April 5, 2024

Hon. Sarah Huckabee Sanders Governor of Arkansas State Capitol, Room 250 500 Woodlane Street Little Rock, AR 72201 Hon. Terry Rice, Senate Co-Chair Hon. Jeff Wardlaw, House Co-Chair Arkansas Legislative Council 1 Capitol Mall, 5<sup>th</sup> Floor Little Rock, AR 72201

RE: Annual Comprehensive Financial Report for SFY 2023

Dear Gov. Sanders, Sen. Rice, and Rep. Wardlaw:

As directed by Arkansas Code § 24-7-305(e)(3), I am furnishing you with the Arkansas Teacher Retirement System's Annual Comprehensive Financial Report for the state fiscal year ending June 30, 2023.

ATRS enjoyed a fruitful year in SFY2023. The System increased its total assets to \$21.178 billion and earned an investment return of 9.2%, placing the System in the top 18<sup>th</sup> percentile nationally compared to other public pension plans with assets greater than \$1 billion.

Actuarially, the System remains stable at a funded rate of 82% and an amortization period of 26 years. The System paid monthly benefits to 52,577 retirees during the fiscal year.

On behalf of the ATRS Board of Trustees, staff, and members, I extend our thanks and gratitude to you for your support of our state's public-school educators and school employees.

Sincerely,

Mark White

ATRS Executive Director



A PENSION TRUST FUND OF THE STATE OF ARKANSAS MARK WHITE, EXECUTIVE DIRECTOR

### Annual Comprehensive Financial Report 2023





### **Table of Contents**



INTRODUCTION	
Letter of Transmittal	5
Board of Trustees	7
Organizational Chart and Administrative Staff	
Professional Consultants	9
FINANCIAL	
Financial Statements:	
Statement of Fiduciary Net Position	
Statement of Changes in Fiduciary Net Position	14
Notes to Financial Statements	
REQUIRED SUPPLEMENTARY INFORMATION:	
Schedule of Changes in Net Pension Liability and Related Ratios	32
Schedule of Contributions	
Schedule of Investment Returns	
Notes to Required Supplementary Information	34
Schedule of Selected Information	
INVESTMENTS	
Investment Consultant's Report	37
Investment Policies and Procedures	
Total Returns by Fiscal Year	45
Schedule of Investment Results	47
Description of Benchmarks	54
Description of Universes	57
ACTUARIAL	
Actuary's Certification Letter	59
Exhibit 1 – Computed Actuarial Liabilities	
Exhibit 2 – Determination of Amortization Period	62
Schedule of Active Member Valuation Data	
Schedule of Retirees and Beneficiaries Added To and Removed From Rolls	63
Short Condition Test	64
Actuarial Gain (Loss) by Risk Area	65
Summary of Actuarial Assumptions and Methods	66
Table I – Single Life Retirement Values	68
Table II – Probabilities of Retirement for Members	69
Table III – Probabilities of Reduced Retirement for Members	70
Table IV – Duration of T-DROP for Members	70
Table V – Teachers Separations From Active Employment Before Age and Service Retirement	71
Table VI – Support Employees Separations From Active Employment Before Age and Service Retirement	
Table VII – Individual Pay Increases	73
Comments	
Schedule of Retired Members by Type of Benefit	75
Schedule of Average Benefit Payments	76
STATISTICAL	
Schedule of Revenue by Source	78
Schedule of Expense by Type	78
Schedule of Benefit Expenses by Type	
Participating Employers	90



### LETTER OF TRANSMITTAL



March 1, 2024

Board of Trustees Arkansas Teacher Retirement System 1400 West Third Little Rock, AR 72201

The Arkansas Teacher Retirement System (the "System" or ATRS) is pleased to submit this Annual Comprehensive Financial Report (ACFR) for the fiscal year ended June 30, 2023. The ATRS ACFR provides comprehensive information on the retirement plan that ATRS administers. Responsibility for both the accuracy of the data and the completeness and fairness of presentation rests with the System. To the best of the System's knowledge and belief, the enclosed data is accurate in all material respects and presents fairly the System's financial status and changes in the financial condition.

The 2023 Financial Report is presented in five sections. Contents are summarized below (a detailed Table of Contents may be found on Page 2).

### **Introductory Section:**

This section contains the transmittal letter, the membership of the Board of Trustees, and an organizational chart.

### **Financial Section:**

This section provides the System's financial statements, required supplementary information, and supporting schedules with additional information about the System's expenses.

### Investment Section:

This section includes the investment consultant's report, investment policies, asset allocation, and investment results.

### **Actuarial Section:**

This section provides the certification letter from the independent actuary, supporting schedules, and a summary of plan provisions.

### **Statistical Section:**

This section presents schedules and tables of comparative data related to the membership, active and retired, of the System.

On March 17, 1937, ATRS was established by Act 266 of 1937. ATRS is a combination contributory/ noncontributory retirement system governed by Arkansas retirement law, Title 24 of the Arkansas Code. ATRS is one of five state-supported retirement systems in Arkansas and provides retirement, disability, and survivor benefits to employees of Arkansas public schools and educationally related public agencies. The System has 338 participating employers.

### **Investments**

ATRS has structured a diversified portfolio that has allocations to equity markets, fixed income, private equity, real assets, and alternative investments. Investing in multiple asset classes not only allows the System to benefit from equity advances, but also offers protection during down markets. The approach is not static and changes in accordance with the changing investment environment. For example, investments in alternative classes continue to be added, such as an allocation to a mortgage servicing rights strategy. These target allocation alignments are designed to further stabilize the portfolio and match the ATRS assets to its liabilities.

Over the long-term, ATRS' investment approach has proved beneficial and is designed to weather investment market volatility. ATRS maintains a roster of compelling investment managers, and new opportunities that will benefit the System are being considered. ATRS still uses indexing to level out risk. A focus on long term growth potential, coupled with asset protection and cost containment, continues to be a focus for ATRS.

### Additions/Deductions to Plan Net Assets

As a retirement system matures, employer and member contributions are supplemented from investment earnings to fully fund retirement benefits and operating costs. This process is intended to leave the investment nucleus untouched to continue providing the required investment income for future generations of plan participants.



Fiscal year 2023 contributions totaled about \$737 million dollars (\$537 million employer and \$201 million member) and remained stable from previous years. As ATRS becomes a more mature system, the total active members compared to retirees will continue to move more towards a one-to-one ratio, and is now about a 1.3 to one ratio. This equalization trend will occur for some time as ATRS matures, as the Baby Boomer generation reaches retirement age, and as schools continue to consolidate and outsource nonteaching positions to private contractors in transportation, food service, custodial services, and substitute teachers.

### **Funding Status**

ATRS had an 8.71% actuarially-determined return as compared to its 7.25% assumed rate of return. To reduce the impact of wild swings in the financial markets, annual results are spread over a four-year period (four-year smoothing). ATRS remains a stable 82% funded. Amortization required to fund the unfunded accrued actuarial liability (UAAL) remains stable at 26 years.

### Internal Control

Internal controls are at the heart of safeguarding the System's assets. ATRS has an active internal audit department that is continually reviewing and updating control policies. As the System grows and technology advances, we feel it prudent to continuously monitor

internal systems and policies to detect and correct potential errors before they occur and to correct any errors that are discovered.

### **Professional Services**

The ATRS Board of Trustees employs firms that are proven experts to draw on their knowledge and expertise on policy and administration. ATRS' independent general investment consultant and real asset consultant is AON Hewitt Investment Consulting, headquartered in Chicago, IL; the private equity consultant is Franklin Park Associates, LLC of Bala Cynwyd, PA; and the independent actuary is Gabriel Roeder Smith & Company, headquartered in Southfield, MI. The System also uses the services of specialized consultants along with national and local legal firms.

### Acknowledgements

This report is intended to provide complete and reliable information as a foundation for management decisions, determining compliance with legal provisions, and determining conscientious administration of the System's fund. Compilation of this report symbolizes the collective efforts of the staff, under the direction of the Board of Trustees.

This report is posted on the ATRS website (artrs.gov) and hard copies are available upon request.

Respectfully submitted,

Mark White Executive Director





### **Member and Retired Trustees**

POSITION # 1
Active Member Trustee
1st Congressional District

**Susan Ford**Cabot, AR
Trustee Since 7/1/2022

Term Expires 6/30/2028

POSITION # 2
Active Member Trustee
2nd Congressional District

Michael Johnson Sherwood, AR Trustee Since 11/10/2020 Term Expires 6/30/2027

POSITION # 3
Active Member Trustee
3rd Congressional District

**Arthur "Chip" Martin**Fayetteville, AR
Trustee Since 7/1/2019
Term Expires 6/30/2025

POSITION # 4
Active Member Trustee
4th Congressional District

**Keri Hamilton**Magnolia AR
Trustee Since 12/04/2023
Term Expires 6/30/2030

POSITION # 5
Active Member Trustee
Administrator Trustee

**Dr. Mike Hernandez** Little Rock, AR Trustee Since 11/10/2020 Term Expires 6/30/2027

POSITION # 6
Active Member Trustee
Administrator Trustee

**Shawn Higginbotham** Hot Springs, AR Trustee Since 9/12/2019 Term Expires 6/30/2027

POSITION # 7
Active Member Trustee
Non-Certified Trustee

Kelsey Bailey Little Rock, AR Trustee Since 09/25/2023 Term Expires 6/30/2030 POSITION # 8
Active Member Trustee
Minority Trustee

Anita Bell North Little Rock, AR Trustee Since 7/1/2015 Term Expires 6/30/2027

POSITION # 9
Retired Member Trustee

**Jeff Stubblefield**Charleston, AR
Trustee Since 7/1/2022
Term Expires 6/30/2028

POSITION # 10
Retired Member Trustee

**Bobby G. Lester** Jacksonville, AR Trustee Since 7/1/2007 Term Expires 6/30/2025

POSITION # 11
Retired Member Trustee

**Danny Knight (Chair)** Sherwood, AR Trustee Since 6/6/2011 Term Expires 6/30/2024

### **Ex Officio Trustees**

**Secretary of Education** 

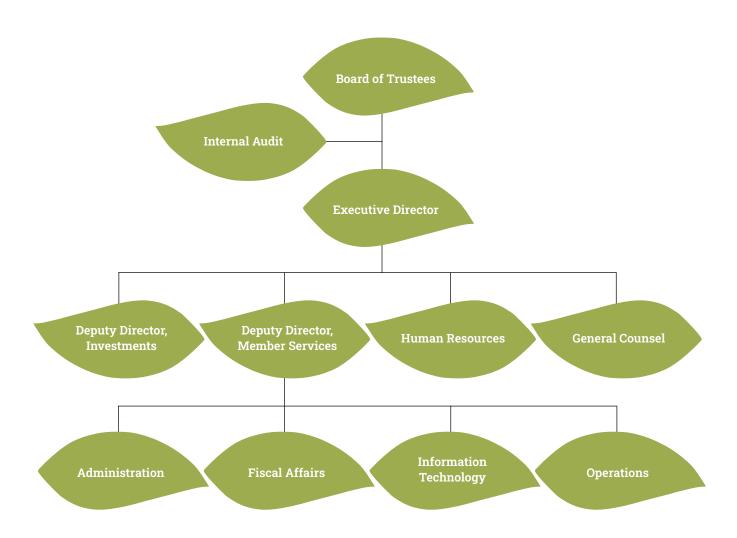
**Jacob Oliva** Little Rock. AR **State Bank Commissioner** 

