \$ 410.2                           | \$ 6,270.1                        | \$ 4,832.7  | \$ 9,090.4       | 100%  | 100% | 50%  | 79%   |

# After legislated changes in benefit provisions.

@ After changes in actuarial assumptions.



## ANALYSIS OF EXPERIENCE

### Purpose of Gain/(Loss) Analysis

Regular actuarial valuations give valuable information about the composite change in unfunded actuarial accrued liabilities – whether or not the liabilities are increasing or decreasing and by how much.

But valuations do not show the portion of the change attributable to each risk area within the retirement system: the rate of investment return which plan assets earn; the rates of withdrawal of active members who leave covered employment; the rates of mortality; the rates of disability; the rates of pay increases; and the ages at actual retirement. In an actuarial valuation, assumptions must be made as to what these rates will be, for the next year and for decades in the future.

The objective of a gain and loss analysis is to determine the portion of the change in actuarial condition (unfunded actuarial accrued liabilities) attributable to each risk area.

The fact that actual experience differs from assumed experience is to be expected – the future cannot be predicted with precision. The economic risk areas (particularly investment return and pay increases) are volatile. Inflation directly affects economic risk areas, and inflation seems to defy reliable prediction.

Changes in the valuation assumed experience for a risk area should be made when the differences between assumed and actual experience have been observed to be sizable and persistent. A gain and loss analysis covering a relatively short period may or may not be indicative of long-term trends, which are the basis of actuarial assumptions.

### Changes in Unfunded Actuarial Accrued Liability

| During the Fiscal Year Ended June 30, 2020                         | Total<br>(in millions) |
|--|------------------------|
| 1. UAAL* at Beginning of Year                                      | \$ 2,390.0             |
| 2. Employer Normal Cost from Last Valuation                        | 150.0                  |
| 3. Actual Employer Contributions                                   | 298.1                  |
| 4. Interest Accrual: $[(1) + \frac{1}{2}[(2) - (3)]] \times .0715$ | 165.6                  |
| 5. Expected UAAL Before Changes: (1) + (2) - (3) + (4)             | 2,407.5                |
| 6. Increase from Benefit Changes                                   | 0.0                    |
| 7. Changes from Revised Actuarial Assumptions and Methods          | 0.0                    |
| 8. New Entrant Liabilities   | 57.5                   |
| 9. Expected UAAL After Changes: (5) + (6) + (7) + (8)              | 2,465.0                |
| 10. Actual UAAL at End of Year                                     | 2,422.6                |
| 11. Gain/(Loss): (9) - (10)  | \$ 42.4                |

\* Unfunded actuarial accrued liability.

Gains/Losses by Risk Area

| During the Fiscal Year Ended June 30, 2020   | Total<br>(in millions) | % of<br>Accrued<br>Liabilities |
|--|------------------------|--------------------------------|
| <b>Economic Risk Areas</b>   |                        |                                |
| Pay Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.   | \$ 2.2                 | 0.0%                           |
| Investment Return. If there is greater investment return than assumed, there is a gain. If less return, a loss.  | (25.7)                 | (0.2)                          |
| <b>Non-Economic Risk Areas</b>   |                        |                                |
| Non-Casualty Retirements. If members retire at older ages or with lower final average compensation (FAC) than assumed, there is a gain. If younger ages or higher FAC, a loss. | (0.5)                  | 0.0                            |
| Disability Retirements. If there are fewer disabilities than assumed, there is a gain. If more, a loss.  | 1.0                    | 0.0                            |
| Death-in-Service Benefits. If there are fewer claims than assumed, there is a gain. If more, a loss.   | (3.1)                  | 0.0                            |
| Withdrawal. If more liabilities are released by other separations than assumed, there is a gain. If smaller releases, a loss.  | 36.4                   | 0.3                            |
| <b>Total Active Member Actuarial Gains/(Losses)</b>  | \$ 10.3                | 0.1                            |
| <b>Retired Life Mortality.</b>   | 30.0                   | 0.3                            |
| <b>Other</b> (includes data adjustments at retirement, timing of financial transactions, and miscellaneous unidentified sources)   | 2.1                    | 0.0                            |
| <b>Total Actuarial Gains/(Losses)</b>  | \$ 42.4                | 0.4%                           |

## SUMMARY OF PLAN PROVISIONS

The Old Contributory Plan is available to persons who became members of APERS before January 1, 1978. The Non-Contributory Plan applies to all persons first hired after January 1, 1978 and before July 1, 2005 in APERS-covered employment. The New Contributory Plan applies to all persons hired after July 1, 2005 in APERS-covered employment or Non-Contributory members who elected to participate in the New Contributory Plan.

### *New Contributory Plan*

### *Non-Contributory Plan*

#### Voluntary Retirement

With a full benefit, after either (a) age 65 with 5 years of service, or (b) 28 years of actual service, regardless of age. For sheriff and public safety members, the age 65 requirement is reduced 1 month for each 2 months of actual service, but not below age 55 (age 52 for sheriff members with a minimum of 10 years of actual service).

With a full benefit, after either (a) age 65 with 5 years of service, or (b) 28 years of actual service, regardless of age. For sheriff and public safety members, the age 65 requirement is reduced 1 month for each 2 months of actual service, but not below age 55 (age 52 for sheriff members with a minimum of 10 years of actual service).

With a reduced benefit, after age 55 with 5 years of service or any age with 25 years of service. The reduction is equal to  $\frac{1}{2}$  of 1% for each month retirement precedes normal retirement age or 1% for each month below 28 years of actual service, whichever is less.

after age 55 with 5 years of service or any age with 25 years of service. The reduction is equal to  $\frac{1}{2}$  of 1% for each month retirement precedes normal retirement age or 1% for each month below 28 years of actual service, whichever is less.

#### Final Average Compensation (FAC)

Average of highest 36 calendar months of covered compensation.

Average of highest 36 calendar months of covered compensation.

#### Full Age and Service Retirement Benefit

2.00% of FAC times years of service (2.03% for service prior to July 1, 2007), plus .5% of FAC times years of service over 28 years for service after July 1, 2009. The minimum monthly benefit is \$150 minus any age and beneficiary option reductions.

1.72% of FAC times years and months of credited service (1.75% for service prior to July 1, 2007), plus .5% of FAC times years of service over 28 years for service after July 1, 2009. If retirement is prior to age 62, an additional .33% of FAC times years of service will be paid until age 62. The portion of the APERS benefit based on service before 1978 cannot be less than the amount provided by contributory provisions in effect at the time of retirement. The minimum monthly benefit is \$150 minus any age and beneficiary option reductions..

*New Contributory Plan*

*Non-Contributory Plan*

**Benefit Increases After Retirement**

Annually, there will be a cost-of-living adjustment equal to 3% of the current benefit.

Annually, there will be a cost-of-living adjustment equal to 3% of the current benefit.

**Member Contribution Rates**

5% of covered compensation (pre-tax). Member contributions are refundable if APERS-covered employment terminates before a monthly benefit is payable. Members will earn interest on the contributions at a rate of 4% annually.

No employee contributions for service after January 1, 1978. If there is service before January 1, 1978, contributions for that period are refundable later in the same manner as under the Contributory Plan.

**Vested Retirement Benefits**

5 or more years of service, and leaving APERS-covered employment before full retirement age. Deferred full retirement benefit, based on service and pay at termination, begins at age 65. A death benefit is payable to surviving spouse of member who dies before benefit commencement.

5 or more years of service and leaving APERS-covered employment before full retirement age. Deferred full retirement benefit, based on service and pay at termination, begins at age 65. A death benefit is payable to surviving spouse of member who dies before benefit commencement.

In place of deferred full benefit, at age 55 or older a qualifying member can elect an immediate reduced benefit.

In place of deferred full benefit, at age 55 or older a qualifying member can elect an immediate reduced benefit.

**Total and Permanent Disability**

Disabled after 5 or more years of service, including credit for 18 of the 24 months preceding disability.

Disabled after 5 or more years of service, including credit for 18 of the 24 months preceding disability.

Amount is computed as an age & service benefit, based on service and pay at disability.

Amount is computed as an age & service benefit, based on service and compensation at disability.

*New Contributory Plan**Non-Contributory Plan***Death After Retirement**

If death occurs before total monthly benefit payments equal member's accumulated contributions, the difference is refunded.

A retiring member can also elect an optional form of benefit, which provides beneficiary protection paid for by reducing the retired member's benefit amount. Should the member elect a straight life benefit and decease within 12 months of the date of retirement, a benefit may be payable to the surviving spouse under certain conditions.

Member contributions before 1978 are protected in the same manner as under the Contributory Plan.

A retiring member can also elect an optional form of benefit, which provides beneficiary protection paid for by reducing the retired member's benefit amount. Should the member elect a straight life benefit and decease within 12 months of the date of retirement, a benefit may be payable to the surviving spouse under certain conditions.

**Death While in APERS-Covered Employment**

Member's accumulated contributions are refundable.

If the member had 5 years service, monthly benefits are payable instead. Surviving spouse receives a benefit computed as if member had retired and elected the Joint & 75% Survivor Option. Payment begins immediately.

Each dependent child receives benefit of 10% of compensation (maximum of 25% for all children).

Dependent parents benefits are payable if neither spouse nor children's benefits are payable.

Member's accumulated contributions before 1978 are refundable.

If the member had 5 years service, monthly benefits are payable instead. Surviving spouse receives a benefit computed as if member had retired and elected the Joint & 75% Survivor Option. Payment begins immediately.

Each dependent child receives benefit of 10% of compensation (maximum of 25% for all children).

Dependent parents benefits are payable if neither spouse nor children's benefits are payable.

| <i>Membership Group</i>  | <i>Service Credits</i>   |
|--|--|
| Public Safety Members (including State Capitol Police and Wildlife Sub-Division members) hired before July 1, 1997 | 1-1/2 times regular rate with 5 years actual service required to meet benefit eligibility rules.   |
| Governor (hired before July 1, 1999)   | 3 times regular rate with 5 years actual service required to meet death-in-service eligibility and 4 years actual service required for other benefit eligibility.          |
| Elected State Constitutional Officers (hired before July 1, 1999)  | 2-1/2 times regular rate with 5 years actual service required to meet benefit eligibility.   |
| General Assembly   | Regular crediting rate with 5 years of actual service required to meet death-in-service eligibility and 10 years of actual service required for other benefit eligibility. |
| Other Elected Public Officials (municipal and county officials)  | 2 times regular rate with 5 years actual service required to meet benefit eligibility.   |
| All Other Members  | Regular rate.  |

### Arkansas Public Employees Deferred Retirement Option Plan

Members with 28 years of actual service in APERS or in combination with a reciprocal system are eligible to participate.