**Susannah Marshall** Little Rock. AR **State Auditor** 

State Treasurer

**Dennis Milligan** Little Rock. AR **Larry Walther** Little Rock, AR





### **Administrative Staff**

Mark White **Executive Director** 

Rod Graves **Deputy Director, Investments** 

Sarah Linam

Deputy Director, Member

Services

Jennifer Liwo
General Counsel

Willie Kincade
Associate Director of
Operations

Curtis Carter, CPA
Associate Director of
Fiscal Affairs

Mullahalli Manjunath
Associate Director of
Information Technology

Vicky Fowler

Human Resources

Manager

Tammy Porter **Board Secretary** 

Brenda West, CPA
Internal Auditor

### PROFESSIONAL CONSULTANTS



### **Actuary**

Gabriel Roeder Smith & Company | Southfield, MI

### **Legal Counsel**

Gill, Ragon, Owen PA | Little Rock, AR

Kutak Rock, LLP | Scottsdale, AZ

Rose Law Firm, PA | Little Rock, AR

### **Securities Monitoring Counsel**

Bernstein Litowitz Berger & Grossman, LLP | New York, NY

Bleichmar Fonti & Auld, LLP | New York, NY

Cohen Milstein Sellers & Toll, PLLC | New York, NY

Kaplan Fox & Kilsheimer LLP | New York, NY

Kessler, Topaz, Meltzer and Check LLP | Radnor, PA

Labaton Keller Sucharow, LLP | New York, NY

### **Investment Consultant**

AON Hewitt Investment Consulting | Chicago, IL

Franklin Park | Bala Cynwyd, PA

Arkansas Capital Corporation | Little Rock, AR

### **Custodian (Domestic and International)**

State Street Bank & Trust Company | Quincy, MA

### **Public Markets**

Arrowstreet Capital | Boston, MA

BlackRock | San Francisco, CA

D.E. Shaw & Company, L.P. | New York, NY

GMO, LLC | Boston, MA

Harris Associates, L.P. | Chicago, IL

Jacobs Levy Equity Management, Inc. | Florham Park, NJ

Kennedy Capital Management | St. Louis, MO

Lazard Asset Management, LLC | New York, NY

Loomis Sayles & Company, L.P. | Boston, MA

Pershing Square Holdings | Saint Peter Port, Guernsey

Putnam Investments Management | Boston, MA

Reams Asset Management | Columbus, IN

Russell Implementation Services | Seattle, WA

State Street Global Advisors | Boston, MA

State Street Global Markets, LLC | Boston, MA

State Street - Securities Lending | Boston, MA

Stephens Investment Management | Houston, TX

Trian Partners | New York, NY

T. Rowe Price Associates, Inc. | Baltimore, MD

Voya Investment Management | Chicago, IL

Wellington Management Co. LLP | Boston, MA

Westrock Coffee Company | Little Rock, AR

### **Private Equity**

Franklin Park | Bala Cynwyd, PA

Advent International Corporation | Boston, MA

Alpine Investors | San Francisco, CA

Altaris Capital Partners, LLC | New York, NY

Altus Capital Partners | Westport, CT

American Industrial Partners | New York, NY

Arlington Capital Partners | Chevy Chase, MD

Atlas Holdings LLC | Greenwich, CT

Audax | New York, NY

The Beekman Group | New York, NY

### PROFESSIONAL CONSULTANTS



Big River Steel | Osceola, AR

Bison Capital Asset Management, LLC | Santa Monica, CA

BV Investment Partners | Boston, MA

Castlelake | Minneapolis, MN

Clearlake Capitol Group | Santa Monica, CA

Court Square Capital Partners III, L.P. | New York, NY

The Cypress Group | New York, NY

Diamond State Ventures | Little Rock, AR

D W Healthcare | Park City, UT

EnCap Investments L.P. | Houston, TX

Greenbriar Equity Group | Rye, NY

Greyrock Capital Group, LLC | Chicago, IL

Grosvenor Capital Management | New York, NY

GTLA | Pine Bluff, AR

Highland, LP | Pine Bluff, AR

Hybar | Osceola, AR

Insight Equity | Insight Mezzanine | Southlake, TX

J.F. Lehman & Company | New York, NY

KPS Capital Partners | New York, NY

Levine Leichtman III | Beverly Hills, CA

Lime Rock Resources III | Westport, CT

LLR Equity Partners III | Philadelphia, PA

Mason Wells | Milwaukee, WI

Natural Gas Partners | Irving, TX

One Rock Capital Partners, LLC | New York, NY

Pine Bridge Investments | New York, NY

Post Road Group | Stamford, CT

Revelstoke Capital Partners | Denver, CO

The Riverside Company  $\mid$  Cleveland, OH

Riverside Partners | Boston, MA

Siris Capital Group | New York, NY

SK Capital Partners | New York, NY

Sycamore Partners III | New York, NY

TA XI | Boston, MA

Tennenbaum | Santa Monica, CA

Thoma Bravo LLC | San Francisco, CA

VISTA Equity Partners | San Francisco, CA

Wellspring Capital Management, L.L.C. | New York, NY

The Wicks Group of Companies, L.L.C. | New York, NY

WNG Capital | Dallas, TX

### **Real Assets**

### Infrastructure

Antin Infrastructure Partners | London, England

Axium Infrastructure | New York, NY

DIF | Amsterdam, Netherlands

Global Energy & Power Infrastructure Fund | Greenwich, CT

Global Infrastructure Partners | New York, NY

IFM Investors (US), LLC | New York, NY

I Squared Capital | Miami, FL

Kohlberg Kravis Roberts & Co. | New York, NY

Macquarie Infrastructure and Real Assets | Chicago, IL

### **Real Estate**

Almanac Realty Securities | New York, NY

Blackstone Real Estate Partners | New York, NY

Calmwater | Los Angeles, CA

The Carlyle Group | New York, NY

CB Richard Ellis Strategic Partners | Los Angeles, CA

Cerberus | New York, NY

FPA Core Plus | Irvine, CA

### PROFESSIONAL CONSULTANTS



GLP Capital Partners | Santa Monica, CA

Harbert Management Corporation | Dallas, TX

Heitman | Chicago, IL

J.P. Morgan Asset Management | New York, NY

Kayne Anderson | Los Angeles, CA

Landmark Partners | Simsbury, CT

LaSalle | Chicago, IL

LBA Logistics | Irvine, CA

Lone Star Real Estate Partners Fund IV, LP | Dallas, TX

Long Wharf Real Estate Partners LLC | Boston, MA

Mesa West Capital | Los Angeles, CA

MetLife Commercial | Morristown, NJ

Metropolitan Real Estate Partners Co-Investments Fund | New York, NY

New Boston Fund VII | Boston, MA

O'Connor North American Property Partners II | New York, NY

PGIM Real Estate | New York, NY

Rockwood Capital Real Estate Partners | New York, NY

RREEF | New York, NY

Torchlight Investors | New York, NY

UBS Realty Investors | Hartford, CT

Walton Street Capital | Chicago, IL

Westbrook Funds | New York, NY

### **Direct Real Estate Partnerships**

CRI – American Center | Rogers, AR

### **Alternative Investments**

### **Hedge Funds**

Anchorage Capital Group, L.L.C. | New York, NY

Capital Fund Management | Paris, France

Capula Investment US LP | Greenwich, CT

Chatham Asset Management | Chatham, NJ

Circumference Group | Little Rock, AR

Graham Capital Management, L.P. | Rowayton, CT

Man Group | New York, NY

Parametric | Minneapolis, MN

Prophet Asset Management | Austin, TX

York Capital Managementm | New York, NY

Silverpoint Capital | Greenwich, CT

### Re-Insurance

Aeolus | Hamilton, Bermuda

Nephila Capital Rubik Holdings | Hamilton, Bermuda

Pillar Capital Management | Hamilton, Bermuda

### Farm Manager

US Agriculture | Wabash, IN

UBS Agrivest | Dallas, TX

### **Timberland**

BTG Pactual Timberland Investment Group | Atlanta, GA  $\,$ 

## Financial 2023 Annual Comprehensive Financial Report 12



### **Statement of Fiduciary Net Position**June 30, 2023

	Totals
Assets	
Cash and cash equivalents	\$ 349,168,296
Receivables	
Member contributions	11,724,778
Employer contributions	28,876,070
Investment trades pending	14,833,999
Accrued investment income	24,965,467
Due from other funds	20,157,127
Other receivables	2,809,166
Total Receivables	103,366,607
Turnsturents at fair relic	
Investments, at fair value	0.715.000.504
Public equities	3,715,263,524
Fixed income	1,686,126,493
Real estate	175,694,289
Pooled investments	5,555,585,690
Alternative investments	9,005,490,510
State recycling tax credits	129,552,000
Investment derivatives	(17,622)
Total Investments	20,267,694,884
Securities lending collateral	457,490,175
Capital assets, net of accumulated depreciation	73,496
Other assets	138,508
Total Assets	21,177,931,966
Deferred Outflows of Resources	
Deferred outflows related to OPEB	493,831
Deferred outflows related to of LD	490,001
Total Assets and Deferred Outflows of Resources	21,178,425,797
Liabilities	
Accrued expenses and other liabilities	469,337
Compensated absences	554,664
Post-employment benefit liability	3,248,593
Investment trades pending payable	24,076,623
Accrued investment expenses	13,598,456
Securities lending liability	457,448,502
Due to other funds	2,317,789
Total Liabilities	501,713,964
Deferred Inflows of Resources	
Deferred inflows of resources related to OPEB	1,659,915
Total Liabilities and Deferred Inflows of Resources	503,373,879
Net Position Restricted for Pension Benefits	\$ 20,675,051,918

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



### **Statement of Changes in Fiduciary Net Position**June 30, 2023

	Totals
Additions	
Contributions	
Member	\$ 200,610,721
Employer	536,619,031
Total contributions	737,229,752
Investment income	
From investing activities	
Net appreciation (depreciation) in fair value of investments	1,551,241,387
Interest and dividends	175,914,000
Real estate operating income	6,437,924
Total investment income (loss)	1,733,593,311
Less investment expense	45,303,664
Net investment income (loss)	1,688,289,647
From securities lending activities	
Securities lending gross income	23,296,797
Less: securities lending expense	19,506,915
Net securities lending income (loss)	3,789,882
Other income	229,734
Total Additions (Losses)	2,429,539,015
Deductions	
Benefits	1,413,477,760
Refunds of contributions	12,583,767
Administrative expenses	7,892,822
Total Deductions	1,433,954,349
Net Change in Position	995,584,666
Net Position - Beginning of Year	19,679,467,252
Net Position - End of Year	\$ 20,675,051,918

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



June 30, 2023

### NOTE 1: Summary of Significant Accounting Policies

### A. Reporting Entity/History

Act 266 of 1937, as amended, established the Arkansas Teacher Retirement System (ATRS) as an office of Arkansas state government for the purpose of providing retirement benefits for public school and other public education employees. Act 427 of 1973, as amended, provided that the general administration of ATRS, responsibility for its proper operation, and responsibility for making effective the provisions of the Teacher Retirement law are vested in a 15-member Board of Trustees. The State Bank Commissioner, Treasurer of State, Auditor of State, and Commissioner of Elementary and Secondary Education are exofficio trustees. The remaining 11 trustees are elected and consist of seven active members of ATRS with at least five years of actual service, three retired members receiving an annuity from ATRS, and one active or retired member from a minority racial ethnic group. The seven active trustees consist of one member from each of the four congressional districts; two employed in positions requiring an administrator's license, of which one must be a superintendent or an educational cooperative director; and one member employed in a position that does not require state licensure. The trustees are elected in accordance with rules adopted by the Board. Board members serve as trustees without compensation but are reimbursed for any necessary expenses incurred to attend Board meetings or perform other duties authorized by the Board.

### **B. Plan Description**

ATRS is a cost-sharing, multiple-employer, defined benefit pension plan that covers employees of schools and education-related agencies, including Arkansas School for the Blind, Arkansas School for the Deaf, Arkansas Activities Association, State Board of Education, regional education service cooperatives, ATRS, Arkansas Educational Television Commission, area vocational-technical schools, Arkansas Rehabilitation Services, enterprises privatized by a public school district, and educational nonprofit organizations licensed and regulated by Division of Developmental Disabilities Services of the Department of Human Services.

Members are eligible for full retirement benefits at age 60 with five or more years of actual and reciprocal service or at any age with 28 or more years of credited service. Members with 25 years of actual and reciprocal service who have not attained age 60 may receive an annuity reduced by 10/12 of 1% multiplied by the number of months by which the early retirement precedes the earlier of (1) completion of 28 years of credited service or (2) attainment of age 60. The normal retirement benefit, paid monthly, is determined based on (1) the member's final average salary (FAS) (effective July 1, 2018, computed using the average of the annual salaries paid during the period of 5 years of credited service producing the highest annual average) and (2) the number of years of service. For active members as of June 30, 2018, a benchmark 3-year FAS was established as a minimum FAS.

On June 30, 2023, the number of participating employers was as follows:

Public schools	256
State colleges and universities	38
State agencies	17
Other/privatized	27
Total	338

On June 30, 2023, ATRS's membership consisted of the following:

Retirees or beneficiaries currently receiving benefits	54,646
T-DROP participants	3,138
Inactive plan members (not receiving benefits)	14,355
Active members	
Fully vested	44,962
Non-vested	23,287
Total	140,388



### **Notes to Financial Statements (Continued)**

June 30, 2023

### NOTE 1: Summary of Significant Accounting Policies (Continued)

### **B. Plan Description (Continued)**

ATRS has contributory and noncontributory plans. The contributory plan has been in effect since the beginning of ATRS. The noncontributory plan became available July 1, 1986. Act 907 of 1999, effective July 1, 1999, requires all new members under contract for 181 or more days to be contributory. Act 443 of 2021, effective July 1, 2021, increased the required number of contract days to 185 or more days. Act 385 of 2005 allows noncontributory members to make an irrevocable election to become contributory on July 1 of each fiscal year.

A cost of living adjustment (COLA) is payable on July 1 of each year to retirees, certain survivors, and annuity beneficiaries who received monthly benefits for the previous 12 months. The COLA is calculated by multiplying 100% of the member's base retirement annuity times 3%. Act 780 of 2017 allows the Board of Trustees to evaluate any future COLA adjustments on an annual basis to determine if a simple or compound COLA increase will be given based on the financial condition of the system.

Act 1096 of 1995 created a teacher deferred retirement option plan (T-DROP) for members with 30 or more years of service credit. Effective September 1, 2003, Act 992 of 2003 requires employers to make contributions on behalf of all members participating in T-DROP at rates established by the Board of Trustees. Member contributions and accumulation of service credit will cease once a member enters T- DROP. During participation in T-DROP, ATRS will credit the member account with plan deposits and interest. The plan deposits will be calculated beginning with the member's plan benefit reduced by 1% for each year of credited service. The Board of Trustees may authorize early participation in T-DROP for members with at least 28 years but less than 30 years of credited service. The plan deposit for early participation will be calculated the same as the regular T-DROP deposit with a further reduction of at least .5% but not more than 1% for each month of credited service under 30 years. The T-DROP account accrues interest at a variable rate that is set annually by the ATRS Board of Trustees. T-DROP deposits into member accounts cease at the completion of 10 years of participation in the program; however, a member may continue employment and will continue to receive interest on the account balance at the 10- year plus interest rate that is also set annually by the Board of Trustees. When T-DROP participation ceases, the member may receive a distribution as a lump-sum cash payment or monthly annuity, roll it into another

tax-deferred account, or defer the distribution into a T-DROP cash balance account held by ATRS.

Disability retirement benefits are payable to members who are vested and demonstrate total and permanent incapacity to perform the duties of their position while in active employment. The disability annuity is computed in the same manner as the age and service annuity.

Survivor benefits are payable to qualified survivors upon the death of an active, vested member. Eligible spouse survivors receive a survivor annuity that is based on the member's years of service credit prior to their death, and minor child survivors receive a percentage of the member's highest salary earned. ATRS also provides a lump sum death benefit for active and retired members with 10 or more years of actual service. The minimum benefit amount is \$6,667 and an additional amount is provided based on the member's retirement date and years of contributory service up to a \$10,000 maximum.

### C. Basis of Presentation - Fund Accounting

The accounting system is organized and operated on a fund basis. A fund is defined as a fiscal and accounting entity with a self-balancing set of accounts recording cash and other financial resources, together with all related liabilities and residual equities or balances and changes therein, which are segregated for purposes of carrying on specific activities or attaining certain objectives in accordance with special regulations, restrictions, or limitations. The following types of funds, if applicable to this Agency, are recognized in the accompanying financial statements.

### **Fiduciary Funds**

Trust and Custodial Funds –Trust and Custodial Funds are used to report resources held by the Agency in a trustee capacity or as an agent for individuals, other governmental units, and other funds. These include Pension Trust Funds, Employee Health Trust Funds, Investment Trust Funds, Private-Purpose Trust Funds, and Custodial Funds. The specific activity accounted for at this Agency includes the following:

Arkansas Teacher Retirement System Pension Trust Fund



June 30, 2023

### NOTE 1: Summary of Significant Accounting Policies (Continued)

### D. Basis of Accounting

Basis of accounting refers to when revenues and expenditures or expenses are recognized and reported in the financial statements. The economic resources measurement focus and accrual basis of accounting are used in Fiduciary Fund financial statements. Under the accrual basis, revenues are recognized when earned, and expenses are recorded when incurred.

### E. Federal Income Tax Status

During the year ended June 30, 2023, ATRS was a qualified plan under 26 USC  $\S$  401(a) and was exempt from federal income taxes under 26 USC  $\S$  501(a).

### F. Cash and Cash Equivalents

Cash and cash equivalents include demand accounts, imprest accounts, cash on hand, cash in State Treasury, cash on deposit with investment managers, and short-term investment funds (STIF). The STIF accounts are created through daily sweeps of excess cash by the custodial bank into bank-sponsored commingled funds that are invested in U.S. Government and agency securities and other short-term investments. The STIF accounts have a weighted average maturity of 90 days or less and the holdings are stated a fair value.

### **G. Deposits and Investments**

### **Deposits**

Deposits are carried at cost and consist of cash in bank, cash in State Treasury, and cash on deposit with investment managers, and cash in short-term investment funds totaling \$5,356,299, \$3,137,421, \$111,728,377, and \$228,946,124, respectively. The STIF account is valued at amortized cost which approximates fair

value and all other deposits are carried at cost. State Treasury Management Law governs the management of funds held in the State Treasury, and the Treasurer of State is responsible for ensuring these funds are adequately insured and collateralized.

Custodial Credit Risk – Custodial credit risk for deposits is the risk that, in the event of the failure of a depository institution, the Agency will not be able to recover deposits or will not be able to recover collateral securities that are in the possession of an outside party. The Agency has adopted the State Board of Finance Policy requiring the use of depository insurance and collateralization procedures to manage the risk that deposits may not be returned. As of June 30, 2023, none of the Agency's bank balance of \$5,357,769 was exposed to custodial credit risk.

As of June 30, 2023, \$1,760,901 of \$112,124,986 in cash held by investment managers was exposed to custodial credit risk as it was uninsured and uncollateralized.

As of June 30, 2023, none of the \$228,946,124 balance in cash in the STIF account was exposed to custodial credit risk as it was collateralized with securities held by the custodial agent in the name of ATRS.

### Investments

Ark. Code Ann. §§ 24-2-601 — 24-2-619 authorizes the ATRS Board of Trustees to have full power to invest and reinvest monies of ATRS and to hold, purchase, sell, assign, transfer or dispose of any of the investments, or investment proceeds in accordance with the prudent investor rule.

Each investment manager is required to invest within the specific guidelines and parameters set by the Board of Trustees. Asset allocation guidelines have been established as follows:



June 30, 2023

### **NOTE 1: Summary of Significant Accounting Policies (Continued)**

### G. Deposits and Investments (Continued)

### **Investments (Continued)**

Asset Allocation	Minimum	Target	Maximum
Total equity	48.0%	53.0%	58.0%
Fixed income	13.0%	15.0%	17.0%
Alternatives	N/A*	5.0%	N/A*
Real assets***	N/A*	15.0%	N/A*
Private equity	N/A*	12.0%	N/A*
Cash equivalents	0.0%	0.0%	5.0%

<sup>\*</sup>Due to the illiquid nature of alternatives, real assets, and private equity, it is not prudent to set rebalancing ranges for these asset classes.

The fair value measurement of investments is categorized within the hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset and gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities and the lowest priority to unobservable inputs. In instances where inputs used to measure fair value fall into different levels, fair value measurements in their entirety are categorized based on the lowest level input that is significant to the valuation.

The hierarchy is defined as follows:

**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.

Assets classified in Level 1 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. Assets classified in Level 3 are valued using an internal fair value as provided by the investment manager due to lack of an independent pricing source. For investments that do not have a readily determinable fair value and fall outside of the fair value hierarchy, the system establishes the value by utilizing the Net Asset Value (NAV) or its equivalent as a practical expedient.

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. The fair value measurement of plan investments and securities lending collateral as of June 30, 2023, was as follows:

<sup>\*\*</sup>Additional allocations to total equity may be made beyond the maximum range to serve as a placeholder for unfunded and uncommitted alternatives, real assets, and private equity.

<sup>\*\*\*</sup>Real assets include real estate, timber, agriculture, and infrastructure.



June 30, 2023

### **NOTE 1: Summary of Significant Accounting Policies (Continued)**

### **G. Deposits and Investments (Continued)**

### **Investments (Continued)**

Investments measured at fair value	Total	Level 1		Level 2	Level 3
Public equity investments:					
Domestic equities	\$ 2,529,485,813	\$ 2,529,485,813			
International equities	1,069,554,260	1,069,554,260			
Preferred equities	116,223,451	106,967,452			\$ 9,255,999
Fixed income investments:					
U.S. Government obligations	109,988,381		\$	109,988,381	
Corporate obligations	1,244,481,439			1,244,481,439	
Asset- and mortgage-backed securities	34,456,773			34,456,773	
Fixed income funds	47,818,093			47,818,093	
Promissory notes	249,381,807				249,381,807
Real estate investments:					
Real estate	73,055,424				73,055,424
Real estate investment trusts	102,638,865	102,638,865			
State recycling tax credits:	129,552,000			129,552,000	
Derivative investments:					
Forward contracts	(17,622)			(17,622)	
Total plan investments at fair value	5,706,618,684	\$ 3,808,646,390	_	1,566,279,064	 331,693,230
Investments measured at net asset value (NAV)					
Pooled investments:					
Collective investment trusts	4,765,569,172				
Closed end funds	764,454,223				
Exchange traded funds	25,562,295				
Alternative investments:					
Private equity funds	3,176,323,251				
Real estate funds	2,002,060,137				
Hedge funds	1,199,332,368				
Other private investments	 2,627,774,754				
Total plan investments at net asset value	14,561,076,200				
Total plan investments	\$ 20,267,694,884				
Securities Lending Collateral:					
Compass fund*	\$ 457,490,175				

<sup>\*</sup>Cash collateral received totaled \$457,448,502. The amount reported in the GASB Statement No. 40 footnote above is the market value of the collateral received at June 30, 2023.



June 30, 2023

### NOTE 1: Summary of Significant Accounting Policies (Continued)

### G. Deposits and Investments (Continued)

### **Investments (Continued)**

Public equity investments are classified as Level 1 and valued based on published market prices and quotations from either national security exchanges or active markets for those securities.

Fixed income investments are classified as Level 2 and include publicly traded securities in inactive markets. Investments in this category are sourced from reputable pricing vendors using price 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.

Real estate consists of direct real estate investments and real estate investment trusts. Direct real estate investments are classified as Level 3 and are comprised mostly of owned properties leased to commercial enterprises. These investments are valued using professional property valuations or appraisals, net of debt borrowed against the related assets. Appraisals and valuations are updated every 3 years. Real estate investment trust are valued at net asset value (NAV) per share calculated at the estimated market value of the total assets less liabilities divided by the number of common shares outstanding. These are classified as Level 1 since they report a daily NAV per share and are actively traded on either national security exchanges or active markets for those securities.

Pooled investments consist of collective investments trusts, closed end funds, exchange traded funds and mutual funds. The fair value of these investments is determined based on net asset value (NAV) per share calculated as assets less liabilities divided by the number of shares owned. These investments are classified as Level 1 since they report a daily NAV per share and are actively traded on either national security exchanges or active markets for those securities.

Derivative investments include forward contracts and warrants and are classified as Level 2 and valued using observable exchange, dealer, or broker market pricing.

Alternative Investments are valued using the net asset value (NAV) per share (or its equivalent) but generally do not have a readily obtainable market value. These values are based on the capital account balance of 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. 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. Generally, the investments cannot be redeemed or have certain redemption restrictions and distributions are from the liquidation of the underlying assets. The expected holding period is dependent on the discretion of the fund manager.

The unfunded commitments and redemption terms for alternative investments measured at the net asset value (NAV) per share (or its equivalent) are presented in the following table:



### Notes to Financial Statements June 30, 2023

### NOTE 1: Summary of Significant Accounting Policies (Continued)

### G. Deposits and Investments (Continued)

### **Investments (Continued)**

nvestments measured at net asset value (NAV)	Total	Unfunded Commitments		Redemption Frequency	Redemption Notice Period
Pooled investments:					
Collective investment trusts	\$ 4,765,569,172			Daily	1-30 days
Closed end funds	764,454,223			Daily	Daily
Exchange traded funds	25,562,295			Daily	Daily
Alternative investments:					
Private equity funds					
Buyout funds	1,396,304,427	\$	670,588,147	N/A	N/A
Distressed debt funds	20,670,755		37,207,326	N/A	N/A
Growth equity funds	31,970,353		11,557,033	N/A	N/A
Hard assets	132,688,385		21,683,853	N/A	N/A
Infrastructure funds	491,096,503		112,920,296	Quarterly - Annualy	90 days
Mezzanine funds	53,076,638		38,633,246	N/A	N/A
Multi-strategy funds	441,228,489		341,301,109	N/A	N/A
Structured capital funds	43,657,375		42,441,589	N/A	N/A
Turnaround funds	121,918,983		98,290,038	N/A	N/A
Venture capital funds	443,711,343		158,134,151	N/A	N/A
Real estate funds					
Core funds	821,624,886		21,000,000	Quarterly	30-90 days
Debt funds	124,704,241		65,851,714	Quarterly	90 days
Farmland funds	238,390,888		19,105,587	Quarterly	60 days
Opportunistic funds	161,764,557		436,854,903	N/A	N/A
Timberland funds	338,018,819		100,00 1,500	Quarterly	90 days
Value added funds	317,556,746		281,766,335	N/A	N/A
Hedge funds	011,000,140		201,100,000	14/ 11	14/11
Co-investment funds	81,506,939		30,188,076	Quarterly	65 days
Credit funds	214,278,554		00,100,010	Quarterly - Annualy	90 days
Equity funds	39,818,815			Quarterly	60 days
Event driven funds	83,685,761			Annually	90 days
Global macro funds	191,210,229			Monthly	3-15 days
Mortgage servicing fund	40,288,622			Semi-annually	90 days
Reinsurance funds	131,945,864			Semi-annually - Annually	60-90 days
Relative value funds	95,719,384			Quarterly	45 days
Risk premia funds	320,878,200			Weekly - Monthly	3-5 days
Other					
Private investments	2,627,774,754			Semi-monthly - Monthly	3-7 days
Total plan investments at net asset value	\$ 14,561,076,200	\$	2,387,523,403		



June 30, 2023

### NOTE 1: Summary of Significant Accounting Policies (Continued)

### G. Deposits and Investments (Continued)

### **Investments (Continued)**

Private Equity Funds – Private equity funds include 69 buyout funds, 3 distressed debt funds, 3 growth equity funds, 13 hard asset funds, 12 infrastructure funds, 5 mezzanine funds, 5 multi-strategy funds, 4 structured capital funds, 10 turnaround funds, and 15 venture capital funds that invest mostly in private companies across a variety of industries. The value of the investments in this type have been determined using the NAV per share (or its equivalent) of the System's ownership interest in partners' capital. These investments cannot be easily redeemed. The nature of private equity investments is that distributions are received through the liquidation of the underlying assets of the fund. The expected holding period of a private equity portfolio company is 2 to 10 years.

Real Estate Funds – Real estate funds include 7 core funds, 8 debt funds, 2 farmland funds, 22 opportunistic funds, 2 timberland funds, and 22 value added funds that invest primarily in the United States, Europe, and Asia. Fund investments can be made in the debt, equity, or a combination of both in real estate property ventures. The value of the investments in this asset class have been determined using the NAV per share (or its equivalent) of the System's ownership interest in partners' capital. These investments can be redeemed with proper

notification to the fund manager. Distributions from each fund may be received as cash flows from operations or return of capital from sales of assets. The expected holding period of underlying assets in the real estate funds is 2 to 10 years.

Hedge Funds – Hedge funds consist of 1 co-investment fund, 5 credit funds, 1 equity fund, 1 event driven fund, 2 global macro funds, 1 opportunistic funds, 12 re-insurance funds, 1 relative value fund and 2 risk premia funds. The value of the investments in this asset class have been determined using the NAV per share (or its equivalent) of the System's ownership interest in partners' capital. Redemption ranges from monthly to annually depending on the manager (except for one fund that currently has a 1-year hold). Distributions are received through liquidation of the underlying assets. The expected holding period is dependent on the discretion of the fund manager.

Securities Lending Collateral – Cash collateral received from borrowers in the securities lending program is invested in a collective investment fund comprised of a liquidity pool. The value of this fund has been determined by the fund administrator using the NAV per share (or its equivalent). Concentration of Investments – Generally accepted accounting principles require each pension plan to disclose investments (other than those issued or explicitly guaranteed by the U.S. Government) in any one organization that represent 5% or more of the pension plan's fiduciary net position. As of June 30, 2023, the Agency had investments of 5% or more of fiduciary net position in the following organizations:



### Notes to Financial Statements June 30, 2023

### NOTE 1: Summary of Significant Accounting Policies (Continued)

### **G. Deposits and Investments (Continued)**

### **Investments (Continued)**

Organization	Ne	t Asset Value
Blackrock Institutional Trust Company, N.A.		
BlackRock MSCI ACWI IMI Index Fund	\$	1,310,986,178
BlackRock U.S. Core Plus Bond Fund		250,429,410
Total	\$	1,561,415,588
Franklin Park Associates, LLC		
ATRS/FP Private Equity Fund, LP	\$	383,793,959
Franklin Park Corporate Finance Access Fund, LP		78,562,182
Franklin Park Corporate Finance Access Fund II, LP		12,298,104
Franklin Park International Fund 2011, LP		10,654,654
Franklin Park International Fund 2012, LP		7,607,582
Franklin Park International Fund 2013, LP		16,792,603
Franklin Park International Fund 2014, LP		16,858,530
Franklin Park International Fund 2015, LP		22,351,074
Franklin Park International Fund 2016, LP		22,671,829
Franklin Park International Fund 2017, LP		30,015,412
Franklin Park International Fund 2018. LP		29,118,750
Franklin Park International Fund 2019, LP		31,351,502
Franklin Park International Fund X, LP		23,734,631
Franklin Park International Fund XI, LP		2,408,869
Franklin Park Venture Capital Fund XIII, LP		41,041,441
Franklin Park Venture Capital Fund XIV, LP		4,250,536
Franklin Park Venture Capital Opportunity Fund, LP		15,584,803
Franklin Park Co-Investment Fund VI, LP		6,846,154
Franklin Park Venture Fund Series 2008, LP		21,015,105
Franklin Park Venture Fund Series 2009, LP		8,881,556
Franklin Park Venture Fund Series 2010, LP		28,445,264
Franklin Park Venture Fund Series 2011, LP		34,454,293
Franklin Park Venture Fund Series 2012, LP		33,723,446
Franklin Park Venture Fund Series 2013, LP		36,250,998
Franklin Park Venture Fund Series 2014, LP		48,735,471
Franklin Park Venture Fund Series 2015, LP		35,510,204
Franklin Park Venture Fund Series 2016, LP		40,977,661
Franklin Park Venture Fund Series 2017, LP		28,664,709
Franklin Park Venture Fund Series 2018, LP		37,177,076
Franklin Park Venture Fund Series 2019, LP		
Total	<u>\$</u>	28,998,780
Total	\$	1,138,777,178
Jacobs Levy Equity Management, Inc.		
Jacobs Levy 130-30 Core 3 Fund, LLC	\$	1,234,178,399
· , · · · · · · · · · · · <del>- ·</del>	<del>*</del>	,,,
State Street Global Advisors Trust Company		
State Street MSCI ACWI IMI Index Securities Lending Fund	\$	1,341,503,314
State Street U.S. Aggregate Bond Index Non-Lending Fund		694,859,507
Total	\$	2,036,362,821



June 30, 2023

### NOTE 1: Summary of Significant Accounting Policies (Continued)

### G. Deposits and Investments (Continued)

### **Investments (Continued)**

**Rate of Return** – The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested. For the year ended June 30, 2023, the annual money-weighted rate of return on

pension plan investments, net of pension plan investment expense, was 8.78%.

Interest Rate Risk – Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. The Agency does not have a formal investment policy that limits investment maturities as a means of managing its exposure to fair value losses arising from increasing interest rates. The summary shown below indicates that 88% of the Agency's investment maturities are one year or longer.

			In	vestment Mat	urit	ies (In Years)		
Investment Type	Total	Less than 1		1 - 5		6 - 10	M	Iore than 10
Convertible preferred equities	\$ 62,952,059	\$ 13,016,115	\$	23,804,448			\$	26,131,496
U.S. Government obligations	109,988,382			32,421,206				77,567,176
Corporate obligations	1,244,481,439	17,642,330		866,137,542	\$	286,845,829		73,855,738
Asset- and mortgage-backed securities	34,456,773	719,364		1,559,227		9,389,405		22,788,777
Fixed income funds	47,818,093			47,818,093				
Promissory notes	249,381,807							249,381,807
Collective investment trusts	1,332,895,585	387,606,667				945,288,918		
Private investments	562,557,447					562,557,447		
State recycling tax credits	 129,552,000	17,552,000		64,000,000		48,000,000		
Total	\$ 3,774,083,585	\$ 436,536,476	\$	1,035,740,516	\$	1,852,081,599	\$	449,724,994
Securities Lending Collateral								
Compass fund	\$ 400,742,431	\$ 400,742,431						

**Asset-Backed Securities** – As of June 30, 2023, ATRS held asset-backed securities with a fair value of \$24,253,352. These securities represent interests in various trusts consisting of pooled financial assets other than mortgage loans conveyed by the issuing parties. ATRS'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 – As of June 30, 2023, mortgage-backed securities had a fair value of \$4,311,661. The yields and maturities of mortgage-backed securities generally depend on when the underlying mortgage loan principal and interest are repaid. Although the full amount of principal will be received if prepaid, the interest income that would have been collected during the remaining period to maturity, net of any market adjustment, is lost.

**Corporate Bonds** – As of June 30, 2023, ATRS held corporate bonds with a fair value of \$373,987,489. Corporate bonds are debt instruments that are issued by private corporations. These bonds

have a term maturity and can have either a fixed or variable interest rate. Variable interest rate bonds have adjustments that are made periodically and vary directly with movements in interest rates.

Convertible Corporate Bonds — As of June 30, 2023, ATRS held convertible bonds with a fair value of \$870,493,950. Convertible bonds convey an option to the bondholder to exchange each bond for a specified number of shares of common stock of the corporation. Convertible bonds generally offer lower coupon rates and promised yields to maturity in exchange for the value of the option to trade the bond into stock.

Promissory Notes – ATRS also held 2 promissory notes with a fair value of \$249,381,807 at June 30, 2023. Promissory notes are a form of debt that companies use to raise money in exchange for payment ofafixedamountofperiodicincomeataspecifieddateorondemand. Oneunsecuredpromissorynote was issued to Big River Steel Holdings, LLC and one secured note was issued to Highland LP.



June 30, 2023

### NOTE 1: Summary of Significant Accounting Policies (Continued)

### G. Deposits and Investments (Continued)

### **Investments (Continued)**

Unrated

**Credit Risk** – Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The risk is measured by the credit quality of investments in

debt securities as described by nationally-recognized statistical rating organizations. A formal investment policy that limits investment in debt based on their statistical rating as a means of managing exposure to credit risk has not been adopted by the Agency.

As of June 30, 2023, the Agency's exposure to credit risk as rated by Standard and Poor's and Moody's Investor Service is as follows:

### Standard and Poor's

Rating		Total
AAA	\$	929,440
AA		251,684,289
A		35,999,334
BBB		229,751,967
BB		114,136,252
В		52,721,138
CCC or below		18,339,677
Unrated		2,960,533,106
Total	\$ 3	3,664,095,203
Securities Lending Collateral		

400,742,431

Custodial Credit Risk – Custodial credit risk for investments is the risk that, in the event of the failure of the counterparty to a transaction, the Agency 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 uninsured, are not registered in the name of the Agency, and are held by either the counterparty or the counterparty's trust department or agent but not in the Agency's name. The Agency has adopted the State Board of Finance Policy requiring the use of depository insurance and collateralization procedures to manage the risk that investments may not be returned. As of June 30, 2023, none of the Agency's investments were exposed to custodial credit risk.

### Moody's Investors Service

Rating	Total
Aaa	
Aa	\$ 252,559,154
A	29,768,629
Baa	228,516,824
Ва	121,623,441
В	62,290,623
Caa or below	8,757,036
Unrated	2,960,579,496
Total	\$ 3,664,095,203
Unrated	\$ 400,742,431

Concentration of Credit Risk – Concentration of credit risk is the risk of loss attributed to the magnitude of the Agency's investment in a single issuer (not including investments issued or explicitly guaranteed by the U.S. Government, investment in mutual funds, external investment pools, or other pooled investments). The Agency has not adopted a formal investment policy to limit the amount it may invest in any one issuer to manage the concentration of credit risk. As of June 30, 2023, none of the Agency's investments in any one issuer represent more than 5% of total investments.

**Foreign Currency Risk** – Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or deposit. The Agency does not have an investment policy that limits investment in foreign currency.



June 30, 2023

### **NOTE 1: Summary of Significant Accounting Policies (Continued)**

### G. Deposits and Investments (Continued)

### **Investments (Continued)**

The Agency's exposure to foreign currency risk in U.S. dollars for investments and deposits at June 30, 2023, was as follows:

							Investments			
Currency		Fair Value	Cash Deposits	Equities	Fixed Income	Real Estate	Pooled Invest.	Alterna- tive Invest.	Forw ard Contracts	Securities Lending
Argentine Peso	ARS	\$ 18,263	\$ 18,263							
Australian Dollar	AUD	4,507,900				\$ 4,507,900				
Brazilian Real	BRL	14,746,887	91,396	\$ 14,655,491						
British Pound	GBP	395,193,708	111,595	128,747,778		9,139,143	\$ 56,524,575		\$ 670,617	
Canadian Dollar	CAD	36,756,648	82,697	32,887,747			3,786,204			
Chilean Peso	CLP	4,434,814		4,434,814						
Chinese Yuan Renminbi	CNY	2,732,015	29	2,731,986						
Danish Krone	DKK	6,110,068		6,110,068						
Euro	EUR	559,653,531	(8,351)	455,211,541	\$ 1,824,510			\$ 99,117,348	3,508,483	
Hong Kong Dollar	HKD	129,441,399		126,081,073			3,429,805		(69,479)	
Indian Rupee	INR	396,609	396,609							
Indonesian Rupiah	IDR	1,613,503			1,613,503					
Japanese Yen	JPY	215,129,700	827,766	156,811,906					742,284	\$ 56,747,744
Mexican Peso	MXN	9,471,566		9,376,630					94,936	
New Taiwan Dollar	TWD	32,616,913	227,037	32,389,876						
Philippine Peso	PHP	3,852,817	12,746	3,840,071						
Singapore Dollar	SGD	-								
South African Rand	ZAR	12,041,441	65	10,583,703	1,457,673					
South Korean Won	KRW	43,758,303	16	43,421,364					336,923	
Swedish Krona	SEK	32,615,565	513	32,509,295					105,757	
Swiss Franc	CHF	49,766,472	518	49,451,532					314,422	
Thailand Baht	THB	4,324,778		4,324,778						
Total		\$1,559,182,900	\$1,760,899	\$ 1,113,569,653	\$4,895,686	\$13,647,043	\$263,740,584	\$99,117,348	\$5,703,943	\$ 56,747,744

For Forward Currency Contracts in the schedule above, a positive number represents the market value of contracts to purchase that currency in excess of the market value of contracts to sell that currency. A negative number, therefore, represents the market value of contracts to sell foreign currency in excess of contracts to purchase that currency.

**Derivatives** – Derivative instruments are financial contracts or agreements whose values depend on the values of one or more underlying assets, reference rates, and/or financial indexes. Derivative instruments include futures contracts, forward contracts, swap contracts, options contracts, forward foreign currency exchange and rights. ATRS investment guidelines state that derivatives may be used to reduce the risk in a

portfolio but should not be used to create a position of leverage or substantially increase the risk of the overall portfolio. Futures and options should be matched by cash or cash equivalent securities, and all short futures positions should be matched by equivalent long security positions. Each investment manager's derivative usage is specified in the investment management agreement or specific guidelines.



June 30, 2023

### **NOTE 1: Summary of Significant Accounting Policies (Continued)**

### G. Deposits and Investments (Continued)

### **Investments (Continued)**

At June 30, 2023, the fair value balance of derivative instruments and the changes in fair value for the year then ended, were as follows:

	Changes in F	air \	/alue	Fair Value at	June	30, 2023
Type	Classification		Amount	Classification		Amount
Foreign currency forwards	Investment income	\$	(28,255)	Investments	\$	(17,622)

Foreign Currency Forwards – ATRS enters into various currency contracts to manage exposure of foreign portfolio holdings to changes in foreign currency exchange rates. A forward exchange contract is a commitment to purchase or sell a foreign currency at a future date at a negotiated forward rate. Risks associated with such contracts include movement in the value of the foreign currency relative to the U.S. dollar and the ability of the counterparty to perform. The contracts are valued at forward exchange rates, and the changes in value of open contracts are recognized as unrealized appreciation (depreciation) in fair value of investments, a component of investment income, in the statement of changes in plan net position. The realized gain or loss on closed forward currency contracts represents the difference between the value of the

original contracts and the closing value of such contracts and is included in net appreciation (depreciation) in fair value of investments, a component of investment income, in the statement of changes in plan net position. At June 30, 2023, ATRS had outstanding forward exchange currency contracts to purchase foreign currencies with contract amounts of \$4,073,058 and market values of \$4,075,742, resulting in a net gain of \$2,684. Outstanding forward exchange currency contracts to sell foreign currencies with contract amounts of \$2,228,658 had market values of \$2,248,966, resulting in a net loss of \$20,306.