Members, for a maximum of 7 years, may continue employment and have 75% of their accrued benefit (at date of participation with 30 or more years of service) paid into the Deferred Retirement Option Plan in lieu of any further benefit accruals.

The payments into the Deferred Retirement Option Plan accumulate with interest at a rate established by the Board. The interest is paid on the mean balance and is paid to the member at termination of active membership in either a lump sum or as an annuity.

Employer contributions continue for members participating in the DROP.

# Statistical Section

Investment Rate of Return - 30 Year Comparison

Schedule of Revenues By Source

Schedule of Expenses by Type

Summary of Administrative Expenses

Schedule of Benefit Expenses by Type

Membership

Summary of Active and Retired Member Valuation

Schedule of Average Benefit Payments

Comparison of Monthly Annuity by Credited  
Years of Service

Comparison of Retirees by Credited Years of Service

Schedule of Retired Members by Type of Benefit

Schedule of Retirees and Benefits Paid by County

Retirees and Benefits Paid by County & District

APERS Participating Employers

Reporting Entities by Category

Schedule of Employer Rates - 10 -Year Comparison

Schedule of Participating Employers

*Crude Oil closed at 40.65 on June 30, 2020.*



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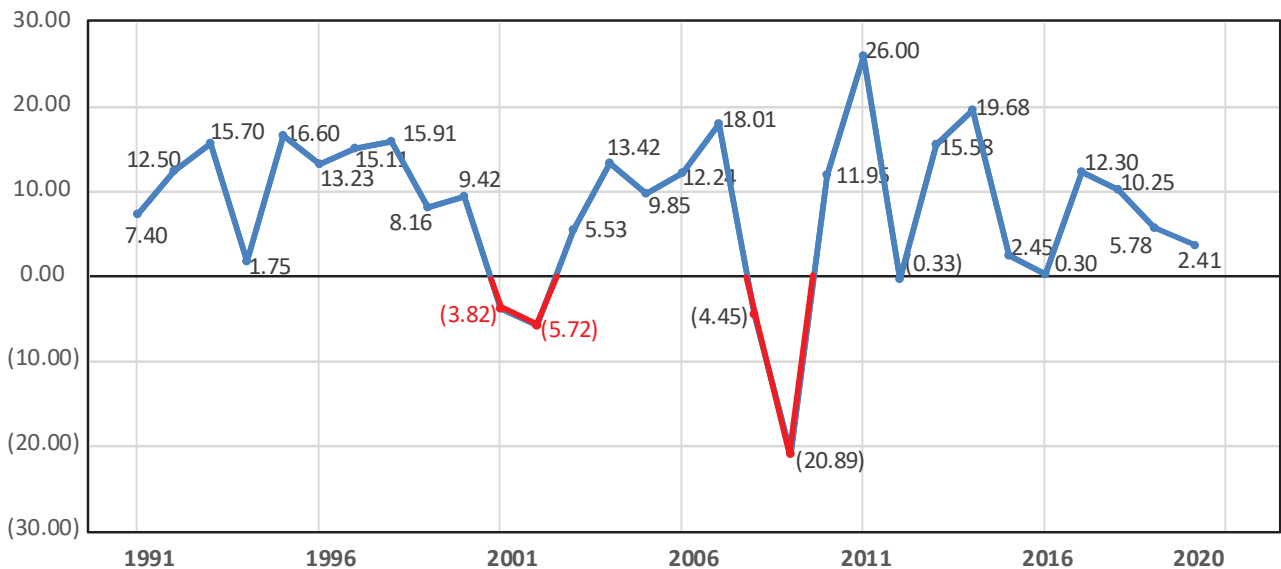


### SCHEDULE OF INVESTMENT RETURN RATE

*Table of Investment Return Percentage Rates for Fiscal Years Ended June 30*

| Year | Rate  | Year | Rate    | Year | Rate   |
|------|-------|------|---------|------|--------|
| 1991 | 7.40% | 2001 | (3.82)% | 2011 | 26.00% |
| 1992 | 12.50 | 2002 | (5.72)  | 2012 | (0.33) |
| 1993 | 15.70 | 2003 | 5.53    | 2013 | 15.58  |
| 1994 | 1.75  | 2004 | 13.42   | 2014 | 19.68  |
| 1995 | 16.60 | 2005 | 9.85    | 2015 | 2.45   |
| 1996 | 13.23 | 2006 | 12.24   | 2016 | 0.30   |
| 1997 | 15.11 | 2007 | 18.01   | 2017 | 12.30  |
| 1998 | 15.91 | 2008 | (4.45)  | 2018 | 10.25  |
| 1999 | 8.16  | 2009 | (20.89) | 2019 | 5.78   |
| 2000 | 9.42% | 2010 | 11.95%  | 2020 | 2.41%  |

*Chart of Investment Return Percentage Rates for Fiscal Years Ended June 30*

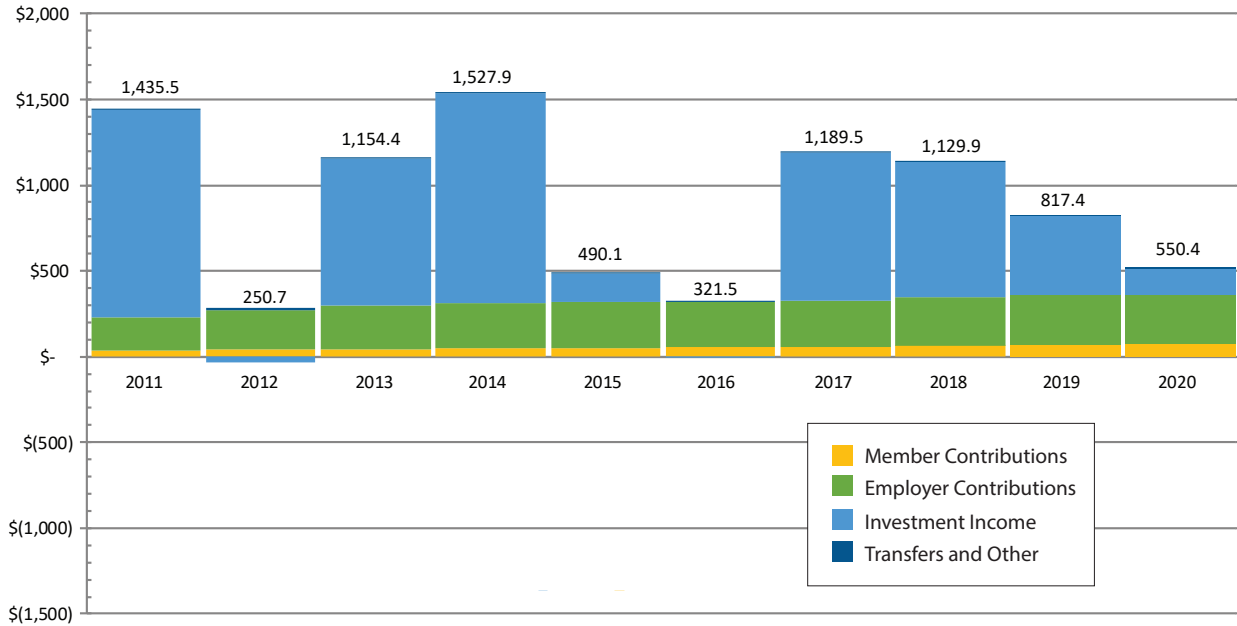


SCHEDULE OF REVENUES BY SOURCE

Table of Revenues for Fiscal Years Ended June 30

| Year Ended June 30 | Member Contributions | Employer Contributions | Investment Income | Transfers and Other | Total            |
|--------------------|----------------------|------------------------|-------------------|---------------------|------------------|
| 2011               | \$ 34,639,544        | \$ 196,428,733         | \$ 1,193,497,611  | \$ 8,966,315        | \$ 1,433,532,203 |
| 2012               | 40,220,553           | 231,511,392            | (30,142,255)      | 9,105,829           | 250,695,519      |
| 2013               | 44,549,911           | 249,062,186            | 851,920,691       | 8,915,952           | 1,154,448,740    |
| 2014               | 48,237,869           | 264,477,703            | 1,208,430,494     | 6,786,822           | 1,527,932,888    |
| 2015               | 51,596,001           | 262,720,214            | 169,621,019       | 6,558,462           | 490,495,697      |
| 2016               | 55,944,132           | 263,545,822            | (4,177,314)       | 6,271,067           | 321,583,707      |
| 2017               | 58,500,339           | 262,063,747            | 862,824,701       | 6,105,620           | 1,189,494,407    |
| 2018               | 64,730,519           | 276,784,232            | 782,326,767       | 6,069,774           | 1,129,911,292    |
| 2019               | 68,206,685           | 293,575,107            | 450,493,098       | 5,115,404           | 817,390,294      |
| 2020               | \$ 71,470,967        | \$ 299,497,566         | \$ 174,561,773    | \$ 4,870,799        | \$ 550,401,105   |

Chart of Revenues for Fiscal Years Ended June 30



## SCHEDULE OF EXPENSES BY TYPE

### Expenses for Fiscal Years Ended June 30

| Fiscal Year | Benefit Payments (1) | Administrative Expenses (2) | Refunds       | Total          |
|-------------|----------------------|-----------------------------|---------------|----------------|
| 2011        | \$ 344,140,357       | \$ 6,374,379                | \$ 6,123,910  | \$ 356,638,646 |
| 2012        | 359,330,673          | 6,794,526                   | 7,420,785     | 373,545,984    |
| 2013        | 396,607,128          | 7,340,273                   | 8,446,701     | 412,394,102    |
| 2014        | 414,548,645          | 7,209,769                   | 9,455,348     | 431,213,761    |
| 2015        | 451,912,791          | 7,201,144                   | 12,195,637    | 471,309,572    |
| 2016        | 480,913,495          | 7,181,913                   | 13,188,729    | 501,284,137    |
| 2017        | 508,200,406          | 9,502,608                   | 13,755,408    | 531,458,422    |
| 2018        | 530,861,312          | 11,503,639                  | 13,727,908    | 556,092,859    |
| 2019        | 555,352,597          | 14,739,700                  | 16,239,928    | 586,332,225    |
| 2020        | \$ 587,453,797       | \$ 11,682,726               | \$ 15,835,290 | \$ 614,971,813 |

<sup>1</sup> Includes DROP and PAW distributions.

<sup>2</sup> A summary of administrative expenses can be found on the table below.

## SUMMARY OF ADMINISTRATIVE EXPENSES

### Expenses for Fiscal Years Ended June 30\*

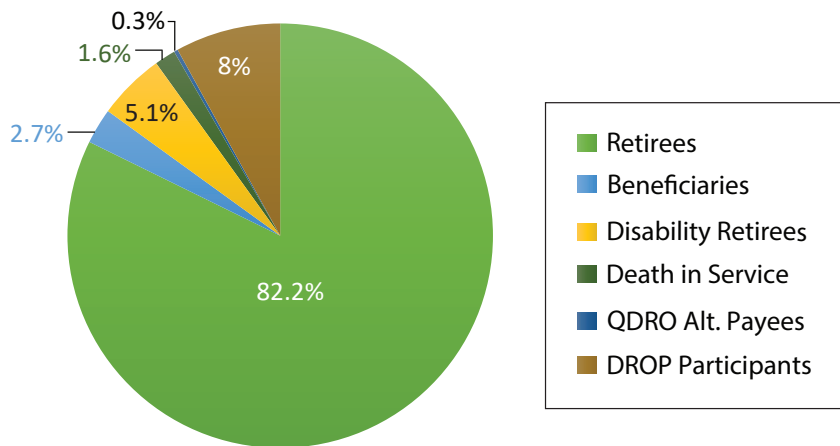
|                               | 2020         | 2019          | 2018          | 2017         | 2016         | 2015         |
|-------------------------------|--------------|---------------|---------------|--------------|--------------|--------------|
| Personnel Services            | \$ 4,894,754 | \$ 4,907,576  | \$ 4,654,834  | \$ 4,732,341 | \$ 4,399,166 | \$ 4,148,088 |
| Communications                | 276,125      | 347,126       | 226,678       | 238,294      | 221,680      | 267,909      |
| Purchases                     | 128,986      | 92,039        | 76,857        | 94,685       | 110,347      | 136,905      |
| Services and Charges          | 1,613,277    | 1,637,239     | 1,634,717     | 1,484,973    | 1,299,726    | 1,358,106    |
| Bad Debt Expense              | 65,265       | 716,682       | 0             | 0            | 0            | 0            |
| Depreciation Expense          | 2,178,514    | 2,175,693     | 2,061,822     | 509,191      | 7,140        | 7,461        |
| Post Employment Benefits      | 58,203       | 1,656,182     | 639,368       | 433,830      | 249,103      | 354,793      |
| Data Processing Charges       | 2,467,603    | 3,207,163     | 2,209,363     | 2,009,294    | 894,750      | 927,882      |
| Total Administrative Expenses | \$11,682,726 | \$ 14,739,700 | \$ 11,503,639 | \$ 9,502,608 | \$ 7,181,913 | \$ 7,201,144 |

\*A more detailed schedule of administrative expenses can be found in the Notes To Supplemental Information on page 54.

SCHEDULE OF BENEFIT EXPENSES BY TYPE\* (for fiscal years ended June 30)

| Year Ended<br>June 30 | Age and Service |               | Disability                  | Death in<br>Service | QDRO<br>Alternative<br>Payees | DROP<br>Participants |
|-----------------------|-----------------|---------------|-----------------------------|---------------------|-------------------------------|----------------------|
|                       | Retirees        | Beneficiaries | Retirees &<br>Beneficiaries |                     |                               |                      |
| 2011                  | \$ 288,680,604  | \$ 10,136,820 | \$ 20,302,152               | \$ 408,348          |                               |                      |
| 2012                  | 309,980,256     | 10,502,736    | 21,950,568                  | 347,292             |                               |                      |
| 2013                  | 333,567,174     | 11,125,082    | 26,158,872                  | 336,180             |                               |                      |
| 2014                  | 363,644,841     | 12,006,363    | 27,648,624                  | 320,928             |                               |                      |
| 2015                  | 392,995,993     | 13,555,679    | 26,854,608                  | 7,428               | 1,346,409                     | 49,188,840           |
| 2016                  | 417,856,215     | 14,859,185    | 27,738,864                  | 41,088              | 1,549,793                     | 47,686,116           |
| 2017                  | 449,127,264     | 13,258,740    | 29,710,308                  | 8,837,724           | 1,798,296                     | 37,399,188           |
| 2018                  | 471,378,204     | 14,960,412    | 30,417,624                  | 9,385,248           | 2,005,704                     | 46,929,948           |
| 2019                  | 500,098,272     | 15,582,348    | 31,298,916                  | 9,604,896           | 2,159,076                     | 50,352,876           |
| 2020                  | \$ 523,802,448  | \$ 17,078,448 | \$ 32,792,592               | \$ 10,211,760       | \$ 2,284,872                  | \$ 50,936,592        |

Percentage of Benefit Expenses by Type for the Fiscal Year Ended June 30, 2020



\* Expenses are based on annualized June 30 benefits amounts

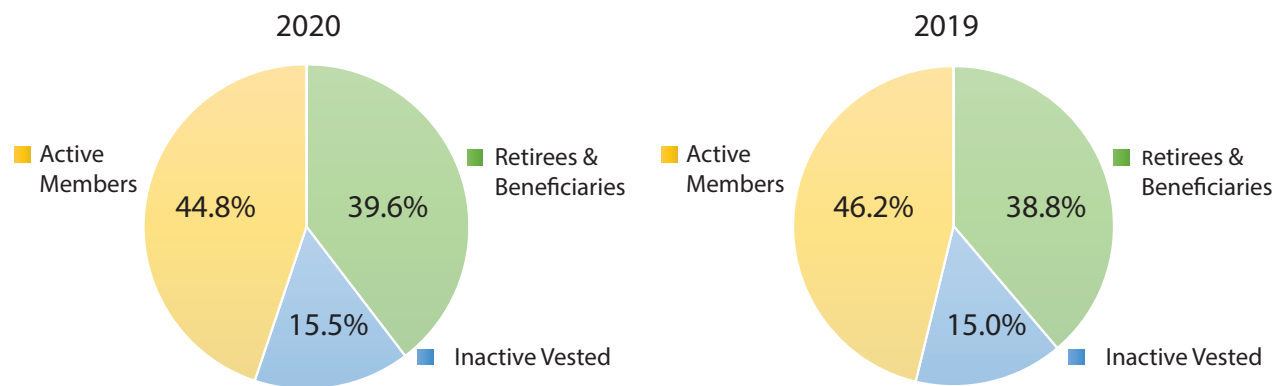
## MEMBERSHIP

APERS covers all state employees who are not covered by another authorized plan, all county employees, municipal employees whose municipalities have elected coverage under the System, college and university employees, certain non-teaching school employees, and other public entities specifically defined by law.

### Members\*

| As of the June 30 End of the Fiscal Year                                   | 2020   | 2019   |
|--|--------|--------|
| Retirees and Beneficiaries Receiving Benefits (includes DROP participants) | 39,805 | 38,543 |
| Terminated Plan Members Entitled to But Not Yet Receiving Benefits         | 14,711 | 14,862 |
| Active Plan Members  | 44,371 | 45,965 |

### Member Comparison



\*Includes members of the Arkansas District Judges Retirement System

SUMMARY OF ACTIVE AND RETIRED MEMBER VALUATION

Historical Comparative Schedule

| Valuation Date | Active Members |                     |                  |             | Retired Lives (including DROP members) |                    |                     |               |  |
|----------------|----------------|---------------------|------------------|-------------|--|--------------------|---------------------|---------------|--|
|                | Number         | Valuation Payroll   |                  |             | Number                                 | Active per Retired | Annual Benefits     |               |  |
|                |                | Dollars in Millions | Average          | % Increase  |  |                    | Dollars in Millions | As a % of Pay |  |
| 6/30/84        | 0              | \$ 0                | \$ 0             | 0%          | 7,036                                  | 0                  | \$ 19.10            | 4.4%          |  |
| 6/30/85        | 0              | 0                   | 0                | 0           | 7,331                                  | 0                  | 22.0                | 4.8           |  |
| 6/30/86        | 0              | 0                   | 0                | 0           | 7,649                                  | 0                  | 24.1                | 4.9           |  |
| 6/30/87        | 0              | 0                   | 0                | 0           | 8,074                                  | 0                  | 30.2                | 6.0           |  |
| 6/30/88        | 0              | 0                   | 0                | 0           | 9,155                                  | 0                  | 39.6                | 7.5           |  |
| 6/30/89        | 0              | 0                   | 0                | 0           | 9,418                                  | 0                  | 42.9                | 7.6           |  |
| 6/30/90        | 0              | 0                   | 0                | 0           | 9,747                                  | 0                  | 44.9                | 7.4           |  |
| 6/30/91        | 0              | 0                   | 0                | 0           | 10,110                                 | 0                  | 49.2                | 7.6           |  |
| 6/30/92        | 39,752         | 698.2               | 17,564           | 0           | 10,456                                 | 3.8                | 51.9                | 7.4           |  |
| 6/30/93        | 39,849         | 733.4               | 18,404           | 4.8         | 10,840                                 | 3.7                | 56.8                | 7.7           |  |
| 6/30/94        | 40,940         | 778.7               | 19,021           | 3.3         | 11,213                                 | 3.7                | 60.7                | 7.8           |  |
| 6/30/95        | 42,041         | 834.5               | 19,850           | 4.4         | 11,683                                 | 3.6                | 70.1                | 8.4           |  |
| 6/30/96        | 42,712         | 889.3               | 20,821           | 4.9         | 12,073                                 | 3.5                | 76.2                | 8.6           |  |
| 6/30/97        | 43,068         | 938.5               | 21,791           | 4.7         | 12,644                                 | 3.4                | 84.8                | 9.0           |  |
| 6/30/98        | 43,047         | 974.7               | 22,644           | 3.9         | 13,480                                 | 3.2                | 94.6                | 9.7           |  |
| 6/30/99        | 43,064         | 1,008.9             | 23,427           | 3.5         | 14,688                                 | 2.9                | 119.3               | 11.8          |  |
| 6/30/00        | 43,121         | 1,050.0             | 24,351           | 3.9         | 15,544                                 | 2.8                | 133.6               | 12.7          |  |
| 6/30/01        | 42,556         | 1,070.1             | 25,146           | 3.3         | 16,643                                 | 2.6                | 150.0               | 14.0          |  |
| 6/30/02        | 42,230         | 1,111.5             | 26,320           | 4.7         | 17,748                                 | 2.4                | 167.6               | 15.1          |  |
| 6/30/03        | 42,879         | 1,147.9             | 26,772           | 1.7         | 18,838                                 | 2.3                | 186.0               | 16.2          |  |
| 6/30/04        | 42,826         | 1,175.8             | 27,455           | 2.6         | 19,872                                 | 2.2                | 203.4               | 17.3          |  |
| 6/30/05        | 42,938         | 1,214.9             | 28,295           | 3.1         | 21,080                                 | 2.0                | 232.9               | 19.2          |  |
| 6/30/06        | 43,453         | 1,267.1             | 29,159           | 3.1         | 22,234                                 | 2.0                | 254.7               | 20.1          |  |
| 6/30/07        | 43,630         | 1,302.6             | 29,855           | 2.4         | 22,409                                 | 1.9                | 274.8               | 21.1          |  |
| 6/30/08        | 44,357         | 1,379.8             | 31,106           | 4.2         | 23,555                                 | 1.9                | 297.0               | 21.5          |  |
| 6/30/09        | 44,702         | 1,433.7             | 32,073           | 3.1         | 24,972                                 | 1.8                | 323.1               | 22.5          |  |
| 6/30/10        | 45,394         | 1,522.7             | 33,544           | 4.6         | 25,880                                 | 1.8                | 342.2               | 22.5          |  |
| 6/30/11        | 45,145         | 1,542.9             | 34,177           | 1.9         | 28,137                                 | 1.6                | 375.7               | 24.3          |  |
| 6/30/12        | 45,937         | 1,606.1             | 34,962           | 2.3         | 29,282                                 | 1.6                | 399.5               | 24.9          |  |
| 6/30/13        | 45,707         | 1,612.7             | 35,285           | 0.9         | 30,533                                 | 1.5                | 426.2               | 26.4          |  |
| 6/30/14        | 45,841         | 1,638.0             | 35,735           | 1.3         | 31,914                                 | 1.4                | 457.1               | 27.9          |  |
| 6/30/15        | 45,722         | 1,645.0             | 35,979           | 0.7         | 33,106                                 | 1.4                | 483.9               | 29.4          |  |
| 6/30/16        | 45,676         | 1,686.5             | 36,923           | 2.6         | 34,214                                 | 1.3                | 509.7               | 30.2          |  |
| 6/30/17        | 46,094         | 1,668.8             | 36,204           | (1.9)       | 36,260                                 | 1.3                | 540.1               | 32.4          |  |
| 6/30/18        | 46,207         | 1,723.6             | 37,302           | 3.0         | 37,398                                 | 1.2                | 575.1               | 33.4          |  |
| 6/30/19        | 45,965         | 1,802.4             | 39,212           | 5.1         | 38,543                                 | 1.2                | 609.1               | 33.8          |  |
| <b>6/30/20</b> | <b>44,373</b>  | <b>\$ 1,795.7</b>   | <b>\$ 40,469</b> | <b>3.2%</b> | <b>39,805</b>                          | <b>1.1</b>         | <b>\$ 637.1</b>     | <b>35.5%</b>  |  |