The net fair value and net notional amounts of foreign currency forwards as of June 30, 2023 were as follows:

		Fair Value	e at June	30, 2023
Foreign Currency Forwards	Fa	air Value	Ne	et Notional
Swiss Franc	\$	(1,507)	CHF	281,298
Euro		(18,836)	EUR	1,483,000
Hong Kong Dollar		36	HKD	2,432,349
United States Dollar		2,685	USD	4,073,058
Totals	\$	(17,622)		

Securities Lending Transactions – Arkansas Code Annotated and Board policy permit ATRS to participate in a securities lending program administrated by State Street Bank (the "Custodian"). The Custodian enters into agreements with broker-dealers or other entities to loan securities for collateral with a simultaneous agreement to return the collateral for the same securities in the future. There were no restrictions on the dollar amount of securities loaned by ATRS. Securities on loan to participating brokers at year-end include U.S. Government

securities, corporate securities, and international securities. Brokers who borrow the securities provide cash or other collateral, including securities issued or guaranteed by the U.S. Government. Collateral must be provided in the amount of at least 100% of the market value of the loaned securities. ATRS cannot pledge or sell collateral securities received unless the borrower defaults. The cash collateral received on each loan is invested in a collective investment fund comprised of a liquidity pool and a duration pool.



June 30, 2023

### NOTE 1: Summary of Significant Accounting Policies (Continued)

### G. Deposits and Investments (Continued)

### **Investments (Continued)**

As of June 30, 2023, the liquidity pool had an average duration of 7.15 days and an average weighted final maturity of 107.11 days for USD collateral. Because the loans are terminable at will, their duration generally will not match the duration of the investments made with cash collateral.

At year-end, ATRS had no credit risk exposure to borrowers due to the custodian's indemnification agreement to purchase replacement securities or return cash collateral in the event a borrower fails to return a loaned security or fails to pay the Agency for income of the securities while on loan. No borrowers failed to return loaned securities or pay distributions during the year. Investments made with cash collateral appear as an asset on the Statement of Plan Net Position. Corresponding liabilities are recorded, as ATRS must return the cash collateral to the borrower upon expiration of the loan.

ATRS is exposed to investment risk, including the possible loss of principal value in the cash collateral pool, due to fluctuation

in the market value of the assets held by the cash collateral pool. As of June 30, 2023, the fair value of the securities lending assets exceeded the securities lending liabilities by \$41,673.

### H. Capital Assets

Capital assets purchased (or leased) and in the custody of this Agency were recorded as expenditures at the time of purchase (lease inception). 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 or setup costs, and installation costs). Only leases in excess of \$25,000 with non-State entities were recorded in the statewide accounting system. Gifts or contributions are generally recorded in the accounts at acquisition value at the time received. Acquisition value is the market value if the Agency would have purchased the item. Depreciation is reported for capital assets based on a straight-line method, with no salvage value. Estimated useful lives generally assigned are as follows:

Assets: Equipment Years: 5-20

Capital assets activity for the year ended June 30, 2023, was as follows:

	E	Beginning Balance	Additions	Retirements		Ending Balance
Fiduciary activities:						
Equipment	\$	921,936			\$	921,936
Less: Accumulated depreciation		832,222	\$ 16,218			848,440
Fiduciary activities, net	\$	89,714	\$ (16,218)	\$	0 \$	73,496

### I. Compensated Absences – Employee Leave

Annual leave is earned by all full-time employees. Upon termination, employees are entitled to receive compensation for their unused accrued annual leave up to 30 days. Liabilities for compensated absences are determined at the end of the year based on current salary rates.

Sick leave is earned by all full-time employees and may be accrued up to 120 days. Compensation up to a maximum of

\$7,500 for unused sick leave is payable to employees upon retirement.

Compensated absences payable attributable to this Agency's employee annual and sick leave as of June 30, 2023 and 2022, amounted to \$554,664 and \$602,734, respectively. The net changes to compensated absences payable during the year ended June 30, 2023, amounted to \$48,070.



June 30, 2023

### NOTE 1: Summary of Significant Accounting Policies (Continued)

### J. Post-Employment Benefits Other Than Pensions (OPEB)

### Arkansas State Employee Health Insurance Plan (Plan)

**Plan Description** – The Department of Transformation and Shared Services – Employee Benefits Division (DTSS-EBD) provides medical and prescription drug benefits for eligible state employees and retirees. Policies for DTSS-EBD related to medical and prescription drug plans are established by the State Board of Finance (Board) and may include ad hoc benefit changes or annual cost redeterminations. For the current year, no ad hoc or cost redetermination changes occurred. The Constitution of Arkansas, Article 5, vests the General Assembly with legislative power to enact and amend duties of and benefit provisions of the Board and DTSS-EBD, respectively, as published in Subchapter 4, Chapter 5 of Title 21 of the Arkansas Code Annotated. DTSS-EBD is included in the State of Arkansas's Annual Comprehensive Financial Report (ACFR), which includes all applicable financial information, notes, and required supplementary information. That report may be obtained by writing to Department of Transformation and Shared Services, 501 Woodlane, Suite 201, Little Rock, Arkansas 72201 or by calling 501-319-6565.

The Agency contributes to the Plan, a single employer defined benefit OPEB plan administered by DTSS- EBD, on a monthly basis. The Board establishes medical and prescription drug benefits for three classes of covered individuals: active employees, terminated employees with accumulated benefits, and retirees and beneficiaries. The Plan is established on the basis of a pay-as-you-go financing requirement, and no assets are accumulated in a trust, as defined by Governmental Accounting Standards Board (GASB) Statement No. 75. The State's annual OPEB cost for the Plan is based on an actuarially-determined calculated amount made in accordance with GASB Statement No. 75.

**Funding Policy** – Employer contributions to the Plan are established by Ark. Code Ann. § 21-5-414 and may not exceed \$550 per budgeted position. Employees, retirees, and beneficiaries contribute varying amounts based on the type of coverage and inclusion of family members. Benefits for Medicare-eligible retirees are coordinated with Medicare Parts A and B, and the Plan is the secondary payer. The portion of the State's annual OPEB liability attributable to ATRS as of June 30, 2023, is \$3,248,593.

### K. Deferred Outflows of Resources and Deferred Inflows of Resources

Deferred outflows of resources represent a decrease of net position that applies to future periods. Thus, these items will not be recognized as an outflow of resources (an expense or expenditure) until a future period.

Deferred inflows of resources represent an increase of net position that applies to future periods. These items will not be recognized as an inflow of resources (revenue) until a future period.

### L. Contributions

The Agency's funding policy provides for periodic employer contributions at statutorily-established rates based on annual actuarial valuations. The employer contribution rate was 15% for the fiscal year ending June 30, 2023. Contributory members are required to contribute 7% of gross wages to ATRS. Employee contributions are refundable if ATRS-covered employment terminates before a monthly benefit is payable. Employee contributions remaining on deposit with ATRS for a period of one or more years earn interest credits, which are included in the refund.

### M. Reserves

In accordance with the provisions of Ark. Code Ann. § 24-7-405, ATRS must maintain reserve accounts showing plan net position available for benefits. At June 30, 2023, the reserve accounts were funded at a level that complied with the code provisions.

	Total
Members' deposit account reserve	\$ 13,545,105,953
Employers' accumulation account reserve	(7,256,465,541)
Retirement reserve	13,893,055,060
Teacher deferred retirement option plan account reserve	371,192,749
Survivor benefit account reserve	112,186,981
Income - expense account reserve	9,976,716
Total	\$ 20,675,051,918



June 30, 2023

### **NOTE 1: Summary of Significant Accounting Policies (Continued)**

### M. Reserves (Continued)

The Code provisions define each of the reserve accounts as follows:

Members' Deposit Account Reserve – The account in which members' contributions shall be accumulated with regular interest and from which shall be made transfers and refunds of contributions.

Employers' Accumulation Account Reserve - The account in which shall be accumulated the employer's contributions to ATRS and from which shall be made transfers as provided in the code.

**Retirement Reserve** – The account from which shall be paid all annuities and benefits in lieu of annuities payable as provided in this act to retirants who retired on account of superannuation or disability and to beneficiaries of such retirants.

> Total pension liability Plan net position Net pension liability

Plan net position as a percentage of the total pension liability

### Actuarial Assumptions – The total pension liability was determined by an actuarial valuation as of June 30, 2023, using the following actuarial assumptions, applied to all prior periods included in the measurement:

Wage inflation rate 2.75% Salary increases 2.75 - 5.75% Investment rate of return 7.25%

Mortality table Pub-2010 General Healthy Retired, General Disabled

Retiree, and General Employee Mortality amount weighted tables were used for males and females. Mortality rates were adjusted for future mortality improvements using projection scale MP-

	Scali	ng Factor
Table	Males	Females
Healthy Retirees	105%	105%
Disabled Retirees	104%	104%
Active Members	100%	100%

The actuarial assumptions used in the June 30, 2023, valuation were based on the results of an actuarial experience study for the period July 1, 2015 through June 30, 2020.

### Teacher Deferred Retirement Option Plan Account Reserve -

The account in which shall be accumulated plan deposits made on behalf of the member with plan interest.

Survivor Benefit Account Reserve - The account from which shall be paid survivor benefits payable as provided in this act.

Income - Expense Account Reserve - The account to which shall be credited all investment income from invested assets of ATRS. It shall also be the account in which shall be accumulated the contributions made by employers for the administrative expenses of ATRS, from which shall be made annual transfers of interest credits and excess amounts to the other accounts of ATRS, and from which shall be paid all the expenses of the Board necessary for the administration and operation of ATRS.

### **NOTE 2: Net Pension Liability**

The components of the net pension liability of the participating employers at June 30, 2023, were as follows:

> \$ 25,864,207,765 (20,675,051,918) 5,189,155,847

> > 79.94%

2023 Annual Comprehensive Financial Report



June 30, 2023

### **NOTE 2: Net Pension Liability (Continued)**

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 (expected returns, net of pension plan investment expense and inflation) are developed for each major class. These ranges are combined to produce the long-term expected rate of

return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of geometric real rates of return were adopted by the plan's trustees after considering input from the plan's investment consultant and actuary.

For each major asset class that is included in the pension plan target asset allocation as of June 30, 2023, these best estimates are summarized in the following table:

I ong-Torm

Asset Allocation	Target	Expected Real Rate of Return
Total equity	53.0%	5.0%
Fixed income	15.0%	1.8%
Alternatives	5.0%	4.8%
Real assets	15.0%	4.5%
Private equity	12.0%	7.3%
Cash equivalents	0.0%	1.0%
	100%	

Single Discount Rate — A single discount rate of 7.25% was used to measure the total pension liability based on the expected rate of return on pension plan investments. The fiscal year 2023 member and employer contribution rates are 7% and 15% of active member payroll, respectively. The projection of cash flows used to determine this single discount rate assumed that member and employer contributions will be made in accordance with this schedule. This includes payroll for current T-DROP participants and Return to Work retirees. 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.

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 7.25%, as well as what the plan's net pension liability would be if it were calculated using a single discount rate that is 1% lower or 1% higher than the current rate:

### Sensitivity of the Net Pension Liability to the Single

	1% Decrease	C	Current Rate		1% Increase
	6.25%		7.25%		8.25%
Ś	8 428 056 331	Ś	5 189 155 847	Ś	2 503 858 115

Net pension liability

### **NOTE 3: Required Supplementary Schedules**

Detailed historical information about the pension liabilities for which the pension plan's assets are being held and managed and the significant assumptions used to measure these

liabilities are required supplementary information. This required supplementary information, prepared in accordance with the parameters of GASB Statement No. 67, is included immediately following the notes to the financial statements.

# Schedule of Changes in Net Pension Liability and Related Ratios for the Ten-Year Period Ended June 30, 2023

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total Pension Liability										
Service cost	\$395,700,338	\$ 379,267,685	\$340,401,007	\$331,035,218	\$ 325,464,537	\$ 315,864,318	\$ 307,786,503	\$305,086,337	\$ 298,134,477	\$ 326,999,276
Interest	1,772,097,027	1,720,782,101	1,655,575,883	1,608,463,162	1,551,511,422	1,504,613,059	1,485,759,965	1,433,768,167	1,371,168,271	1,326,709,192
Changes in benefit terms							(469,205,711)			(27,405,705)
Difference between actual and expected experience	164,573,721	4,880,583	108,860,237	(24,869,157)	119,427,343	(7,365,993)	(76,812,667)	(15,341,738)	123,519,055	(103,017,525)
Changes in assumptions			887,447,380				1,374,950,899			
Benefit payments	(1,413,477,760)	(1,374,220,915)	(1,308,163,750)	(1,255,065,793)	(1,205,326,555)	(1,160,738,238)	(1,092,952,357)	(1,035,958,950)	(970,719,484)	(914,250,015)
Refunds	(12,583,767)	(10,426,792)	(9,463,375)	(9,592,091)	(9,679,783)	(9,455,405)	(10,874,003)	(10,145,471)	(10,774,122)	(10,485,103)
Net Change in Total Pension Liability	699'608'906	720,282,662	1,674,657,382	649,971,339	781,396,964	642,917,741	1,518,652,629	677,408,345	811,328,197	598,550,120
Total Pension Liability - Beginning of Year	24,957,898,206	24,237,615,544	22,562,958,162	21,912,986,823	21,131,589,859	20,488,672,118	18,970,019,489	18,292,611,144	17,481,282,947	16,882,732,827
Total Pension Liability - End of Year (A)	\$ 25,864,207,765	\$ 24,957,898,206	\$ 24,237,615,544	\$ 22,562,958,162	\$21,912,986,823	\$ 21,131,589,859	\$ 20,488,672,118	\$ 18,970,019,489	\$ 18,292,611,144	\$17,481,282,947
Plan Net Position										
Contributions - employer	\$536,619,031	\$ 501,522,604	\$472,567,147	\$ 446,228,128	\$ 430,864,656	\$ 424,488,126	\$ 414,954,939	\$ 410,358,229	\$ 408,230,472	\$404,920,440
Contributions - member	200,610,721	183,315,252	168,129,972	153,105,134	141,885,632	138,766,747	133,109,939	131,100,983	128,555,684	125,225,906
Net investment income	1,692,309,263	(1,590,291,257)	5,250,953,451	(165,766,491)	898,384,867	1,824,094,695	2,289,818,591	35,579,657	632,166,951	2,429,334,097
Benefit payments	(1,413,477,760)	(1,374,220,915)	(1,308,163,750)	(1,255,065,793)	(1,205,326,555)	(1,160,738,237)	(1,092,952,357)	(1,035,958,950)	(970,719,484)	(914,250,015)
Refunds	(12,583,767)	(10,426,792)	(9,463,375)	(9,592,091)	(6,679,783)	(9,455,405)	(10,874,003)	(10,145,471)	(10,774,122)	(10,485,103)
Administrative expense	(7,892,822)	(6,650,604)	(7,326,797)	(8,454,436)	(7,134,784)	(9,336,430)	(7,825,595)	(8,059,030)	(8,034,857)	(8,034,236)
Other		507,446,092								
Net Change in Plan Net Position	995,584,666	(1,789,305,620)	4,566,696,648	(839,545,549)	248,994,033	1,207,819,496	1,726,231,514	(477,124,582)	179,424,644	2,026,711,089
Plan Net Position - Beginning of Year	19,679,467,252	21,468,772,872	16,902,076,224	17,741,621,773	17,492,627,740	16,284,808,244	14,558,576,730	15,035,701,312	14,856,276,668	12,829,565,579
Plan Net Position - End of Year (B)	\$ 20,675,051,918	\$ 19,679,467,252	\$ 21,468,772,872	\$ 16,902,076,224	\$ 17,741,621,773	\$17,492,627,740	\$ 16,284,808,244	\$14,558,576,730	\$ 15,035,701,312	\$ 14,856,276,668
Net Pension Liability - End of Year (A) - (B)	\$5,189,155,847	\$5,278,430,954	\$ 2,768,842,672	\$5,660,881,938	\$ 4,171,365,050	\$ 3,638,962,119	\$ 4,203,863,874	\$ 4,411,442,759	\$ 3,256,909,832	\$ 2,625,006,279
Plan net position as a percentage of total pension liability	79.94%	78.85%	88.58%	74.91%	80.96%	82.78%	79.48%	76.75%	82.20%	84.98%
Coveredemployeepayroll	\$3,492,029,158	\$ 3,320,346,417	\$ 3,204,720,806	\$3,077,558,814	\$ 3,027,154,131	\$ 2,986,026,715	\$ 2,921,965,125	\$ 2,888,392,668	\$ 2,873,988,053	\$ 2,850,860,174
Net pension liability as a percentage of covered employee payroll	148.60%	158.97%	86.40%	183.94%	137.80%	121.87%	143.87%	152.73%	113.32%	92.08%

<sup>\*</sup>ATRS is only required to present those years for which information is available until the full 10-year trend is completed.



## Schedule of Contributions for the Ten-Year Period Ended June 30, 2023

	2	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Actuarially-determined contribution	S	547.709158 \$	547709158 \$ 493.022221 \$ 474.196.689 \$	474.196.689 \$		447.791.482 \$	450.612.124 \$ 447.791.482 \$ 422.365.685 \$	423.846.831 \$	437,434,470 \$	423846831 \$ 437,434,470 \$ 474,773,530 \$ 485,904,529	485.904.529
Actual contribution		536,619,031	501,522,604	472,567,147		430,864,656	424,488,126	414,954,939	410,358,229	408,230,472	404,920,440
Contribution deficiency (excess)	\$	1,090,127 \$	1,090,127 \$ (8,500,383) \$	1,629,542 \$	4,383,996 \$	4,383,996 \$ 16,926,826 \$	(2,122,441) \$		27,076,241 \$	27,076,241 \$ 66,543,058 \$	80,984,089
Covered employee payroll	\$ 3,4	\$ 851050761	3,320,346,417 \$	3,204,720,806 \$	\$ 3,492,029,158 \$ 3,320,346,417 \$ 3,204,720,806 \$ 3,077,558,814 \$ 3,027,154,131 \$ 2,986,026,715 \$ 2,921,965,125 \$ 2,888,392,668 \$ 2,873,988,053 \$	3,027,154,131 \$	2,986,026,715 \$	2,921,965,125 \$	2,888,392,668 \$	2,873,988,053 \$	2,850,860,174
Actual contribution as a percentage of covered employee payroll		15.37%	15.10%	14.75%	14.50%	14.23%	14.22%	14.20%	14.21%	14.20%	14.20%

## Schedule of Investment Returns for the Ten-Year Period Ended June 30, 2023

2014	19.27%
2015	4.34%
2016	0.24%
2017	16.09%
2018	11.46%
2019	5.25%
2020	-0.96%
2021	3182%
2022	-5.15%
2023	8.78%
	Annual money-weighted rate of return



### **Notes to Required Supplementary Information**

June 30, 2023

### NOTE 1: Summary of Significant Information Related to Required Supplementary Schedules

### A. Schedule of Contributions

### 1. Changes in Benefit Terms

There were no significant changes in benefit terms for the year ended June 30, 2023.

### 2. Changes in Assumptions

There were no significant changes in assumptions for the year ended June 30, 2023.

### 3. Methods and Assumptions Used in Calculations of Actuarially-Determined Contributions

Valuation date: June 30, 2021

> Actuarially determined contribution rates are calculated as of June 30 in the year which is one year prior to the beginning of the fiscal year in which contributions are reported.

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

Actuarial cost method Entry age normal; funding to retirement

Amortization method Level percentage of payroll

30 years Amortization period

Asset valuation method 4-year smoothed market for funding purposes; 20% corridor

Payroll growth

Salary increases 2.75 to 5.75% including inflation

Investment rate of return 7.25%

Pub-2010 General Healthy Retired, General Dis abled Retiree, Mortality table

and General Employee Mortality amount weighted tables were used for males and females. Mortality rates were adjusted for future mortality improvements using projection

scale MP-2020 from 2010.

	Scalin	ng Factor
Table	Males	Females
Healthy Annuitant	105%	105%
Disabled Annuitant	104%	104%
Employee Mortality	100%	100%



### Schedule of Selected Information for the Five-Year Period Ended June 30, 2023

	2023	2022	2021	2020	2019
Total Assets	\$ 21,177,931,966	\$ 20,501,229,577	\$ 22,005,819,561	\$ 17,272,901,062	\$ 18,281,516,802
Total Deferred Outflows of Resources	493,831	685,899	1,034,149	1,310,404	
Total Liabilities	501,713,964	820,378,162	537,941,055	371,416,146	539,895,029
Total Deferred Inflows of Resources	1,659,915	2,070,062	139,784	719,096	
Net Position Restricted for Pension Benefits	20,675,051,918	19,679,467,252	21,468,772,871	16,902,076,224	17,741,621,773
Total Additions (Losses)	2,429,539,015	(398,007,308)	5,891,652,600	433,570,198	1,471,135,154
Total Deductions	1,433,954,349	1,391,298,311	1,324,955,953	1,273,115,747	1,222,141,121



# Investments 2023 Annual Comprehensive Financial Report





March 1, 2024

Board of Trustees Arkansas Teacher Retirement System 1400 West Third Avenue Little Rock, AR 72201

#### **Market Overview**

Investors entered fiscal year 2023 amongst a very challenging market environment, with both bonds and equities continuing to be pressured. The U.S. Federal Reserve ("Fed"), amongst other central banks, continued to combat high inflation with sharp interest rate hikes. Throughout the year, sentiment appeared to cycle through optimism on achieving a soft landing, to the reality that inflation is still above the Fed's long-term target of 2% and further hikes could lead to a recession. In June of 2022, U.S. headline inflation (CPI) peaked at 8.9% year-over-year. In response to persistently high inflation and a still strong U.S. economy, the Fed continued its rate hiking cycle with three additional 75 basis point (bp) hikes, followed by a 50bp hike in December and three 25bp hikes in the back half of the year. This represents the fastest hiking cycle since the late 1980s. However, by mid-fiscal year, there was confidence in a declining inflationary environment that shifted sentiment.

Headline U.S. inflation showed a steady decline from its peak to end the 2023 fiscal year at 3.0% year-over-year. The declining trend in inflation was followed by a slowing pace of rate hikes by the Fed and offered a source of relief to investors. As a result, risk appetite picked up and was supported by a generally resilient economy and expectations of an interest rate pivot later in 2023. This positive outlook wasn't accepted by everyone, however, as the yield curve remained inverted throughout the year, which has historically signaled a looming recession, and prospects for any rate cuts in the near term has since proven to be premature.

Markets were also tested in the back half of the year through a regional banking crisis and the U.S. debt ceiling debacle. In March 2023, Silicon Valley Bank (SVB) entered receivership with the Federal Deposit Insurance Corporation (FDIC), due to inadequate liquidity and solvency protection, and represents the largest failure of a bank since the GFC. Shortly after SVB's demise, investor concerns regarding Credit Suisse accelerated. Regulators swiftly stepped in with the FDIC fully protecting all depositors and launching the new Bank Term Funding Program to provide liquidity should banks require it. Swiss regulators also stepped in quickly to broker a deal between with UBS buying Credit Suisse at a significant discount. Despite all the chaos,

a broader banking crisis was avoided and markets emerged mostly unscathed. The stalemate during the debt ceiling negotiations also threatened to destabilize markets, yet investor confidence remained relatively stable through the ordeal until a resolution was passed.

Despite a rough start to the year, fiscal year 2023 ended on a more positive tone as year-over-year inflation fell throughout the year and economic readings held up stronger than expected. Global equities, as defined by the MSCI All Country World IMI Index, rose 16.1% for the year ending June 30, 2023. Developed markets, both the U.S. and non-U.S. generated strong returns of 18.9% and 18.8%, as measured by the DJ U.S. Total Stock Market Index and the MSCI EAFE Index, respectively. Emerging markets struggled in the high inflation and rising rate environment, returning 1.8% in USD terms. Driven by the Fed rate tightening magnitude and pace, yields rose sharply in the first few months, then traded range bound for the remaining part of the year. The impact on investment grade returns was relatively muted, as the Bloomberg Aggregate Bond Index declined by 0.9%. As riskappetite returned, high yield bonds performed well and returned 9.1% over the year, as measured by the Bloomberg U.S. Corporate High Yield Index. Private markets weren't as favorable due to the lag in valuations which came in low, and in places negative, during the year. Overall, more risk-oriented portfolios generally delivered positive mid to high single digit total returns for the 2023 fiscal year period.

#### **Overview of ATRS Fund Structure**

The ATRS portfolio is well-diversified across several asset classes, including global public equities, fixed income, alternative investments, real assets, and private equity. The asset allocation is a long-term Policy determined through periodic asset-liability studies and assessments of risk and liquidity needs. Within these asset classes, the investments are diversified across investment types, styles, regions and vintage years. A variety of investment firms are employed within each category to minimize manager- and firm-specific risks. We continue to believe the diversification and overall risk level of the portfolio is appropriate given the goals and objectives of the ATRS.





During the 2023 fiscal year there were no changes to the ATRS target asset allocation. However, ATRS did make modest enhancements within the Total Equity, Fixed Income and Opportunistic/ Alternatives portfolios. Modifications within the Total Equity asset class were a result of a manager and structure review and included replacing two active strategies, where conviction had waned, with a new strategy that brings a diversified active approach to the portfolio. In addition, the portfolio changes replenished the liquidity source and balanced exposure via size and region towards a more globally oriented portfolio. The resulting equity portfolio offers a more streamlined lineup across high conviction active managers with a lower cost profile and a balanced contribution to active risk. Within Fixed Income, ATRS increased its exposure to duration by removing an absolute return strategy and re-allocating to existing managers

with more market-like duration. The resulting portfolio allows ATRS to benefit from the higher rate environment while also providing its intended risk reducing characteristics. Finally, there were two additions to the Opportunistic/Alternative portfolio, as ATRS continues to build out the portfolio to offer compelling and diversified returns. The ATRS Board approved a second opportunistic credit strategy with an existing manager and an allocation to a mortgage servicing rights strategy which seeks to capitalize on the current market environment and to provide uncorrelated, double-digit returns.

Aon and the ATRS Investment Team continue to regularly review the portfolio allocation, structure and manager line-up, and evaluate additional types of strategies in order to best position the fund to achieve its investment objectives.

#### ATRS Performance Overview (annualized returns)

	1	1 Year 3 Year		Year	5 Year	
Periods ending 6/30/2023	Return	Rank	Return	Rank	Return	Rank
Total Fund	9.2%	18	11.5%	5	7.5%	12
Performance Benchmark	9.2	18	10.0	16	7.8	8
Total Equity	15.7	53	13.9	17	7.6	49
Performance Benchmark	17.0	42	11.8	35	8.8	34
Total Fixed Income	1.4		-1.1		1.8	
Performance Benchmark	0.0		-3.4		1.0	
Total Opportunistic/Alternatives	7.9		6.1		2.4	
Custom Alternatives Benchmark	4.4		5.1		2.9	
Total Real Assets <sup>1</sup>	1.5		7.2		6.2	
Total Real Assets Benchmark	1.7		8.1		6.8	
Total Private Equity <sup>1</sup>	2.1		16.6		13.4	
Private Equity Policy	-6.9		20.7		12.5	

<sup>1</sup>Returns for Private Markets are calculated using Time-Weighted Rate of Returns (TWRs) and are reported on a one-quarter lag.

The Total Fund ended the fiscal year with approximately \$20.7 billion, representing an increase of approximately \$1.0 billion over the year. Investment gains of approximately \$1.8 billion drove the strong increase in assets. The 2023 fiscal year brought strong returns across public equity markets, which drove strong absolute returns for the Total Fund which returned 9.2%, net-of-fees. Total Equity returned 15.7% and the Opportunistic/ Alternatives portfolio returned 7.9% over the year, both which buoyed more modest results across the rest of the portfolio. On a relative basis, the Total Fund performed in line with its performance benchmark, as Private Equity, reported on a one

quarter lag, held up better than its public market benchmark, and the Fixed Income portfolio outperformed as well. Offsetting outperformance was an overweight allocation to Private Equity relative to policy and some underperformance from Total Equity over the year. Relative to a peer group of U.S. Public Pension Plans with assets over \$1 billion, the ATRS portfolio ended the year ranking in the top quartile of its peer group. Longer-term performance also remains positive, as the Total Fund returned an annualized 7.5% over the five-year period and 8.8% over the ten-year period and ranked near the top decile of the peer universe over the three-, five- and ten-year periods.





The largest exposure of the portfolio, Total Equity, which provides exposure to U.S. and International equity markets, returned 15.7% over the year and drove the strong absolute performance of the Total Fund. On a relative basis, the ATRS Total Equity portfolio trailed its benchmark return of 17.0%, primarily due to a modest bias to small cap securities which trailed their medium and larger cap counterparts. Additionally, exposure to the convertible bond strategy, which tends to lag in strong risk on markets, was also a headwind to relative performance over the year. Longer-term absolute performance remains strong, as Total Equity returned an annualized 7.6% and 8.4% return over the trailing 5-year and since inception (7/2015) periods, respectively.

The ATRS fixed income portfolio returned a modest 1.4% over the fiscal year, though outperformed its benchmark, the Bloomberg Universal Index, which was flat for the year. The ATRS portfolio's lower duration positioning (less interest rate sensitivity) was beneficial as interest rates rose. Additionally, strong performance from two active managers in the risk-on environment was also beneficial to relative performance. Despite muted longer-term performance of 1.8% and 2.6% over the trailing 5- and 10-year periods, respectively, ATRS's fixed income portfolio added an annualized 0.8 percentage points of value-add above its benchmark over both times periods.

The opportunistic/alternatives portfolio produced a strong absolute return of 7.9% for the fiscal year, while also outperforming its benchmark by 3.5 percentage points. Strong returns were widespread across activist, equity insurance risk premium, global macro, and opportunistic and distressed credit strategies, and on both an absolute and relative basis. During the year, twelve out of fifteen strategies outperformed their

respective benchmarks. It is also important to note that this portfolio has many strategies early in their investment lives as there have been several enhancements made to this portfolio over recent years. Longer-term performance is mixed, though the portfolio has outperformed its benchmark over the trailing 10-year and since inception (5/2011) time periods.

The real assets category, which includes real estate, timber, agriculture, and infrastructure, returned 1.5% during the fiscal year, modestly trailing its performance benchmark (1.7%). The real estate allocation which is approximately 58% of the portfolio declined 3.5%, outperforming its benchmark return of -3.9%. The infrastructure portfolio, still relatively young, returned 12.6% over the year and outperformed its benchmark (10.2%). Timber returned 7.1%, trailing its benchmark (11.3%), while Agriculture returned 10.1% and outperformed its benchmark (9.1%). Over the long-term, the real assets portfolio has been additive from both an absolute and relative perspective.

The ATRS private equity portfolio returned 2.1% on a time-weighted return basis during the fiscal year. Despite a muted return, the portfolio notably outperformed its public equity benchmark (U.S. equity stock market plus a 2%), which declined 6.9% for the 2023 fiscal year as it represents public markets on a one-quarter lag. Over the long-term, the private equity portfolio has exceeded this performance benchmark by an annualized 1.7 percentage points, earning 12.6% since inception (4/1997).

We are pleased to report on the great success of the ATRS portfolio and feel it is well positioned going-forward to achieve its long-term goals.

Sincerely,

Patrick J. Kelly, CFA, CAIA

Comstall

Partner

Katie Comstock

Partner



## **Investment Policies and Procedures**

Amended: October 4, 2010 | February 7, 2011 | June 3, 2013 | October 7, 2013 | February 17, 2014 | June 1, 2015 April 21, 2016 | November 13, 2017 | April 1, 2019 | February 3, 2020 | December 7, 2020 | June 7, 2021

#### Statement Of Investment Policy

This Investment Policy has been prepared within the context of applicable Arkansas laws and is intended to allow for sufficient flexibility in the investment process to capture opportunities, yet ensure that both prudence and care are maintained in the execution of the investment program. While safety of principal is given primary consideration, the Arkansas Teacher Retirement System Board of Trustees, hereinafter "Board" may take appropriate levels of risk to earn higher levels of investment return

The Board has arrived at this policy through careful study of the rates of return and risks associated with various investment strategies in relation to the current and projected liabilities of the Arkansas Teacher Retirement System, hereinafter, "the System". This policy has been chosen as the most appropriate for achieving the financial objectives of the System. The policy will be reviewed periodically as circumstances dictate.

The Board has adopted a long-term investment horizon so that the chances and duration of investment losses are carefully weighed against the long-term potential for appreciation of assets. The assets of the System will be invested in a manner that provides the safeguards and diversity to which a prudent investor would adhere. All transactions undertaken on behalf of the System will be in the sole interest of the members of the System.

To achieve the overall investment goal of the System, one or more investment consultants may be retained by the Board as investment advisors. The scope of duties, together with the terms and conditions of engagement, of any investment consultant will be set forth in a contract approved by the Board. Throughout this document, investment advisors are referred to as investment consultants.

The System shall manage those assets not specifically allocated to investment managers. No investment shall be made without an investment consultant's recommendation. The System shall not

approve any material changes in any direct investment without first receiving written advice/ recommendation from a third-party investment consultant and, if needed, outside legal

counsel, and, without thereafter receiving written approval by the Investment Committee and Board.

#### Standard of Care

The standard of care for the Board and Executive Director of the assets of the System is: when investing and reinvesting trust assets and in acquiring, retaining, managing and disposing of investments of the trust assets, there shall be exercised the reasonable care, skill, and caution that a prudent investor would use after considering the purposes, terms, distribution requirements, and other circumstances of the trust. Investment and management decisions respecting individual assets shall be evaluated not in isolation but in the context of the trust portfolio as a whole and as a part of an overall investment strategy having risk and return objectives reasonably suited to the trust. The investments of the trust shall be diversified unless the Board reasonably determines that, because of special circumstances, the purposes of the trust are better served without diversifying. The trust assets shall be invested and managed solely in the interest of the members and benefit recipients of the trust. The trust assets shall be invested in a manner to only incur costs that are appropriate and reasonable in relation to the assets and purposes of the investment. Compliance with the standard of care is determined in light of facts and circumstances at the time of action, not in hindsight.

Investment and management functions may be delegated to an investment agent that a prudent trustee of comparable skills could properly delegate under the circumstances. When making such delegation, the Board shall establish the scope and terms of the delegation, consistent with the purposes and terms of the trust, and shall monitor the investment agent performance and compliance with the terms of the delegation. In performing a delegated function, an investment agent owes a duty to the System and the trust to exercise reasonable care to comply with the terms of the delegation. In addition, the Executive Director may delegate certain duties to the System's investment staff without relieving the Executive Director from the ultimate responsibility.

Each party serving in a fiduciary capacity for the trust shall apply the standard of care set forth herein.



#### **Statement Of Investment Policy (Continued)**

#### **Asset Allocation**

The Board is responsible for the prudent investment of funds and to maintain a proper allocation of the System's investment assets. The Board, in conjunction with its investment consultants, shall set and adjust the System's asset allocation

ranges as necessary to provide an optimal allocation to obtain its target returns. The general investment consultant shall notify the Executive Director and the Board when an asset liability modeling study should be undertaken. It shall be the goal of the System to maintain the following asset allocation targets and ranges:

Asset Category	Minimum*	Target	Maximum*
Total Equity	48.0	53.0	58.0**
Fixed Income	13.0	15.0	17.0
Opportunistic/Alternatives	N/A	5.0	N/A
Real Assets***	N/A	15.0	N/A
Private Equity	N/A	12.0	N/A
Cash Equivalents	0.0	0.0	5.0

<sup>\*</sup> Due to the illiquid nature of opportunistic/alternatives, real assets, and private equity, it is not prudent to set rebalancing ranges for these asset classes

#### Rebalancing

The asset allocation ranges established by the Board represent the Board's judgment of a portfolio mix that provides the greatest risk/return value. Allowing the portfolio to exceed the Board limits strays from the financial discipline, which the Board believes will – over time – provide the appropriate risk-adjusted return to the System.