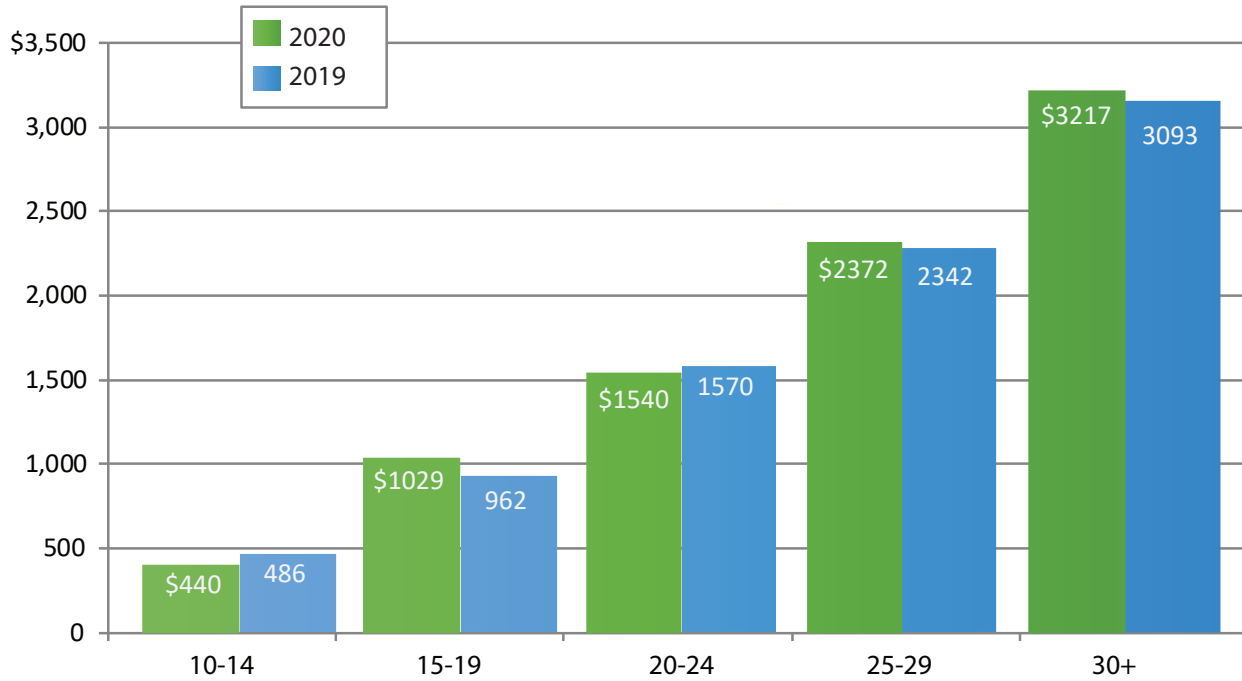
The above valuation payroll results do not include DROP payroll.

## SCHEDULE OF AVERAGE BENEFIT PAYMENTS

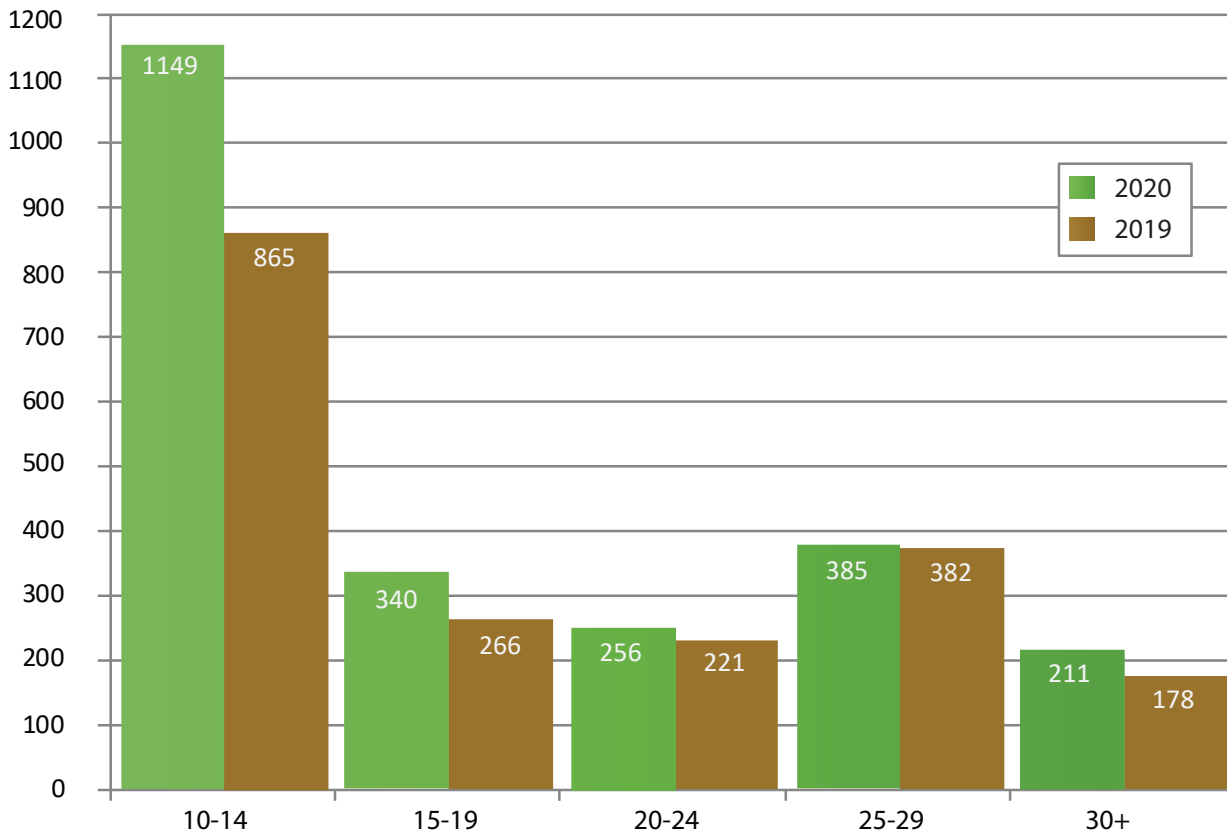
*Voluntary Retirements Still Receiving Benefits as of June 30, 2020*