The Executive Director is responsible for rebalancing the allowable asset classes and the individual portfolios if any of the asset classes falls outside of the designated range. The general investment consultant shall provide guidance and advice to the Executive Director to best achieve the rebalancing. Rebalancing among individual investment manager portfolios within asset classes may also be necessary to ensure the appropriate level of diversification is achieved by investment style, market capitalization or risk levels (see total asset class guidelines) and/or to take advantage of market conditions, fund manager expertise, opportunities, or other circumstances that could be beneficial to ATRS.

The Executive Director may rebalance across all equity managers, all equity holdings, all fixed income managers, and all fixed income holdings. A Board approved transition manager

may be used for rebalancing. Rebalancing including the use of a Board approved transition manager, as needed, may be initiated by the Executive Director after recommendation from the appropriate investment consultant and positive notice to the Board Chair. The Executive Director and general investment consultant will monitor the asset values by classification for each asset manager on a monthly basis, based on month-end data provided by the custodial bank. The Executive Director and general investment consultant shall regularly inform the Board on the rebalancing pacing and strategy.

Whenever the minimum or maximum range of total equity or fixed income has been exceeded, a transfer of funds or other appropriate action will occur to bring the actual allocation within the prescribed range within a time frame determined to be prudent by the Executive Director in consultation with the general investment consultant.

Normal plan cash flows should be used to the extent possible to rebalance. Interest, dividends, and plan contributions should be used to the extent possible to fund asset classes that are below their target. Withdrawals should be made from asset classes that are above their target.

<sup>\*\*</sup>Additional allocations to total equity may be made beyond the maximum range to serve as a placeholder for unfunded and uncommitted opportunistic/alternatives, real assets, and private equity

<sup>\*\*\*</sup>Real assets includes real estate, timber, agriculture, and infrastructure



#### **Statement Of Investment Policy (Continued)**

#### **Investment Manager Selection**

In order to implement its investment strategy, the System will use individual investment managers. Arkansas Code § 24-3-401 et seq. requires ATRS to always operate under the prudent investor rule. The prudent investor rule requires all investment decisions to be made based on the experience of management, rates of return, appropriate risk, reasonable cost, and all other relevant factors that should be used by prudent investors.

It is the policy of the Board to include, whenever appropriate, qualified minority—owned and women-owned business enterprises in the System's investment manager selection process and to objectively evaluate all qualified investment manager candidates regardless of race, gender or disability.

The Board will evaluate all qualified investment manager candidates with emphasis on demonstrated professional performance, organizational depth, institutional investment management capability, and reasonableness of fee structure regardless of the amount of investment assets under management or the age of the investment management firm.

The Board will use professional consultants that do not use discriminatory practices in the creation and maintenance of their investment manager databases and will require the investment consultants to affirm their use of non-discriminatory practices when recommending investment manager candidates to the Board.

#### Goals

Recognizing the purpose of the System is to remain actuarially sound and pay member benefits, the overall investment goal is to achieve, over a period of years, the greatest rate of return for the System with due consideration given to preserving capital and its purchasing power, and to maintain an appropriate level of risk consistent with the obligations of a prudent investor. The return of the System should exceed, net of fees, a policy benchmark comprised of the respective asset class benchmarks weighted by the asset class policy targets over a full market cycle (approximately five years). During periods of transition to and from non-marketable and illiquid asset classes such as private equity and real assets, actual allocations may be used over extended periods to reflect these changes in the policy targets. Periodic performance reports will provide a detailed description of the policy benchmark composition over time.

The System's actuary sets an expected return based on the Board's policy decisions. Market cycles may result in the System

earning a return materially above or below the actuarial rate of return for extended periods of time. Therefore, the actuarial rate of return will not be used for performance comparison purposes.

#### **Total Equity**

The total equity exposure of the portfolio shall be well diversified with broad exposures to small, mid, and large capitalization companies and growth and value style sectors across U.S. and non-U.S. markets. The goal for total equity shall be to achieve a total rate of return that will exceed, net of all fees and costs, the return of the aggregate global equity market as measured by the Morgan Stanley Capital International (MSCI) All Country World Index (ACWI) Investable Market Index (IMI) over a full market cycle (approximately five years). Because the total equity portfolio was previously segregated into domestic and global equity components, the total equity portfolio has a bias to domestic equity relative to the MSCI ACWI IMI. Therefore, to ensure appropriate performance measurement, the benchmark for total equity will be appropriately weighted between the Dow Jones U.S. Total Stock Market Index and the MSCI ACWI IMI Index to reflect the current domestic / global asset mix until the domestic allocation is in line with the global opportunity set as defined by the MSCI ACWI IMI. The manager structure of the total equity portfolio should resemble the weighted average of their respective benchmarks and avoid any material biases due to a concentration of managers or management styles. To achieve this goal, the Board may employ various actively managed and passive mandates. The structure of the equity component will be analyzed annually to ensure proper diversification is achieved.

#### **Fixed Income**

The manager structure of the aggregate fixed income portfolio's risk exposure should resemble the aggregate domestic fixed income market as measured by the Barclays U.S. Universal Bond Index. To help achieve this goal, the Board will employ investment managers that invest assets in a broad array of sectors (government, mortgage backed, credits, asset backed, and commercial mortgage backed bonds), maturities, and credit qualities so that the overall portfolio structure is not materially different from that of the domestic and global fixed income markets. To provide a broad base of low-cost diversification and readily available liquidity, the Board may allocate a portion of the fixed income assets to a passive investment portfolio that approximates the return of the broad fixed income market.

The goal for fixed income investments shall be to achieve a total rate of return that will exceed, net of all costs and fees, the return of the Barclays U.S. Universal Bond Index over a full market cycle (approximately five years).



#### **Statement Of Investment Policy (Continued)**

#### Opportunistic/Alternative Investments

The Opportunistic/Alternatives asset class may include investments in direct hedge funds, hedge fund of funds, commodities, currency mandates, and other alternative strategies that are not closely correlated or related to the traditional asset classes (fixed income, equities, private equity, and real assets). Unique investments that do not fit within the other asset class categories may also be included in the Opportunistic/Alternative category at the Board's discretion.

Because this category may include illiquid investments made through closed end investment partnerships, it may take a period of time to reach and maintain the target allocation of 5%. Assets will be invested in the total equity asset class when the opportunity/alternative allocation is below its long-term target of 5%.

The benchmark for the category will be a weighted average of the benchmarks of the underlying strategies.

The goal of the credit, global macro, and other liquid alternative investments shall be to achieve a total rate of return that will exceed, net of all fees and costs, the return of the appropriate institutional quality hedge fund index over a full market cycle (approximately five years). Appropriate benchmarks will be determined as investments are added to the portfolio.

#### Real Assets

The Real Asset category may include real estate, timber, agriculture, and infrastructure. While no fixed targets are set, the following general parameters have been identified:

10% Real Estate 2% Timber 1% Agriculture 2% Infrastructure

The total target of the asset class will be 15%. Because this category may include illiquid investments made through closed end investment partnerships, it will take a period of time to reach these targets. Assets will be invested in the total equity asset class until the total target is attained.

The System may initiate investments in real estate as governed

by the Real Asset Statement of Investment Policy. The System's goal for real estate is to not materially exceed the System's approved target asset allocation for total real estate investments as determined by the Board at the beginning of each fiscal year. Should the real estate target asset allocation be exceeded, the Executive Director, working with the Real Estate Consultant, shall develop a pacing and strategy plan to address the over allocation.

ATRS' Real Estate portfolio is benchmarked on a net of fee basis against the NCREIF Fund Index Open-end Diversified Core Equity Index ("NFI-ODCE"). Once ATRS' Real Estate portfolio reaches its full target allocation for a five year period, it is expected to meet or exceed the NFI-ODCE over rolling five year periods.

The System may initiate direct ownership in timberland or indirect investments in fund of funds, partnerships, corporations, or real estate investment trusts ("REITs") investing in investment grade properties of like kind.

The goal of the timberland investments shall be to achieve a total rate of return that will exceed, net of all fees and costs, the return of the NCREIF Timberland Property Index ("NTPI") over a five year rolling period. The Consumer Price Index plus 300 basis points will be used as a secondary measurement to gauge the timber portfolio's performance compared to the opportunity cost of investing in timber.

The goal of the agriculture investments shall be to achieve a total rate of return that will exceed, net of all fees and costs, the return of the NCREIF Farmland Index ("NFI") over a five year rolling period. The Consumer Price Index plus 300 basis points will be used as a secondary measurement to gauge the agriculture portfolio's performance compared to the opportunity cost of investing in agriculture.

The goal of the infrastructure investments shall be to achieve a total rate of return that will exceed, net of all fees and costs, the return of the Consumer Price Index (CPI) plus 5 percentage points over a full market cycle (approximately ten years). The Consumer Price Index plus 5 percentage points will be used as the benchmark to reflect the opportunity cost of investing in infrastructure. Similar infrastructure programs of institutional investors will also be used as a secondary benchmark to the extent such data is made available.



#### **Statement Of Investment Policy (Continued)**

#### Real Assets (Continued)

The ATRS Total Real Asset Benchmark is weighted by the allocations based on Net Asset Values across the various sub-categories, and thus defined as Real Estate benchmark, Timber benchmark, Agriculture benchmark and Infrastructure benchmark. The net of fee return for ATRS' Total Real Asset Portfolio is expected to meet or exceed the Total Real Asset Benchmark over rolling five year periods.

#### **Private Equity**

The System may initiate investments in private equity as governed by the Private Equity Statement of Investment Policy. Private equity investments may include domestic and foreign private equity partnerships, venture capital, and mezzanine financing partnerships that are intended to diversify the assets and reduce the likelihood of material losses in any individual investment classification. The investment consultant responsible for private equity shall advise the Executive Director and Board on the Private Equity Statement of Investment Policy and the structure of private equity investments best suited for the System.

The System's goal for private equity investments is to achieve a total rate of return that will exceed, net of all costs and fees, the return of the public equity markets, as measured by the Dow Jones U.S. Total Stock Market Index, plus a liquidity premium of 2 percentage points per year over a full market cycle for private equity (approximately ten years).

#### Cash Equivalents

The System may hold direct ownership in short-term investments or may permit or require managers to hold cash or cash equivalents to meet liquidity needs of the investment manager or of the System.

The System's cash management goal shall be to preserve capital and maintain liquidity.

#### **Arkansas-Related Investments**

The System may initiate Arkansas-related mortgage loans, promissory notes, direct real estate investments, or purchase insured certificates of deposit or short term securities of Arkansas financial institutions to meet the goals of the

mandated requirements. Arkansas-related investments are categorized according to the appropriate asset class for each investment. In addition, Arkansas related investments include, but are not limited to, investments managed by an Arkansas related manager, Arkansas related investments held by other fund managers, Arkansas timberland, partnerships based in Arkansas, and partnerships holding Arkansas properties.

#### **Commingled or Mutual Funds**

If a commingled fund or mutual fund is utilized, the portfolio will be governed by the prospectus or similar document for the fund. In those cases, the System will utilize the prudent investor rule and advice of the investment consultant in selecting and evaluating funds initially and in monitoring them on an ongoing basis.

#### **Derivatives**

Derivatives may be used to reduce the risk in a portfolio and provide desired market and security level positions as an alternative to purchasing cash securities. Excessive leverage shall not be created through the use of derivatives in a manner that substantially increases the System's portfolio risk. Each investment manager's derivative usage shall be specified in the investment management agreement or specific guidelines.

The use of futures and options shall be matched by cash or cash equivalent securities, and all short futures positions shall be matched by equivalent long security positions, unless otherwise stated in the investment manager guidelines or authorizing fund documents.

#### **Loaning of Securities**

The lending agent will evaluate the credit-worthiness of potential borrowers of securities, and will loan securities only to financially sound borrowers. The lending agent will maintain a diversified list of such borrowers in order to mitigate the counterparty risk that is inherent in securities lending.

Collateral levels should be based on the nature of the loaned security and will generally be between 102% and 105% of the market value of the borrowed security. Marking to market will be performed every business day subject to de minimis rules of change in value, and borrowers will be required to deliver additional assets as necessary to maintain over-collateralization of securities loans.



#### **Statement Of Investment Policy (Continued)**

#### **Securities Lending Reinvestment Guidelines**

The cash collateral portfolio will be managed on an amortized cost basis (maintain a \$1 net asset value) and have investment guidelines that are 2a-7-like in nature (money market fund guidelines) to ensure that only a moderate amount of risk is taken on the reinvestment of the cash collateral. This will control the amount of credit and duration risk that can be taken by the short duration fixed income manager, which will help to mitigate losses due to insufficient collateral relative to the amount on loan. In addition, guidelines for the cash collateral portfolio will be created in conjunction with the lending strategy and with input from the securities lending agent.

The collateral pool should also maintain a reasonable level of overnight liquidity in order to allow for the smooth recall of securities over time.

#### **Investment Manager Reporting**

The System will require all investment managers, managing partners, and general partners to provide on at least a quarterly and an annual basis, reporting appropriate for the investment.

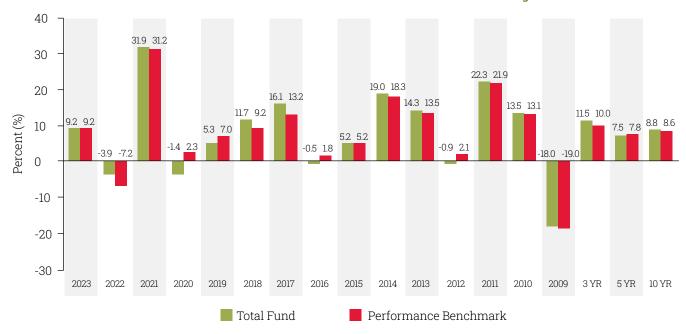
#### **Roles**

The Executive Director and investment consultant are jointly responsible for the initial selection of investment managers and any increase or decrease in an investment manager's funding. The Executive Director and investment consultant are jointly responsible for monitoring existing investment managers on performance, stability, and compliance. The Executive Director and investment consultant may also recommend termination of an investment manager when circumstances justify termination. Reasons for termination include, but are not limited to, relative performance, relative stability, costs, strategic allocation of assets, or other relevant factors that a prudent investor would use.

#### **Proxies**

The System authorizes the investment manager to vote all proxies related to stocks in which it invests the System's assets. The System expects the investment manager to cast votes solely in the best interest of plan beneficiaries.

#### ATRS Total Fund Fiscal Year Returns vs. Performance Benchmark: Periods Ending June 30th



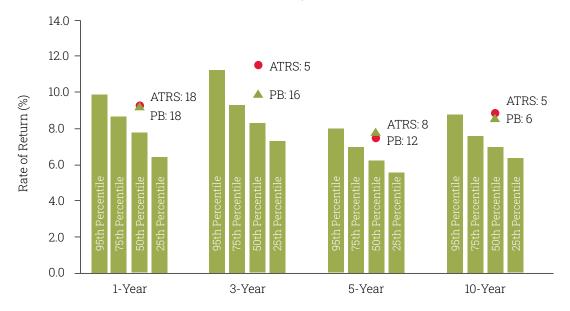


#### ATRS Total Fund Returns Relative to Performance Benchmark: Periods Ending June 30th



Fiscal Year

#### ATRS Total Fund Ranks: Periods Ending June 30, 2023 Universe of U.S. Public Defined Benefit Plan with over \$1 billion in AUM





# Traditional Assets | Schedule of Investment Results Returns for Period Ending June 30, 2023

The table below details the rates of return for the System's investment managers over various time periods ending June 30, 2023. The Appendix at the end of this document provides a description of the benchmarks used for each manager as of the end of the fiscal year.

Public Equity	1-Year	3-Years	5-Years
Pershing Square Holdings  Dow Jones U.S. Total Stock Market Index	23.5	16.8	21.5
	<i>18.9</i>	<i>13.7</i>	<i>11.3</i>
Trian Partners	18.5	8.6	7.2
Trian Co-Investments	22.6	13.7	10.2
S&P 500 Index	<i>19.6</i>	<i>14.6</i>	<i>12.3</i>
Jacobs Levy 130/30	18.0	25.7	16.0
Russell 3000 Index	<i>19.0</i>	<i>13.9</i>	<i>11.4</i>
Kennedy Capital Management Russell 2000 Value Index	6.6	17.4	4.6
	<i>6.0</i>	<i>15.4</i>	<i>3.5</i>
Stephens Russell 2000 Growth Index	13.6	5.7	6.7
	<i>18.5</i>	<i>6.1</i>	<i>4.2</i>
Voya Convertibles Performance Benchmark	9.5	9.0	11.8
	<i>10.6</i>	<i>8.6</i>	<i>9.7</i>
Voya Absolute Return	15.6	12.1	8.0
Performance Benchmark	<i>16.5</i>	<i>11.0</i>	<i>8.1</i>
Arrowstreet SSgA Global Index BlackRock MSCI ACWI IMI Fund MSCI AC World IMI (Net)	16.5	11.3	8.0
	16.6	11.4	7.9
	<i>16.1</i>	11.0	<i>7.6</i>
T. Rowe Price Global Equity	20.0	9.1	11.5
Lazard	10.4	6.6	4.8
<i>MSCI ACWI Index (Net)</i>	<i>16.5</i>	<i>11.0</i>	<i>8.1</i>
Harris Global Equity	18.4	15.4	7.1
MSCI World Index (Net)	<i>18.5</i>	<i>12.2</i>	<i>9.1</i>
Wellington Global Perspectives	13.4	14.6	5.0
Performance Benchmark	<i>13.0</i>	<i>10.8</i>	<i>4.5</i>



# Traditional Assets | Schedule of Investment Results (Continued)

Fixed Income	1-Year	3-Years	5-Years
BlackRock	-0.4	-3.6	1.1
Performance Benchmark	0.0	-3.4	1.0
Reams Core Plus Bond Fund	2.6	-2.2	3.2
SSgA Aggregate Bond Index	-1.0	-4.0	0.8
Barclays Aggregate Index	-0.9	-4.0	0.8
Loomis Sayles	3.3	-0.4	2.7
Performance Benchmark	2.7	-1.6	1.9
Wellington Global Total Return	4.8	3.4	3.5
BofA Merrill Lynch 3 Month US T-Bill	3.6	1.3	1.6



# **Alternatives | Schedule of Investment Results**

Opportunistic/Alternatives	1-Year	3-Years	5-Years
Anchorage	6.9	9.9	4.9
York	35.5	9.1	-7.7
Credit Suisse Event Driven	<i>3.0</i>	<i>7.5</i>	<i>3.3</i>
Capula	11.8	6.9	7.4
Graham	3.7	17.8	9.5
<i>HFRI Macro (Total) Index</i>	-0.4	<i>7.3</i>	<i>5.0</i>
Circumference Group Core Value	16.4	10.2	7.6
Russell 2000 Index	<i>12.3</i>	<i>10.8</i>	<i>4.2</i>
Aelous Keystone Fund Nephila Rubik Holdings Pillar Opportunity FTSE 3 Month T-Bill	11.3	0.6	0.2
	2.2	-7.8	-5.5
	-3.0		
	<i>3.7</i>	<i>1.3</i>	1.6
Parametric Global Defensive Equity  Performance Benchmark	12.6	9.2	5.3
	<i>10.4</i>	<i>6.4</i>	<i>5.2</i>
Man Alternative Risk Premia	8.5	7.7	3.2
SG Multi Alternative Risk Premia Index	<i>6.1</i>	4.4	<i>0.2</i>
CFM Systematic Global Macro Fund	-4.8		
HFRI Macro: Systematic Diversified Index	- <i>3.4</i>		
Chatham PDSC III	18.8		
Chatham PDSC IV			
HFRI Event Driven (Total) Index	<i>5.3</i>		
Silver Point Capital Fund	8.0		
<i>HFRI ED: Distressed/Restructuring Index</i>	<i>1.6</i>		
Prophet Mtg. Service Opportunities Credit Suisse Hedge Fund Index			 



# Real Assets | Schedule of Investment Results

Real Estate Manager	Since-In- ception IRR	Inception Date
Core & Open End Funds		
Arkansas Investments	8.0%	12/31/2007
JP Morgan Strategic Property Fund	6.7%	2/5/2007
MetLife Commercial Mortgage Income Fund, LP	3.3%	7/1/2019
Prime Property Fund	-6.0%	3/31/2022
Prudential PRISA	6.5%	6/30/2005
RREEF Core Plus Industrial Fund	-5.4%	9/30/2021
UBS Trumbull Property Fund	5.1%	3/31/2006
UBS Trumbull Property Income Fund	5.0%	7/3/2017
Closed End Funds		
Almanac Realty Securities V, LP	11.9%	5/12/2008
Almanac Realty Securities VI	8.8%	11/20/2012
Almanac Realty Securities VII	10.9%	4/24/2015
Almanac Realty Securities VIII	11.0%	12/21/2018
Almanac Realty Securities IX	-13.0%	6/13/2022
Blackstone Real Estate Partners Europe VI (EURO Vehicle)	16.1%	11/20/2019
Blackstone Real Estate Partners VII	14.9%	2/6/2012
Blackstone Real Estate Partners X	-26.8%	6/30/2022
Calmwater Real Estate Credit Fund III	7.0%	12/27/2017
Carlyle Realty Partners IX	N/M	6/30/2021
Carlyle Realty Partners VII	14.0%	7/15/2014
Carlyle Realty Partners VIII	28.8%	6/29/2018
CBRE Strategic Partners U.S. Opportunity 5	5.4%	8/13/2008
CBRE Strategic Partners U.S. Value 8	3.7%	9/30/2016
CBRE Strategic Partners U.S. Value 9	-4.2%	7/20/2020
Cerberus Institutional Real Estate Partners III	13.4%	10/3/2013
FPA Core Plus Fund IV	8.6%	9/10/2018
GLP Capital Partners IV	1.6%	9/28/2021
Harbert European Real Estate Fund IV	-0.8%	6/30/2016
Heitman European Property Partners IV	-3.8%	12/15/2008

Real Estate Manager (Continued)	Since-In- ception IRR	Inception Date
Closed End Funds (Continued)		
Kayne Anderson Real Estate Partners V	12.8%	6/15/2018
Kayne Anderson Real Estate Partners VI	7.2%	6/4/2021
Landmark Real Estate Fund VI	18.5%	6/30/2010
Landmark Real Estate Fund VIII	16.3%	8/2/2017
Landmark Real Estate Fund IX	N/M	12/31/2021
LaSalle Asia Opportunity Fund IV	31.9%	7/22/2014
LaSalle Asia Opportunity V	6.9%	9/30/2017
LaSalle Asia Opportunity VI	N/M	3/31/2022
LaSalle Income & Growth Fund VI	8.4%	7/16/2013
LaSalle Income & Growth Fund VII	2.4%	6/30/2017
LaSalle Income & Growth Fund VIII	13.9%	2/26/2020
LBA Logistics Value Fund IX	-10.5%	2/22/2022
Lone Star Real Estate Fund IV	10.4%	10/1/2015
Lone Star Real Estate Fund VII	N/M	4/30/2023
Long Wharf Real Estate Partners V	7.9%	11/20/2015
Long Wharf Real Estate Partners VI, L.P.	20.9%	3/30/2020
Mesa West Real Estate Income Fund V	4.9%	11/8/2021
Metropolitan Real Estate Partners Co- Investments Fund, L.P.	9.2%	12/30/2015
O'Connor North American Property Partners II, L.P.	-3.0%	4/10/2008
PGIM Real Estate Capital VII (USD Feeder)	10.8%	1/28/2021
Rockwood Capital Real Estate Partners Fund IX	9.9%	12/27/2012
Rockwood Capital Real Estate Partners Fund XI	3.2%	12/18/2019
Torchlight Debt Opportunity Fund IV	9.3%	7/19/2013
Torchlight Debt Opportunity Fund V	10.1%	6/29/2015
Torchlight Debt Opportunity Fund VI	8.1%	2/12/2018
Torchlight Debt Opportunity Fund VII	5.0%	7/16/2020
Walton Street Real Estate Debt Fund II, L.P.	5.7%	6/28/2019
Westbrook Real Estate Fund IX	6.7%	6/11/2013
Westbrook Real Estate Fund X	8.6%	7/18/2016
Total Real Estate	7.5%	5/28/1997



# Real Assets | Schedule of Investment Results (Continued)

Timber & Agriculture	Since-In- ception IRR	Inception Date
BTG Timber Separate Account	5.1%	2/18/1998
BTG Pactual Open Ended Core U.S. Timberland Fund	9.6%	12/30/2019
HFMS Farmland Separate Account	6.6%	4/22/2011
UBS Agrivest Core Farmland Fund	5.2%	4/1/2015

Infrastructure	Since-In- ception IRR	Inception Date
Antin Infrastructure Partners II, L.P.	13.2%	7/3/2014
AxInfra NA II LP	9.1%	3/1/2021
DIF Infrastructure Fund V, L.P.	8.1%	6/5/2018
DIF Infrastructure Fund V, L.P.	N/M	12/31/22
Global Energy & Power Infrastructure Fund II	12.7%	12/23/2014
Global Infrastructure Partners III, L.P.	10.0%	5/18/2016
IFM Global Infrastructure Fund (US), L.P.	10.7%	10/1/2018
ISQ Global Infrastructure Fund III	6.1%	12/30/2021
KKR Global Infrastructure Investors II, L.P.	17.0%	12/18/2014
KKR Diversified Core Infrastructure Fund	7.1%	4/1/2022
Macquarie Infrastructure Partners III, L.P.	18.5%	2/13/2015
Macquarie Infrastructure Partners V, L.P.	14.7%	12/16/2020



# **Private Equity | Schedule of Investment Results**

Annualized Annuali Internal Rate Internal I of Return* Inception Date of Return*	Rate
Individual Partnerships Private Equity (Continued)	
Audax Mezzanine III         9.79%         5/10/2010         CSFB-ATRS 2005-1 Series         7.47%	5/1/2005
Big River - Mezzanine 17.34% 6/27/2014 CSFB-ATRS 2006-1 Series 10.139	8/1/2006
Blackstone Mezzanine I 10.16% 12/22/1999 Cypress MBP II -0.48%	6 6/18/1999
DLJ Investment II 10.35% 11/10/1999 DH Tech I 0.00%	1/12/2000
Greyrock IV 12.11% 12/30/2016 Diamond State 5.46%	4/15/2000
Greyrock V 12.05% 4/15/2020 Diamond State II 11.88%	6 1/4/2007
Greyrock VI NMF 3/8/2023 DLJ MBP III 19.36%	6 7/19/2000
Insight Mezzanine I 6.54% 7/13/2009 Doughty Hanson III 13.549	6 10/20/1997
DW Healthcare III 18.969	6 12/21/2011
Private Equity DW Healthcare IV 20.389	% 12/21/2015
21st Century Group I -3.75% 4/6/2000 DW Healthcare V 8.71%	7/22/2019
Advent GPE VI-A 16.42% 3/12/2008 EnCap IX 10.39%	6 12/19/2012
Alpine Investors IX NMF 12/20/2022 EnCap VIII 0.53%	1/31/2011
Alpine Investors VIII 43.88% 8/13/2021 EnCap X 15.489	6 4/7/2015
Altaris Constellation 24.77% 7/20/2016 EnCap XI 18.79%	6 3/6/2017
Altaris IV 28.79% 6/30/2017 FP CF Access 24.689	% 7/31/2019
Altus Capital II 13.39% 6/3/2011 FP CF Access II NMF	2/4/2022
American Industrial VI 26.28% 9/30/2015 FP Co-Invest VI NMF	2/24/2023
American Industrial VII 25.00% 3/29/2019 FP Intnl 2011 9.65%	
Arlington IV 24.26% 7/29/2016 FP Intnl 2012 8.00%	
Arlington V 34.44% 5/3/2019 FP Intnl 2013 8.21%	
Arlington VI NMF 4/29/2022 FP Intnl 2014 14.309	
Atlas Capital II 19.86% 12/13/2013 FP Intnl 2015 11.51%	
ATRS-FP PE 19.95% 4/1/2012 FP Intnl 2016 8.37%	
Big River - Equity 14.98% 6/27/2014 FP Intnl 2017 18.59%	
Big River - Funding 4.27% 1/31/2017 FP Intnl 2018 12.329	
Big River - Holdings Note 11.05% 8/23/2017 FP Intnl 2019 32.75%	
Big River - Holdings Note 2023 5.57% 3/13/2018 FP Intnl X 7.76%	
Big River - Holdings Note 2023-2 6.50% 9/14/2018 FP Intnl XI NMF	
Big River - Preferred Equity 12.51% 8/23/2017 FP Venture Opp NMF	
Big River - Sr Secured Debt 14.71% 6/27/2014 FP Venture XIII 9.53%	
Bison V 14.55% 6/30/2016 FP Venture XIV NMF	
Bison VI NMF 12/23/2021 FP Venture 2008 18.129	
Blue Oak Arkansas -34.84% 3/26/2014 FP Venture 2009 16.98%	
Boston Ventures VII 2.82% 12/14/2007 FP Venture 2010 16.66%	
BV IX 31.98% 4/7/2017 FP Venture 2011 34.849	
BV VIII 46.12% 8/15/2014 FP Venture 2012 20.709	
BV X 49.94% 2/28/2020 FP Venture 2013 24.429	
BV XI NMF 7/1/2022 FP Venture 2014 20.649	
Castlelake II 5.88% 5/4/2012 FP Venture 2015 13.35%	
Castlelake III 6.58% 2/28/2014 FP Venture 2016 21.71%	
Clearlake V 41.46% 1/12/2018 FP Venture 2017 21.379	
Clearlake VI 26.24% 12/10/2019 FP Venture 2018 22.35%	
Clearlake VII NMF 10/29/2021 FP Venture 2019 20.709	
Court Square III 20.43% 7/17/2012 Greenbriar V 18.49%	



# Private Equity | Schedule of Investment Results (Continued)

	Annualized Internal Rate of Return*	Inception Date		Annualized Internal Rate of Return*	Inception Date
Private Equity (Continued)			Private Equity (Continued)		
Greenbriar VI	NMF	10/17/2022	Riverside IV	21.27%	12/4/2009
GTLA Holdings	29.56%	8/30/2018	Riverside V	12.65%	5/11/2012
Highland Contingent Note	6.26%	7/20/2018	Riverside VI	12.76%	7/3/2018
Highland Equity	0.00%	7/28/2016	Riverside Value Fund I	152.73%	3/14/2022
HMTF III	1.85%	3/4/1997	Second Cinven	9.30%	4/30/1998
HMTF IV	-6.09%	6/18/1998	Siris III	11.02%	12/11/2014
HMTF V	17.57%	11/28/2000	Siris IV	15,52%	12/22/2017
Insight Equity II	8.42%	7/13/2009	SK Capital V	11.94%	7/5/2018
JF Lehman III	11.17%	8/8/2011	SK Capital VI	NMF	3/3/2022
JF Lehman IV	35.52%	10/23/2015	Sycamore Partners II	4.74%	4/7/2014
JF Lehman V	19.32%	6/28/2019	Sycamore Partners III	19.39%	12/21/2017
JF Lehman VI	NMF	10/27/2022	TA XI	26.78%	4/30/2009
KPS III Supplemental	22.83%	8/14/2009	Tennenbaum VI	7.27%	2/15/2011
KPS IV	24.23%	4/12/2013	Thoma Bravo Discover	36.12%	1/29/2016
KPS Mid Cap II	NMF	6/30/2023	Thoma Bravo Discover II	24.26%	12/20/2017
KPS Mid-Market I	22.89%	10/15/2019	Thoma Bravo Discover III	6.40%	5/29/2020
KPS V	26.28%	10/15/2019	Thoma Bravo Discover IV	NMF	4/13/2022
Levine Leichtman V	17.41%	4/30/2013	Thoma Bravo Explore I	24.45%	1/23/2020
Lime Rock Resources III	3.27%	7/16/2013	Thoma Bravo Explore II	NMF	5/2/2022
LLR III	16.52%	5/9/2008	Thoma Bravo XI	27.03%	5/1/2014
LLR VI	2.70%	9/25/2020	Thoma Bravo XII	16.33%	4/27/2016
Mason Wells III	20.55%	5/13/2010	Thoma Bravo XIII	29.42%	9/24/2018
NGP IX	10.84%	2/27/2008	Thoma Bravo XIV	4.67%	5/29/2020
NGP X	-0.28%	4/20/2012	Thoma Bravo XV	NMF	4/13/2022
NGP XI	10.66%	9/30/2014	Vista Equity III	28.51%	7/11/2008
NGP XII	15.45%	10/2/2017	Vista Foundation II	15.13%	10/31/2013
Oak Hill I	10.59%	4/1/1999	Vista Foundation III	22.77%	5/19/2016
One Rock II	14.00%	3/31/2017	Wellspring V	16.22%	7/28/2010
PineBridge Structured III	-4.27%	12/31/2015	Wicks IV	21.21%	4/29/2011
Revelstoke III	10.87%	10/1/2021	WNG II	0.85%	6/26/2018

<sup>\*2022</sup> and 2023 vintage year funds' performance is deemed not meaningful (NMF).



## **Description of Benchmarks**

**Total Fund** - The Performance Benchmark for the Total Fund reflects a weighted average of the underlying asset class benchmarks, weighted as follows: Opportunistic/Alternatives and Real Assets at the weight of the previous month's ending market values, Fixed Income and Private Equity at their long-term Policy Targets of 15% and 12%, respectively, and Total Equity at its long-term Policy Target of 53% plus the balance of the unfunded or uncommitted assets of the Opportunistic/Alternatives and Real Assets categories. From October 2007 to

July 2013, the Performance Benchmark was the performance of the asset class benchmarks as a weighted average of the previous month's ending market values. The historical components of the benchmark are shown in the table below. Returns prior to September 30, 1996, consist of the actual allocations to the seven different asset classes included in the ATRS portfolio over time. The historical benchmarks used for each asset class are noted below.

Date	DJ U.S. Total Stock Market Index	Russell 3000 Index	MSCI ACW ex-US Index	MSCI ACWI	Bloomberg Barclays U.S. Universal Bond Index	Bloomberg Barclays Aggregate Bond Index	Alternative Policy <sup>1</sup>
03/31/2004 - 09/30/2007	40.0%		17.5%		25.0%		17.5%
07/31/2003 - 02/29/2004	40.0%		17.5%			25.0%	17.5%
10/31/2001 - 06/30/2003		40.0%	17.5%			25.0%	17.5%
08/31/1998 - 09/30/2001		40.0%	17.0%			28.0%	15.0%
10/31/1996 - 07/31/1998		40.0%	20.0%			28.0%	12.0%

<sup>1</sup>Currently, the benchmarks for Real Assets and Opportunistic/Alternatives are included in the Total Fund Performance Benchmark at their actual beginning quarter weights. Prior October 1, 2007, private equity, real estate, and other alternatives (timber) were grouped together in one "Alternatives Asset Class." The Alternative Policy for this asset class was comprised of the weighted average of the Real Estate, Private Equity, and Other Alternatives policy benchmarks. Prior to July 31, 2003 the alternative benchmark consisted of 57.0% of the Russell 3000 + a 2% Premium per year, 8.5% of the NCREIF South Timberland Index, 28.5% of the Real Estate Index, 6% of the EnnisKnupp STIF Index. After this date, real estate and private equity benchmarks started to report on a one-quarter lag to align with the returns of their asset classes.