|  | Years of Credited Service |             |             |             |             |
|--|---------------------------|-------------|-------------|-------------|-------------|
|  | 10-14                     | 15-19       | 20-24       | 25-29       | 30+         |
| Retirement Effective Dates - July 1, 2019 to June 30, 2020 |                           |             |             |             |             |
| Average Monthly Benefit                                    | \$ 439.55                 | \$ 1,029.09 | \$ 1,540.36 | \$ 2,372.23 | \$ 3,217.21 |
| Average Monthly Final Average Salary                       | 2,791.36                  | 3,379.30    | 3,786.62    | 2,781.00    | 2,412.39    |
| Number of Active Retirees                                  | 1,149                     | 340         | 256         | 385         | 211         |
| Retirement Effective Dates - July 1, 2018 to June 30, 2019 |                           |             |             |             |             |
| Average Monthly Benefit                                    | 485.59                    | 961.56      | 1,569.79    | 2,342.18    | 3,093.57    |
| Average Monthly Final Average Salary                       | 2,735.94                  | 3,260.28    | 3,679.97    | 2,784.56    | 2,464.53    |
| Number of Active Retirees                                  | 865                       | 266         | 221         | 382         | 178         |
| Retirement Effective Dates - July 1, 2017 to June 30, 2018 |                           |             |             |             |             |
| Average Monthly Benefit                                    | 455.14                    | 991.06      | 1,472.39    | 2,325.23    | 2,954.57    |
| Average Monthly Final Average Salary                       | 2,711.53                  | 3,303.54    | 3,717.60    | 2,457.80    | 1,878.18    |
| Number of Active Retirees                                  | 763                       | 274         | 186         | 385         | 214         |
| Retirement Effective Dates - July 1, 2016 to June 30, 2017 |                           |             |             |             |             |
| Average Monthly Benefit                                    | 481.50                    | 1,029.89    | 1,490.30    | 2,351.32    | 3,060.06    |
| Average Monthly FAS  | 2,827.35                  | 3,284.51    | 3,442.16    | 3,618.77    | 3,900.04    |
| Number of Active Retirees                                  | 843                       | 286         | 203         | 454         | 213         |
| Retirement Effective Dates - July 1, 2015 to June 30, 2016 |                           |             |             |             |             |
| Average Monthly Benefit                                    | 473.37                    | 1,010.25    | 1,480.91    | 2,306.85    | 2,930.09    |
| Average Monthly FAS  | 2,836.80                  | 3,278.34    | 3,734.49    | 3,726.51    | 4,058.28    |
| Number of Active Retirees                                  | 830                       | 238         | 163         | 441         | 222         |
| Retirement Effective Dates - July 1, 2014 to June 30, 2015 |                           |             |             |             |             |
| Average Monthly Benefit                                    | 464.07                    | 1,113.73    | 1,535.49    | 2,344.41    | 2,904.59    |
| Average Monthly Final Average Salary                       | 2,768.57                  | 3,238.30    | 3,493.35    | 3,521.92    | 3,868.05    |
| Number of Active Retirees                                  | 835                       | 258         | 214         | 468         | 203         |
| Retirement Effective Dates - July 1, 2013 to June 30, 2014 |                           |             |             |             |             |
| Average Monthly Benefit                                    | 439.94                    | 957.40      | 1,422.04    | 2,261.50    | 2,850.48    |
| Average Monthly Final Average Salary                       | 2,691.68                  | 2,991.31    | 3,400.22    | 3,512.88    | 3,727.83    |
| Number of Active Retirees                                  | 750                       | 230         | 174         | 470         | 164         |
| Retirement Effective Dates - July 1, 2012 to June 30, 2013 |                           |             |             |             |             |
| Average Monthly Benefit                                    | 439.47                    | 909.99      | 1,503.68    | 2,308.12    | 2,788.18    |
| Average Monthly Final Average Salary                       | 2,549.33                  | 2,817.05    | 3,527.85    | 3,309.36    | 3,654.43    |
| Number of Active Retirees                                  | 789                       | 209         | 184         | 508         | 199         |
| Retirement Effective Dates - July 1, 2011 to June 30, 2012 |                           |             |             |             |             |
| Average Monthly Benefit                                    | 415.01                    | 948.47      | 1,383.72    | 2,315.59    | 2,718.91    |
| Average Monthly Final Average Salary                       | 2,538.35                  | 2,940.64    | 3,205.23    | 3,408.59    | 3,383.48    |
| Number of Active Retirees                                  | 731                       | 209         | 165         | 432         | 156         |
| Retirement Effective Dates - July 1, 2010 to June 30, 2011 |                           |             |             |             |             |
| Average Monthly Benefit                                    | 445.50                    | 991.98      | 1,507.80    | 2,322.97    | 2,710.13    |
| Average Monthly Final Average Salary                       | 2,583.34                  | 2,897.53    | 3,182.95    | 3,380.22    | 3,418.11    |
| Number of Active Retirees                                  | 638                       | 183         | 177         | 420         | 184         |
| Retirement Effective Dates - July 1, 2010 to June 30, 2020 |                           |             |             |             |             |
| Average Monthly Benefit                                    | 454.41                    | 998.68      | 1,496.11    | 2,323.74    | 2,931.49    |
| Average Monthly Final Average Salary                       | 2,712.85                  | 3,168.10    | 3,531.75    | 3,277.24    | 3,272.55    |
| Number of Active Retirees                                  | 8,193                     | 2,493       | 1,943       | 4,345       | 1,944       |

COMPARISON OF MONTHLY ANNUITY BY CREDITED YEARS OF SERVICE



COMPARISON OF RETIREES BY CREDITED YEARS OF SERVICE



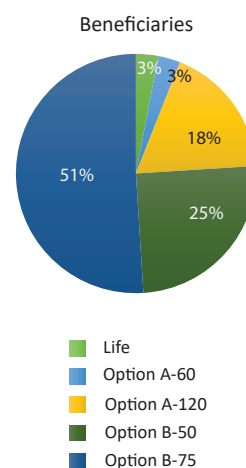
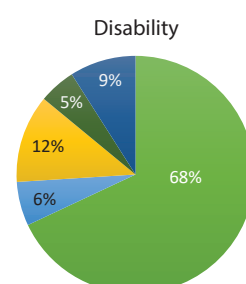
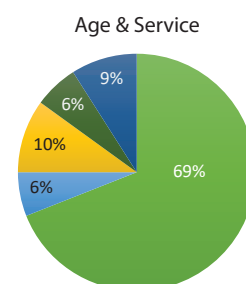


## SCHEDULE OF RETIRED MEMBERS BY TYPE OF BENEFIT

*Annuities Being Paid as of June 30, 2020*

| Type of Annuity  | Number        | Annual Annuities   |
|--|---------------|--------------------|
| <b>Age &amp; Service Retirees</b>                              |               |                    |
| Life   | 22,021        | \$ 367,076,844     |
| Option A-60 (5 years certain)                                  | 1,991         | 26,787,276         |
| Option A-120 (10 years certain)                                | 3,287         | 42,648,804         |
| Option B-50 (joint and 50% survivor)                           | 1,815         | 37,685,952         |
| Option B-75 (joint and 75% survivor)                           | 2,873         | 49,603,572         |
| Total  | 31,987        | 523,802,448        |
| <b>Disability Retirees</b>                                     |               |                    |
| Life   | 2,179         | 22,545,528         |
| Option A-60  | 186           | 1,748,052          |
| Option A-120   | 400           | 3,978,600          |
| Option B-50  | 163           | 1,731,672          |
| Option B-75  | 287           | 2,788,740          |
| Total  | 3,215         | 32,792,592         |
| <b>Beneficiaries of Age &amp; Service Retirees</b>             |               |                    |
| Life   | 46            | 981,696            |
| Option A-60  | 49            | 377,868            |
| Option A-120   | 290           | 2,720,916          |
| Option B-50  | 397           | 3,874,500          |
| Option B-75  | 798           | 9,123,468          |
| Total  | 1,580         | 17,078,448         |
| <b>Total Age &amp; Service Retirees &amp; Beneficiaries</b>    | <b>33,567</b> | <b>540,880,896</b> |
| <b>Death-in-Service Beneficiaries</b>                          | 1,218         | 10,211,760         |
| <b>Total Death and Disability Retirees &amp; Beneficiaries</b> | 4,433         | 43,004,352         |
| <b>QDRO Alternate Payees</b>                                   | 285           | 2,284,872          |
| <b>Total Retirees &amp; Beneficiaries</b>                      | 38,285        | 586,170,120        |
| <b>DROP Participants</b>                                       | 1,520         | 50,936,592         |
| <b>Total Including DROP Participants</b>                       | 39,805        | \$ 637,106,712     |

Retired by Type of Benefit



The average monthly benefit is \$1,333.81.

**SCHEDULE OF RETIREES AND BENEFITS PAID BY COUNTY \***  
(for the fiscal year ended June 30, 2020)

*District I*

| County       | Retirees | Benefits Paid |
|--------------|----------|---------------|
| Arkansas     | 207      | \$ 2,962,432  |
| Baxter       | 404      | \$ 5,124,801  |
| Chicot       | 264      | \$ 3,255,154  |
| Clay         | 193      | \$ 1,962,524  |
| Cleburne     | 394      | \$ 5,552,965  |
| Craighead    | 1,124    | \$ 14,475,932 |
| Crittenden   | 397      | \$ 4,090,216  |
| Cross        | 261      | \$ 3,037,021  |
| Desha        | 305      | \$ 3,674,123  |
| Fulton       | 166      | \$ 1,900,767  |
| Greene       | 408      | \$ 4,769,711  |
| Independence | 468      | \$ 5,471,365  |
| Izard        | 225      | \$ 2,683,148  |
| Jackson      | 167      | \$ 1,707,662  |
| Jefferson**  | 239      | \$ 3,364,367  |
| Lawrence     | 233      | \$ 3,003,319  |
| Lee          | 175      | \$ 2,328,443  |
| Lincoln      | 287      | \$ 4,188,186  |
| Lonoke       | 969      | \$ 15,102,367 |
| Mississippi  | 381      | \$ 4,746,839  |
| Monroe       | 129      | \$ 1,610,865  |
| Phillips     | 280      | \$ 2,907,214  |
| Poinsett     | 258      | \$ 2,608,501  |
| Prairie      | 141      | \$ 1,813,752  |
| Randolph     | 247      | \$ 2,866,669  |
| St. Francis  | 418      | \$ 4,583,125  |
| Searcy       | 150      | \$ 1,663,710  |
| Sharp        | 258      | \$ 3,040,678  |
| Stone        | 260      | \$ 3,056,290  |
| Woodruff     | 107      | \$ 1,103,286  |

*District III*

| County      | Retirees | Benefits Paid |
|-------------|----------|---------------|
| Benton      | 1,090    | \$ 15,074,694 |
| Boone       | 452      | \$ 5,442,105  |
| Carroll     | 185      | \$ 2,184,131  |
| Crawford**  | 478      | \$ 7,693,896  |
| Marion      | 175      | \$ 1,848,558  |
| Newton**    | 87       | \$ 1,146,766  |
| Pope        | 674      | \$ 9,087,525  |
| Sebastian** | 701      | \$ 9,258,127  |
| Washington  | 1,137    | \$ 16,690,562 |

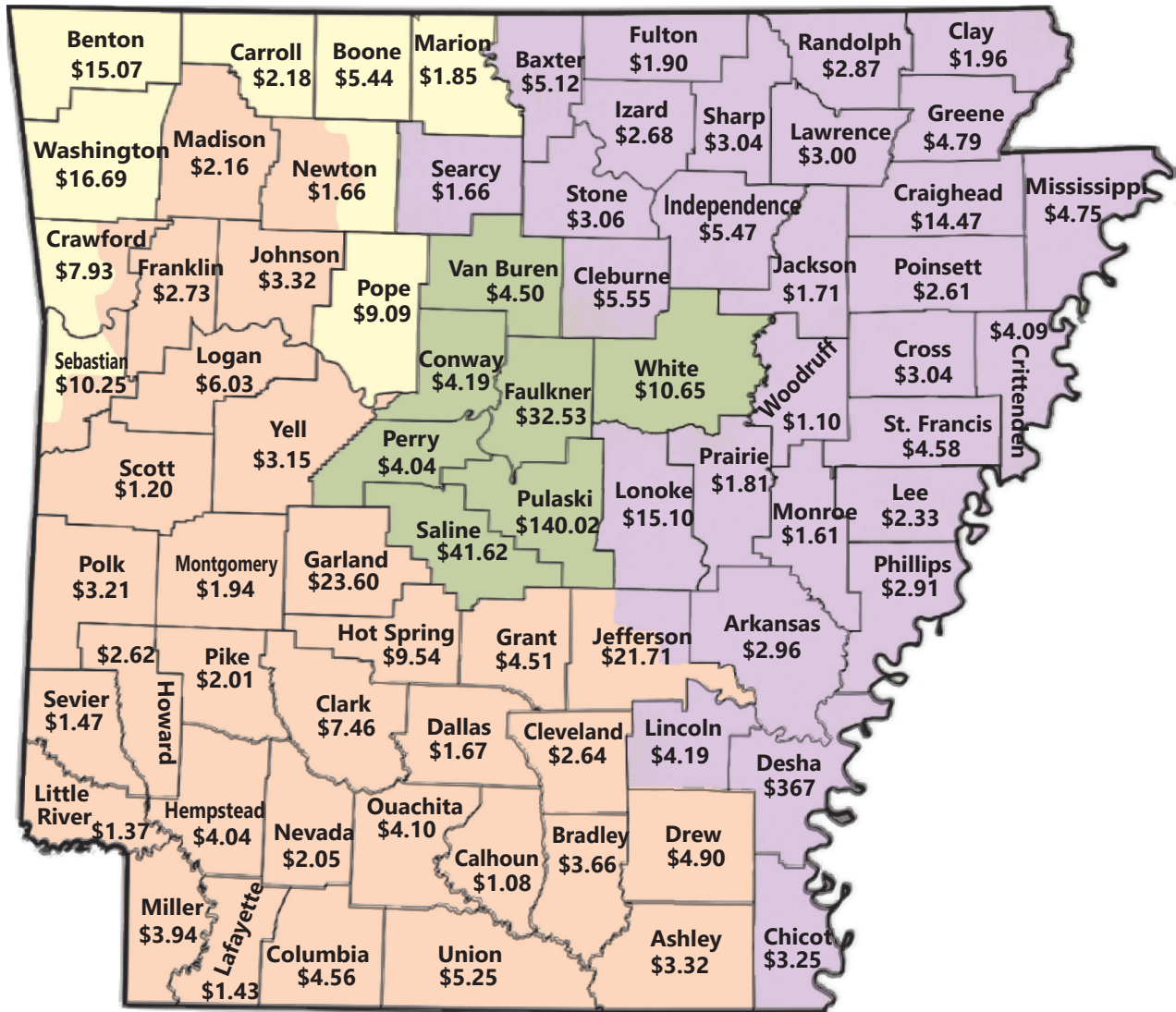
*District II*

| County    | Retirees | Benefits Paid  |
|-----------|----------|----------------|
| Conway    | 334      | \$ 4,186,174   |
| Faulkner  | 1,973    | \$ 32,529,459  |
| Perry     | 279      | \$ 4,043,239   |
| Pulaski   | 6,811    | \$ 140,021,234 |
| Saline    | 2,299    | \$ 41,618,507  |
| Van Buren | 320      | \$ 4,505,769   |
| White     | 827      | \$ 10,653,973  |

*District IV*

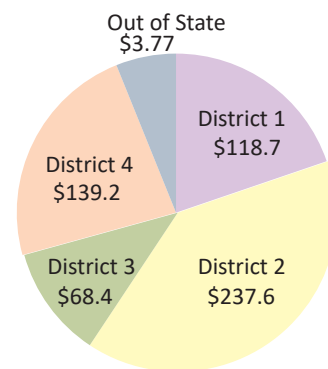
| County       | Retirees | Benefits Paid |
|--------------|----------|---------------|
| Ashley       | 281      | \$ 3,315,403  |
| Bradley      | 296      | \$ 3,665,128  |
| Calhoun      | 93       | \$ 1,077,977  |
| Clark        | 552      | \$ 7,463,927  |
| Cleveland    | 184      | \$ 2,640,658  |
| Columbia     | 317      | \$ 4,564,821  |
| Crawford**   | 25       | \$ 238,801    |
| Dallas       | 152      | \$ 1,670,094  |
| Drew         | 340      | \$ 4,903,786  |
| Franklin     | 206      | \$ 2,730,571  |
| Garland      | 1,457    | \$ 23,604,052 |
| Grant        | 305      | \$ 4,513,783  |
| Hempstead    | 310      | \$ 4,042,610  |
| Hot Spring   | 718      | \$ 9,541,442  |
| Howard       | 197      | \$ 2,623,289  |
| Jefferson**  | 1,254    | \$ 18,346,075 |
| Johnson      | 249      | \$ 3,319,640  |
| Lafayette    | 127      | \$ 1,426,785  |
| Little River | 144      | \$ 1,367,260  |
| Logan        | 503      | \$ 6,033,920  |
| Madison      | 175      | \$ 2,289,503  |
| Miller       | 336      | \$ 3,935,941  |
| Montgomery   | 143      | \$ 1,941,442  |
| Newton**     | 50       | \$ 514,056    |
| Nevada       | 176      | \$ 2,055,852  |
| Ouachita     | 350      | \$ 4,105,169  |
| Pike         | 152      | \$ 2,007,052  |
| Polk         | 263      | \$ 3,215,540  |
| Scott        | 132      | \$ 1,200,897  |
| Sebastian**  | 78       | \$ 988,804    |
| Sevier       | 132      | \$ 1,468,124  |
| Union        | 422      | \$ 5,252,258  |
| Yell         | 253      | \$ 3,149,929  |

\*Does not include DROP or PAW lump sum payments. Totals may not add due to rounding.  
\*\*County totals divided over two districts.



(The figures shown are benefits paid by county in millions of dollars)

| Benefits By District               | Total Retirees | Total Amount          |
|------------------------------------|----------------|-----------------------|
| 1st District                       | 9,515          | \$ 118,655,433        |
| 2nd District                       | 12,843         | \$ 237,558,355        |
| 3rd District                       | 4,979          | \$ 68,426,365         |
| 4th District                       | 10,372         | \$ 139,214,590        |
| Out of State                       | 3,768          | \$ 36,687,133         |
| <b>Total Retirees and Benefits</b> | <b>41,477</b>  | <b>\$ 600,541,876</b> |

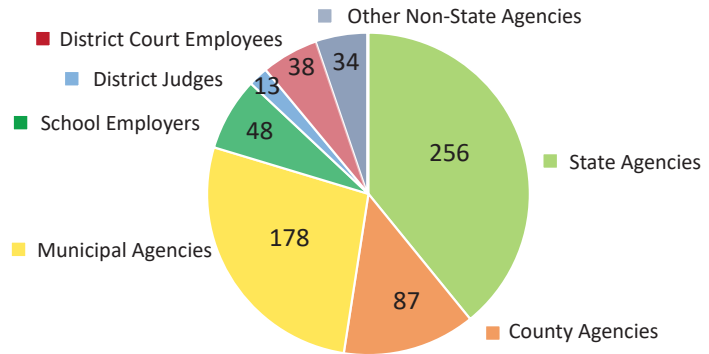


APERS PARTICIPATING EMPLOYERS

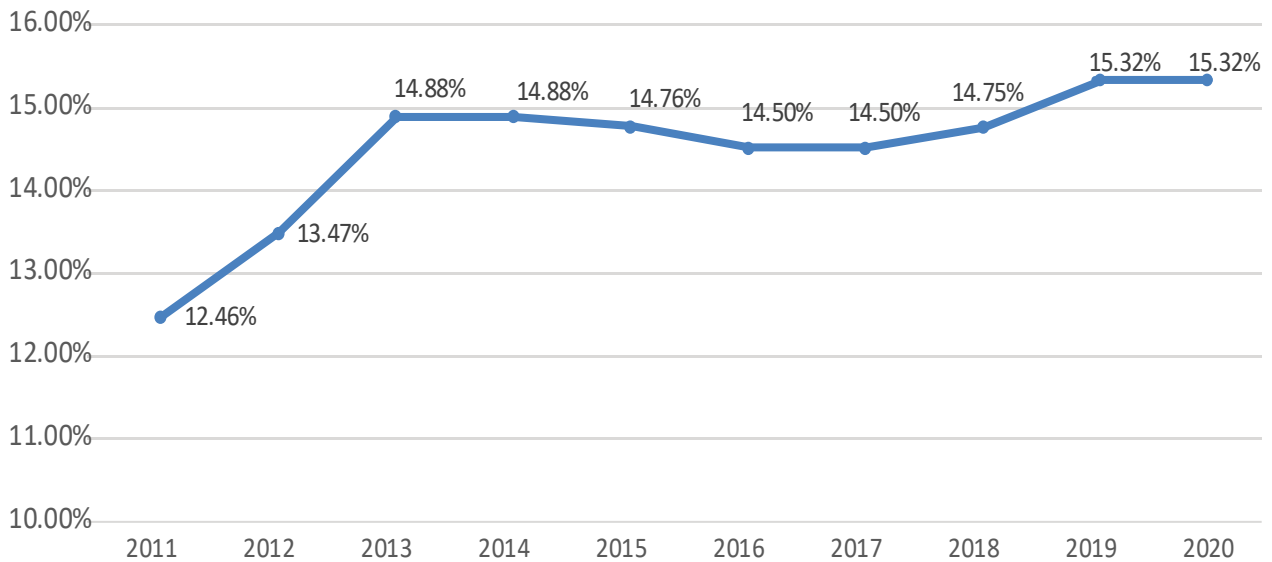
Reporting Entities by Category

| Fiscal Years Ended June 30 | 2020       | 2019       |
|----------------------------|------------|------------|
| State                      | 256        | 253        |
| County                     | 87         | 87         |
| Municipal                  | 178        | 178        |
| School                     | 48         | 53         |
| District Judges            | 13         | 14         |
| District Court             | 38         | 39         |
| Other Non-State            | 34         | 42         |
| <b>Total</b>               | <b>654</b> | <b>666</b> |

Reporting Entities 2020



Schedule of Employer Rates - 10 Year Comparison



## Schedule of Participating Employers (as of June 30, 2020)

## State Agencies

|  |   |
|--|---|
| Abstractor's Board, Arkansas   | Cossatot Community College of the University of Arkansas              |
| Accountancy, Arkansas State Board of Public                                | Cossatot Conservation District  |
| Administrative Office of the Courts  | Counseling, Arkansas Board of Examiners in Court of Appeals, Arkansas |
| Aeronautics, Arkansas Department of  | Craighead County Conservation District                                |
| Agriculture Department, Arkansas   | Crawford County Conservation District                                 |
| Alcohol Abuse Program  | Crime Information Center, Arkansas                                    |
| Appraiser Licensing and Certification Board, Arkansas                      | Crime Laboratory, Arkansas State                                      |
| Architects, Landscape Architects and Interior Designers, Arkansas Board of | Crittenden County Conservation District                               |
| Arkansas County Conservation District                                      | Crooked Creek Conservation District                                   |
| Arkansas Northeastern College  | Cross County Conservation District                                    |
| Arkansas Senate  | Dallas County Conservation District                                   |
| Arkansas State University  | Dental Examiners, Arkansas State Board of                             |
| Arkansas State University - Beebe  | Department of Agriculture   |
| Arkansas State University - Newport  | Department of Commerce  |
| Arkansas Technical University  | Department of Correction  |
| Ashley County Conservation District  | Department of Education   |
| Assessment Coordination Department, Arkansas                               | Department of Energy and Environment                                  |
| Athletic Commission, Arkansas State  | Department of Finance and Administration                              |
| Attorney General, Arkansas   | Department of Health  |
| Auctioneers Licensing Board, Arkansas                                      | Department of Human Services  |
| Auditor, Arkansas  | Department of Inspector General                                       |
| Bail Bondsman Licensing Board, Arkansas                                    | Department of Labor and Licensing                                     |
| Bank Department, Arkansas State  | Department of Parks, Heritage, and Tourism                            |
| Barber Examiners, Arkansas State Board of                                  | Department of Public Safety   |
| Baxter County Conservation District  | Department of the Military  |
| Benton County Conservation District  | Department of Transformation and Shared Services                      |
| Black River Technical College  | Department of Veterans Affairs  |
| Boone County Conservation District   | Deputy Prosecuting Attorneys  |
| Buffalo Conservation District  | Desha County Conservation Districts                                   |
| Calhoun County Conservation District                                       | Development Finance Authority, Arkansas                               |
| Capitol Zoning District Commission, Arkansas                               | Dietetics Licensing Board, Arkansas                                   |
| Carroll County Conservation District                                       | Disabled Veterans Service Office                                      |
| Chicot County Conservation District  | Drew County Conservation District                                     |
| Child Abuse and Neglect Prevention Board, Arkansas                         | East Arkansas Community College                                       |
| Chiropractic Examiners, Arkansas State Board of                            | Economic Development Commission, Arkansas                             |
| Claims Commission, Arkansas State  | Educational Television Network, Arkansas                              |
| Clay County Conservation District  | Election Commissioners, Arkansas State Board of                       |
| Cleburne County Conservation District                                      | Emergency Management, Arkansas Department of                          |
| Collection Agencies, Arkansas State Board of                               | Engineers and Professional Surveyors, Arkansas Board of               |
| College of the Ouachitas   | Licensure for Professional  |
| Columbia County Conservation District                                      | Environmental Quality, Arkansas Department of                         |
| Community Correction, Arkansas Department of                               | Ethics Commission, Arkansas   |
| Constitutional Officers  | Fair Housing Commission, Arkansas                                     |
| Contractors Licensing Board, Arkansas                                      | Faulkner County Conservation District                                 |
| Conway County Conservation District  | Fifteenth (15th) Judicial District Victim Witness Office              |
| Correction, Arkansas Department of   | Fifteenth (15th) Judicial Drug Task Force                             |
|  | Fifth (5th) Judicial Drug Task Force                                  |

## State Agencies continued

Finance and Administration, Arkansas Department of  
 Fire Protection Licensing Board, Arkansas  
 First (1st) Judicial Drug Task Force  
 Fourteenth (14th) Judicial Drug Task Force  
 Franklin County Conservation District  
 Fulton County Conservation District  
 Game and Fish Commission, Arkansas  
 Garland County Conservation District  
 Geographic Information Office, Arkansas  
 Geological Survey, Arkansas  
 Geologists, Arkansas Board of Registration for  
 Professional  
 Governor, Office of  
 Greene County Conservation District  
 Health Information Technology, Arkansas Office of  
 Health Services Permit Agency, Arkansas  
 Health, Arkansas Department of  
 Hearing Instrument Dispensers, Arkansas Board of  
 Hempstead County Conservation District  
 Henderson State University  
 Heritage, Arkansas Department of  
 Higher Education, Arkansas Department of  
 Home Inspector Registration Board, Arkansas  
 Hot Spring County Conservation District  
 House of Representatives - Speaker's Office  
 House of Representatives, Arkansas  
 Human Services, Arkansas Department of  
 Independence County Conservation District  
 Information Systems, Arkansas Department of  
 Insurance Department, Arkansas  
 Izard County Conservation District  
 Jackson County Conservation District  
 Jefferson County Conservation District  
 Johnson County Conservation District  
 Judicial Discipline and Disability Commission, Arkansas  
 Labor, Arkansas Department of  
 Lafayette Conservation District  
 Law Enforcement Standards and Training, Arkansas  
 Commission  
 Lawrence County Conservation District  
 Lee County Conservation District  
 Legislative Audit, Arkansas Division of  
 Legislative Research, Arkansas Bureau of  
 Library, Arkansas State  
 Lieutenant Governor, Office of  
 Lincoln County Conservation District  
 Liquefied Petroleum Gas Board, Arkansas  
 Logan County Conservation District  
 Lonoke County Conservation District

Lottery Commission, Arkansas  
 Madison County Conservation District  
 Manufactured Home Commission, Arkansas  
 Martin Luther King, Jr. Commission  
 Medicaid Inspector General, Office of  
 Medical Board, Arkansas State  
 Miller County Conservation District  
 Mine Creek Conservation District  
 Minority Health Commission, Arkansas  
 Mississippi County Conservation District  
 Monroe County Conservation District  
 Montgomery County Conservation District  
 Motor Vehicle Commission, Arkansas  
 National Park Community College  
 Natural Resources Commission, Arkansas  
 Nevada County Conservation District  
 Newton County Conservation District  
 North Arkansas College  
 Northwest Arkansas Community College  
 Nursing, Arkansas State Board of  
 Oil and Gas Commission, Arkansas  
 Opticians Arkansas Board of Dispensing  
 Optometry, Arkansas State Board of  
 Ouachita Conservation District  
 Ozarka College  
 Parks and Tourism, Arkansas Department of  
 Parole Board, Arkansas  
 Pharmacy, Arkansas State Board of  
 Phillips Community College of the University of  
 Arkansas  
 Phillips County Conservation District  
 Physical Therapy, Arkansas State Board of  
 Pike County Conservation District  
 Poinsett County Conservation District  
 Pope County Conservation District  
 Poteau River Conservation District  
 Prairie County Conservation District  
 Prosecuting Attorney  
 Prosecutor Coordinator, Office of the  
 Psychology, Arkansas Board of  
 Public Defender Commission, Arkansas  
 Public Employees Retirement System, Arkansas  
 Public Service Commission, Arkansas  
 Pulaski Conservation District  
 Randolph County Conservation District  
 Real Estate Commission, Arkansas  
 Rehabilitation Services, Arkansas  
 Rich Mountain Conservation District  
 Riverside Vocational-Technical School  
 Saint Francis Conservation District  
 School for the Blind, Arkansas



**State Agencies continued**

School for the Deaf, Arkansas  
 Sebastian County Conservation District  
 Secretary of State, Arkansas  
 Secretary of State, Office of  
 Securities Department, Arkansas  
 Senate, Arkansas  
 Sentencing Commission, Arkansas  
 Sharp County Conservation District  
 Sixteenth (16th) Judicial Drug Task Force  
 Social Security Administration, Disability Determination  
 Social Work Licensing Board, Arkansas  
 South Arkansas Community College  
 South Central Drug Task Force - Eighth (8th) Judicial District  
 Southeast Arkansas College  
 Southern Arkansas University  
 Southern Arkansas University Tech  
 Speech-Language Pathology and Audiology, Arkansas Board of Examiners in  
 Spinal Cord Commission, Arkansas  
 State District Courts  
 State Lands, Arkansas Commission of  
 State Military Department  
 State Military Department  
 State Police, Arkansas Department of  
 Statewide Shared Services  
 Stone County Conservation District  
 Student Loan Authority, Arkansas  
 Supreme Court - Bar of Arkansas  
 Supreme Court, Arkansas  
 Tenth (10th) Judicial District Victim Assistance Office  
 Tenth (10th) Judicial Drug Task Force  
 Third (3rd) Judicial Drug Task Force  
 Thirteenth (13th) Judicial Drug Task Force  
 Tobacco Control Board, Arkansas  
 Tobacco Settlement Commission, Arkansas  
 Towing and Recovery Board, Arkansas  
 Treasurer, Office of the  
 Twentieth (20th) Judicial District Drug Task Force  
 Twenty-First (21st) Judicial Drug Task Force  
 Union County Conservation District  
 University of Arkansas - Pulaski Technical College  
 University of Arkansas at Fayetteville  
 University of Arkansas at Fort Smith  
 University of Arkansas at Little Rock  
 University of Arkansas at Monticello  
 University of Arkansas at Pine Bluff  
 University of Arkansas College at Hope  
 University of Arkansas Community College at Batesville

University of Arkansas Community College at Morrilton  
 University of Arkansas Cooperative Extension Service  
 University of Arkansas for Medical Sciences  
 University of Arkansas Rich Mountain  
 University of Central Arkansas  
 Van Buren County Conservation District  
 Veterans Affairs, Arkansas Department of  
 Veterans Child Welfare Service  
 Veterinary Medical Examining Board, Arkansas  
 War Memorial Stadium Commission  
 Washington County Conservation District  
 Waterways Commission, Arkansas  
 White County Conservation District  
 Woodruff County Conservation District  
 Workers' Compensation Commission, Arkansas  
 Workforce Services, Arkansas Department of  
 Yell County Conservation District

**County Agencies**

Arkansas Association of Counties  
 Arkansas County  
 Arkansas Valley Regional Library  
 Ashley County  
 Baxter County  
 Baxter County Library  
 Benton County  
 Boone County  
 Bradley County  
 Calhoun County  
 Carroll County  
 Chicot County  
 Clark County  
 Clay County  
 Clay County - Western District  
 Cleburne County  
 Cleveland County  
 Columbia County  
 Conway County  
 Craighead County  
 Crawford County  
 Crittenden County  
 Cross County  
 Dallas County  
 Desha County  
 Drew County  
 East Central Arkansas Regional Library  
 Faulkner County  
 Franklin County

## County Agencies continued

Fulton County  
Garland County  
Grant County  
Grassy Lake and Tyrone Drainage District  
Greene County  
Hempstead County  
Hot Spring County  
Howard County  
Independence County  
Izard County  
Jackson County  
Jefferson County  
Johnson County  
Lafayette County  
Lawrence County  
Lee County  
Lincoln County  
Little River County  
Logan County  
Lonoke County  
Madison County  
Marion County  
Miller County  
Mississippi County  
Monroe County  
Montgomery County  
Nevada County  
Newton County  
Ouachita County  
Perry County  
Phillips County  
Phillips County Library  
Pike County  
Poinsett County  
Polk County  
Pope County  
Prairie County  
Pulaski County  
Randolph County  
Randolph County Nursing Home  
Saint Francis County  
Saline County  
Saline County Library  
Scott County  
Searcy County  
Sebastian County  
Sevier County  
Sharp County  
Stone County

Union County  
Van Buren County  
Washington County  
White County  
White County Public Library  
White River Regional Library  
Woodruff County  
Yell County  
Yell County Library

## Municipal Agencies

Alma Water and Sewer Department  
Batesville Waterworks  
Bradford Water and Sewer System  
Brinkley Municipal Waterworks and Sewer Department  
Camden Water and Utilities  
Central Arkansas Water  
City of Alexander  
City of Alma  
City of Arkadelphia  
City of Ash Flat  
City of Ashdown  
City of Augusta  
City of Austin  
City of Batesville  
City of Beebe  
City of Bentonville  
City of Biscoe  
City of Bono  
City of Bradford  
City of Brinkley  
City of Bryant  
City of Cabot  
City of Caddo Valley  
City of Calico Rock  
City of Cammack Village  
City of Carlisle  
City of Cave City  
City of Cave Springs  
City of Cedarville  
City of Centerton  
City of Charleston  
City of Cherry Valley  
City of Clarksville  
City of Clinton  
City of Corning  
City of Cotter  
City of Crawfordsville  
City of Crossett



## Municipal Agencies continued

|                            |                        |
|----------------------------|------------------------|
| City of Decatur            | City of Lowell         |
| City of Des Arc            | City of Magnolia       |
| City of Dewitt             | City of Malvern        |
| City of Dierks             | City of Mammoth Spring |
| City of Dover              | City of Marked Tree    |
| City of Elm Springs        | City of Marshall       |
| City of England            | City of Marvell        |
| City of Eudora             | City of McRae          |
| City of Farmington         | City of Melbourne      |
| City of Flippin            | City of Mena           |
| City of Fordyce            | City of Monette        |
| City of Foreman            | City of Monticello     |
| City of Forrest City       | City of Morrilton      |
| City of Gassville          | City of Mountain Home  |
| City of Gentry             | City of Mountain Pine  |
| City of Goshen             | City of Mountain View  |
| City of Gravette           | City of Mount Ida      |
| City of Green Forest       | City of Nashville      |
| City of Greenland          | City of Norman         |
| City of Hackett            | City of Ola            |
| City of Hamburg            | City of Pangburn       |
| City of Hampton            | City of Paragould      |
| City of Hardy              | City of Paris          |
| City of Harrisburg         | City of Perryville     |
| City of Harrison           | City of Piggott        |
| City of Haskell            | City of Plumerville    |
| City of Hazen              | City of Pottsville     |
| City of Heber Springs      | City of Prairie Grove  |
| City of Helena-West Helena | City of Prescott       |
| City of Highfill           | City of Quitman        |
| City of Holly Grove        | City of Rector         |
| City of Hope               | City of Rison          |
| City of Horatio            | City of Rogers         |
| City of Hot Springs        | City of Russellville   |
| City of Huntington         | City of Salem          |
| City of Huntsville         | City of Searcy         |
| City of Huttig             | City of Shannon Hills  |
| City of Jacksonville       | City of Sheridan       |
| City of Jasper             | City of Smackover      |
| City of Junction City      | City of Stamps         |
| City of Kibler             | City of Star City      |
| City of Knoxville          | City of Strong         |
| City of Lamar              | City of Stuttgart      |
| City of Lavaca             | City of Summit         |
| City of Lepanto            | City of Van Buren      |
| City of Leslie             | City of Vilonia        |
| City of Lewisville         | City of Waldron        |
| City of Lincoln            | City of Ward           |
| City of Lockesburg         | City of Warren         |
|                            | City of West Fork      |

## Municipal Agencies continued

City of Wilmar  
City of Wynne  
City of Yellville  
Clinton Water and Sewer  
Crossett Public Library  
Crossett Water Commission  
El Dorado Waterworks  
Fordyce Water and Sewer  
Forrest City Water Utility  
Fort Smith Public Library  
Harrisburg Water and Gas Division  
Hope Water and Light  
Hot Springs Advertising and Promotion  
Commission  
Hot Springs Municipal Sewer System  
Huntsville Water and Sewer  
Jacksonville Wastewater Utility  
Jacksonville Water Commission  
Little Rock Water Reclamation Authority  
Malvern Waterworks  
McGehee Water and Sewer System  
Mena Water and Sewer  
Mount Pleasant Water Department  
Mountain View Water and Sewer System  
Municipal League, Arkansas  
North Little Rock Advertising & Promotion  
Commission  
Pangburn Water Department  
Piggott Light and Water System  
Rogers Water Utilities  
Star City Water and Sewer  
Stuttgart and North Arkansas County Library  
Town of Arkansas City  
Town of Fountain Hill  
Town of Imboden  
Town of Ravenden  
Town of Shirley  
Town of Viola  
Town of Western Grove  
Van Buren Municipal Utilities  
Vilonia Waterworks Association  
Warren Water and Sewer  
Wynne Water Utilities

## Schools

Arkadelphia School District #1  
Atkins School District #18  
Bald Knob School District  
Benton School District #8  
Bergman School District #3  
Berryville School District  
Booneville School District #65  
Cabot School District #4  
Clarksville School District #17  
Conway School District  
Cossatot River School District  
Des Arc School District #5  
El Dorado School District #15  
Fairview School District  
Fayetteville School District #1  
Forrest City School District  
Fort Smith School District  
Greenwood School District #25  
Helena-West Helena School District #2  
Hope School District #1a  
Horatio School District #55  
Hot Springs School District  
Huntsville School District  
Jonesboro Public Schools  
Junction City School District #75  
Lafayette County School District  
Lee County School District  
Little Rock School District  
McCrary Public Schools  
Mountain Home School District #9  
North Little Rock School District  
Pine Bluff Schools  
Pottsville School District #61  
Pulaski County Special School District  
Russellville School District #14  
Searcy County School District  
Sheridan School District #37  
Siloam Springs School District #21  
South Conway County School District  
Two Rivers School District  
Van Buren School District #42  
Waldron School District  
Warren School District #1

**District Judges**

Brinkley District Court  
 Camden District Court  
 Charleston District Court  
 Cherokee Village District Court  
 Clarksville District Court  
 East Camden District Court  
 Hot Springs District Court  
 Little Rock District Court  
 Newport District Court  
 Ouachita County District Court  
 Sharp County District Court  
 State District Judges  
 Woodruff County District Court

**District Court Employers\***

Alpena District Court  
 Berryville District Court  
 Booneville District Court  
 Camden District Court  
 Cherokee Village District Court  
 Clarendon District Court  
 De Queen District Court  
 Dermott District Court  
 Devalls Bluff District Court  
 Dumas District Court  
 East Camden District Court  
 Elkins District Court  
 Eureka Springs District Court  
 Faulkner County District Court  
 Fayetteville District Court  
 Fort Smith District Court  
 Lake Village District Court  
 Little Rock District Court  
 Lonoke District Court  
 Marion District Court  
 Maumelle District Court  
 McCrory District Court  
 McGehee District Court  
 Newport District Court  
 North Little Rock District Court  
 Osceola District Court  
 Pine Bluff District Court  
 Sherwood District Court  
 Siloam Springs District Court  
 Springdale District Court  
 Texarkana District Court  
 Trumann District Court  
 Tyrone District Court  
 West Memphis District Court  
 Wrightsville District Court

**Other Non-State Employers**

Alpine Public Water Authority  
 Benton County Solid Waste District  
 Blytheville-Gosnell Regional Airport Authority  
 Boone County Airport  
 Boston Mountain Solid Waste Management District  
 Buffalo Island Regional Water District  
 Clark County Country Water Facilities  
 Fulton County Water Authority  
 Highway 71 Water District No. 1  
 Hot Spring County Solid Waste Management District  
 James Fork Regional Water District  
 Kimzey Regional Water District  
 Little River Rural Development Authority Water System  
 Madison County Water Facilities Board  
 Magnet Butterfield Water Association  
 Milltown-Washburn Water Users  
 Montgomery County Regional Water Authority  
 Nevada County-Prescott Solid Waste Management Authority  
 North Garland County Regional Water District  
 Northeast Arkansas Regional Solid Waste Management District  
 Northeast Public Water Authority  
 Paragould Housing Authority  
 Pulaski Area Geographic Information System  
 Pulaski County Regional Solid Waste Management District  
 Riversouth Rural Water District  
 Saline County Regional Solid Waste Management District  
 Sardis Water Association  
 South Bend Fire District #10  
 Southeast White County Water Authority  
 Southwest Boone County Water Association  
 Southwest White County Regional Water Association  
 Upper Southwest Arkansas Solid Waste Management District  
 Washington Water Authority  
 Watson Chapel Public Water Authority

\*Employer doesn't participate in APERS with the exception of the district court judge and/or court clerk.

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