**Total Equity** - A weighted average of the Dow Jones U.S. Total Stock Market Index and the MSCI All Country World IMI Index based on weights of the underlying investment manager allocations. As of June 1, 2023, the Total Equity Performance Benchmark was comprised of 33.0% DJ U.S. Total Stock Market Index and 67.0% MSCI ACWI IMI

**Total Fixed Income** - The Bloomberg Barclays U.S. Universal Bond Index as of March 1, 2004.

**Total Opportunistic/Alternatives** – A custom benchmark consisting of 25% DJ/CS Event-Driven Index, 25% HFR Macro Index, and 50% South Timberland NCREIF Index until June 30,2013; 60% HFRI Macro Index and 40% DJ/CS Event-Driven Index until July 31, 2015; 56% HFRI Macro

Index, 38% DJ/CS Event-Driven Index, and 6% Russell 2000 Index until March 31, 2016; 45% HFRI Macro Index, 30% DJ/CS Event-Driven Index, 5% Russell 2000 Index, and 20% Citigroup 3 Month T-bill until May 31, 2016; 37% HFRI Macro Index, 25% DJ/CS Event-Driven Index, 5% Russell

2000 Index, and 33% Citigroup 3 Month T-bill until May 31, 2017; 28% HFRI Macro Index, 20% DJ/CS Event-Driven Index, 4% Russell

2000 Index, 25% Citigroup 3 Month T-bill, and 23% Parametric Performance Benchmark until May 31, 2018. 22% HFRI Macro Index, 18% DJ/CS Event-Driven Index, 3% Russell 2000 Index, 27% FTSE 3 Month T-bill, 18.50% Parametric Performance Benchmark, and 11.5% SG Multi-Alternative Risk Premia Until June 30, 2018. 20% HFRI Macro Index, 15% DJ/CS Event-Driven Index, 3.5% Russell 2000 Index, 25% FTSE 3 Month T-bill, 16.5% Parametric Performance Benchmark, and 20% SG Multi-Alternative Risk Premia Until August 31, 2018. 17% HFRI Macro Index, 15% DJ/CS Event -Driven Index, 3.5% Russell 2000 Index, 28% FTSE 3 Month T-bill, 16.5% Parametric Performance Benchmark, and 20% SG Multi-Alternative Risk Premia Until November 30, 2018. 15% HFRI Macro Index, 15% DJ/ CS Event-Driven Index, 3.5% Russell 2000 Index, 30% FTSE 3 Month T-bill, 16.5% Parametric Performance Benchmark, and 20% SG Multi-Alternative Risk Premia thereafter.

**Total Real Assets** - A custom benchmark consisting of a weighted average of the net asset values at previous month's end of the subcategories' benchmarks, defined as Real Estate Benchmark, Timber Benchmark, Agriculture Benchmark and Infrastructure Benchmark.



# **Description of Benchmarks (Continued)**

**Real Estate** - NFI-ODCE - NCREIF Fund Index Open-end Diversified Core Equity Index.

**Timber Benchmark** - NCREIF Timberland Property Index (NTPI) weighted according to ATRS' regional exposure based on net asset value.

**Agriculture Benchmark** - NCREIF Farmland Index (NFI) weighted according to ATRS' regional and crop type exposure based on net asset value.

**Infrastructure Benchmark** - Consumer Price Index (CPI) plus 500 basis points annually.

**Total Private Equity** - The Dow Jones U.S. Total Stock Market Index + a 2% premium per year.

Cash Equivalents - The Citigroup 90 day T-bill.

Voya Convertibles Performance Benchmark - On January 1, 2005, the benchmark for the portfolio was changed to the Merrill Lynch Convertible Bond (All Quality) Index. Prior to January 1, 2005, the performance benchmark for the Voya (previously Nicholas Applegate) portfolio was the CSFB Convertible Securities Index. Prior to May 1, 2004, the performance benchmark consisted of 90% CSFB Convertible Securities Index and 10% Salomon High Yield Index.

**BlackRock Performance Benchmark** - The Bloomberg Barclays U.S. Universal Bond Index as of March 1, 2004. Previously it was the Bloomberg Barclays Aggregate Bond Index.

**Jacobs Levy Performance Benchmark** - On January 1, 2008, the benchmark for the portfolio was changed to the Russell 3000 Index. Prior to January 1, 2008, the portfolio benchmark was the Russell 1000 Growth Index.

**Loomis Sayles Performance Benchmark** - An Index that splices 65% of the Bloomberg Barclays Capital Government/Credit Index and 35% Bloomberg Barclays Capital High Yield Index.

**PIMCO Performance Benchmark** - The Bloomberg Barclays U.S. Universal Bond Index as of March 1, 2004. Previously it was the Bloomberg Barclays Capital Aggregate Bond Index.

Wellington Global Performance Benchmark - As of July 1, 2012 the benchmark was changed to MSCI All Country World Small Cap Index. Prior to July 1, 2012, the benchmark was MSCI All Country World Small/Mid Cap Index.

**Bloomberg Aggregate Bond Index** - A market-value weighted index consisting of the Bloomberg Barclays Corporate, Government and Mortgage-Backed Securities Indices. The Index also includes credit card-, auto- and home equity loan-backed securities, and is the broadest available measure of the aggregate U.S. fixed income market.

**Bloomberg Government/Credit Index** — The Bloomberg Barclays Government/Credit Index measures the investment return of all medium and larger public issues of U.S. Treasury, agency, investment-grade corporate, and investment-grade international dollar-denominated bonds.

**Bloomberg High Yield Index** - The Bloomberg Barclays High Yield Index covers the universe of fixed rate, non-investment grade debt. Pay-in-kind (PIK) bonds, Eurobonds, and debt issues from countries designated as emerging markets (e.g., Argentina, Brazil, Venezuela, etc.) are excluded, but Canadian and global bonds (SEC registered) of issuers in non-EMG countries are included.

**Bloomberg U.S. Universal Bond Index** - A market-value weighted index consisting of the components of the Bloomberg Barclays Aggregate Bond Index, plus EuroDollar bonds, emerging markets bonds, 144A fixed income securities, and U.S. corporate high yield securities.

**Citigroup 90 day T-bill Index** - Treasury bill rates of return, as reported by Citigroup (Salomon Smith Barney), for bills with a maximum time remaining to maturity of 90 days.

**DJ/CS Event-Driven Index** - Event driven funds typically invest in various asset classes and seek to profit from potential mispricing of securities related to a specific corporate or market event. Such events can include: mergers, bankruptcies, financial or operational stress, restructurings, asset sales, recapitalizations, spin-offs, litigation, regulatory and legislative changes as well as other types of corporate events. Event driven funds can invest in equities, fixed income instruments (investment grade, high yield, bank debt, convertible debt and distressed), options and various other derivatives. Many event driven fund managers use a combination of strategies and adjust exposures based on the opportunity sets in each subsector.

**Dow Jones U.S. Total Stock Market Index -** A capitalization-weighted stock index representing all U.S. common stocks traded regularly on the organized exchanges. The Index is the broadest measure of the aggregate U.S. stock market.



## **Description of Benchmarks (Continued)**

**FTSE Europe** - A tradable index, designed to represent the performance of the 100 most highly capitalized blue chip companies in Europe.

**HFR Macro Index** – An index representing investment managers which trade a broad range of strategies in which the investment process is predicated on movements in underlying economic variables and the impact these have on equity, fixed income, hard currency and commodity markets.

HFR Distressed/Restructuring Index – An index representing distressed restructuring strategies which employ an investment process focused on corporate fixed income instruments, primarily on corporate credit instruments of companies trading at significant discounts to their value at issuance or obliged (par value) at maturity as a result of either formal bankruptcy proceeding or financial market perception of near term proceedings.

LIBOR Index - London Interbank Offered Rate. A filtered average of the world's most creditworthy banks' interbank deposit rates with maturities between overnight and one full year.

Merrill Lynch Convertible Bond (All Quality) Index –The Merrill Lynch All Convertibles All Qualities Index is a widely used index that measures convertible securities' performance. It measures the performance of U.S. dollar-denominated convertible securities not currently in bankruptcy with a total market value greater than \$50 million at issuance.

MSCI All Country World Index - A capitalization-weighted index of stocks representing 46 developed and emerging country markets.

MSCI Europe, Australasia, Far East (EAFE) Non-U.S. Stock Index - A capitalization-weighted index of stocks representing 23 developed and emerging country markets in Europe, Australia, Asia and the Far East.

**MSCI World Index** - A capitalization-weighted index of stocks representing 23 developed stock markets in Europe, Asia and Canada

**NFI-ODCE Index**- NCREIF Fund Index Open-end Diversified Core Equity Index is an index of investment returns reporting on both a historical and current basis the results of 33 openend commingled funds pursuing a core investment strategy; underlying funds are leveraged with gross and net returns available

**Russell 3000 Index** – An index that measures the performance of the 3000 stocks that make up the Russell 1000 and Russell 2000 Indices.

**Russell 1000 Index** – An index that measures the performance of the largest 1,000 stocks contained in the Russell 3000 Index.

**Russell 1000 Value Index** – An index that measures the performance of those Russell 1000 companies with lower price-to-book ratios and lower I/B/E/S growth forecasts.

Russell 2000 Index – An index that measures the performance of the smallest 2000 companies contained in the Russell 3000 Index

**Russell 2000 Growth Index** – An index that measures the performance of those Russell 2000 companies with greater price-to-book ratios and greater I/B/E/S growth forecasts.

**Russell 2000 Value Index** – An index that measures the performance of those Russell 2000 companies with lower price-to-book ratios and lower I/B/E/S growth forecasts.

**S&P 500 Stock Index** - A capitalization-weighted stock index consisting of the 500 largest publicly traded U.S. stocks.

**SG Multi Alternative Risk Premia Index** – An equally-weighted peer index representing risk premia managers who employ investment programs diversified across multiple asset classes while utilizing multiple risk premia factors.

South Timberland Index – The largest regional subindex of the NCREIF Timberland Index, consisting of timberland properties held in the U.S. South. This includes close to 300 properties with more than 10 million cumulative acres of timberland in the following states: Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, Missouri, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia. Calculations are based on quarterly returns at the individual property level. Performance is reported on an all-cash, unlevered basis, gross of investment management fees.



# **Description of Universes**

**Total Fund** - The Total Fund and its benchmark are ranked in our Public Fund Universe. The universe is calculated based on data provided by BNY Mellon Performance & Risk Analytics, LLC, and includes roughly 90 public pension plans each with assets greater than \$1 billion.

**Total Equity** - The total equity component and its benchmark are ranked in our global equity component universe. The universe is calculated based on data provided by BNY Mellon Performance & Risk Analytics, LLC, and includes over 450 global equity portfolios

**Total Fixed Income** - The total fixed income component and its benchmark are ranked in our fixed income component universe. The universe is calculated based on data provided by BNY Mellon Performance & Risk Analytics, LLC, and includes the fixed income asset class returns of approximately 50 public pension plans each with assets greater than \$1 billion.









January 28, 2024

Board of Trustees Arkansas Teacher Retirement System 1400 West Third Street Little Rock, Arkansas 72201

Dear Board Members:

The basic funding objective of the Arkansas Teacher Retirement System (ATRS) is to establish and receive contributions which:

- When expressed in terms of the percentage of active member payroll, will remain approximately level from generation to generation; and
- When combined with present assets and future investment return, will be sufficient to meet the financial obligations of ATRS to present and future retirees and beneficiaries.

The progress being made toward the realization of the financing objectives of the System through June 30, 2023 is illustrated in the attached Exhibits 1 and 2. Actuarial funding valuations are performed each year and the most recent funding valuations were completed based upon census data, asset data, and plan provisions as of June 30, 2023. In addition to the funding valuation reports, the actuary produces separate financial reporting information in accordance with Governmental Accounting Standards Board (GASB) Statements No. 67 and No. 68.

The System's administrative staff provides the actuary with data for the actuarial valuations. The actuary relies on the census data after reviewing it for internal and year-to-year consistency. The actuary does not audit census data. The actuary summarizes and tabulates population data in order to analyze longer term trends. Asset information was also accepted without audit. The actuary is not responsible for the accuracy or completeness of any information provided by ATRS.

The figures disclosed in the Supplementary Schedules to the Financial Section were provided by Gabriel, Roeder, Smith & Company, as were the Notes to Trend Data. In addition, Gabriel, Roeder, Smith & Company was responsible for the following schedules found in the Actuarial Section:

- · Computed Actuarial Liabilities
- Determination of Amortization Period as of June 30, 2023
- Active Members in Valuation Data

- Retirees and Beneficiaries Added to and Removed from Rolls
- · Short Condition Test
- Actuarial Gain (Loss) by Risk Area during the Period June 30, 2022 to June 30, 2023
- Summary of Actuarial Assumptions and Methods
- · Single Life Retirement Values
- · Probabilities of Retirement for Members
- · Assumed Duration in T-DROP for Members
- Teachers Separations and Individual Pay Increases
- Support Employees Separations and Individual Pay Increases
- Comments
- · Schedule of Retired Members by Benefit Type
- · Schedule of Average Benefit Payments

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.

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. The Board adopts these assumptions after considering the advice of the actuary and other professionals. All actuarial assumptions used in this report are reasonable for the purposes of this valuation. The combined effect of the assumptions is expected to have no significant bias (i.e. not significantly optimistic or pessimistic). The assumptions and methods used for funding purposes meet the parameters set by the Actuarial Standards of Practice. Each actuarial valuation takes into account all prior differences between actual and assumed experience in each risk area. The June 30, 2023 valuations were based upon assumptions that were adopted by the ATRS Board in connection with a study of experience covering the 2015-2020 period.





The Arkansas Teacher Retirement System remains stable with an 82.1% funded position (based on the actuarial value of assets) and an 80.8% funded position based upon the market value of assets as of June 30, 2023. The amortization period as of June 30, 2023 is 26 years.

Based upon the results of the June 30, 2023 valuations, we are pleased to report to the Board of Trustees that the Arkansas Teacher Retirement System is meeting its basic financial objective of level percent-of-payroll financing.

Readers desiring a more complete understanding of the actuarial condition of ATRS are encouraged to obtain and read the complete actuarial valuation reports. The complete reports also contain certain very important disclosures mandated by Actuarial Standards of Practice. The material in the Actuarial Section and Financial Sections of this Annual Report contains some, but not all, of the information in the actuarial reports.

Future actuarial measurements may differ significantly from the current measurements presented in this information due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements; and changes in plan provisions or applicable law. This information does not contain an analysis of the potential range of such future measurements.

This information was prepared using our proprietary valuation model and related software which, in our professional judgment, has the capability to provide results that are consistent with the purposes of the information and has no material limitations or known weaknesses. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

This information has been prepared by actuaries who have substantial experience valuing public employee retirement systems. Judith A. Kermans, Heidi G. Barry and Derek Henning 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, Gabriel, Roeder, Smith & Company

Judith A. Kermans, EA, FCA, MAAA

ice A. Leinens

Heidi G. Barry, ASA, FCA, MAAA

Derek Henning, ASA, EA, FCA, MAAA



# Exhibit 1 | Computed Actuarial Liabilities as of June 30, 2023

		Entry Age Actua	rial Cost Method
Actuarial Present Value of	(1) Total Present Value	(2) Portion Covered by Future Normal Cost Contributions	(3) Accuarial Accrued Liabilities (1)-(2)
Age and service retirement allowances based on total service likely to be rendered by present active members.	\$ 10,997,036,288	\$ 2,892,841,180	\$ 8,104,195,108
Age and service retirement allowances based on total service likely to be rendered by present T-DROP members.	1,901,631,818	39,016,167	1,862,615,651
Vested deferred benefits likely to be paid present active and inactive members.	1,531,547,444	487,889,511	1,043,657,933
Survivor benefits expected to be paid on behalf of present active members.	187,006,99	71,372,302	115,634,694
Disability benefits expected to be paid on behalf of present active members.	222,460,200	111,729,654	110,730,546
Refunds of member contributions expected to be paid on behalf of present active members.	27,682,895	183,329,469	(155,646,574)
Benefits payable to present retirees and beneficiaries.	14,510,824,580		14,510,824,580
Total	\$ 9,378,190,221	\$ 3,786,178,283	\$ 25,592,011,938
Funding Value of Assets	21,014,908,823	-	21,014,908,823
Liabilities to be covered by future contributions	\$ 8,363,281,398	\$ 3,786,178,283	\$ 4,577,103,115



# Exhibit 2 | Determination of Amortization Period Computed as of June 30, 2023 and June 30, 2022

	Percents of Active Member Payroll				
		June 30, 2023		June 30, 2022	
Computed Contributions for	Teachers	Support	Combined	Combined	
Normal Cost					
Age & Service Annuities	11.24%	7.54%	10.24%	10.20%	
Deferred Annuities	1.49%	2.31%	1.71%	1.73%	
Survivor Benefits	0.27%	0.19%	0.25%	0.25%	
Disability Benefits	0.41%	0.39%	0.40%	0.40%	
Refunds of Member Contributions	0.48%	1.22%	0.68%	0.68%	
Total	13.89%	11.65%	13.28%	13.26%	
Average Member Contributions	6.62%	5.16%	6.23%	6.21%	
Net Employer Normal Cost	7.27%	6.49%	7.05%	7.05%	
Unfunded Actuarial Accrued Liabilities			7.95%	7.95%	
Employer Contribution Rate			15.00%	15.00%	
Amortization Years			26	26	

The amortization period is the number of years it will take to pay off the unfunded liability of \$4.6 billion, assuming contributions remain at the Fiscal 2024 level. Since 2000, the period has varied from a low of 19 years to a high of over 100 years. If experience in FY 2024 is reasonably in line with expectations, the amortization period is likely to decrease in the next valuation due to the phase-in of net investment gains.



## **Schedule of Active Member Valuation Data**

_	Active Members in Valuation		Average A	annual Pay
Valuation Date June 30	Number	Annual Payroll (Millions)	Amount	% Change
2023	71,387	\$3,353	\$46,963	4.8%
2022	71,378	3,199	44,811	1.8%
2021	70,098	3,086	44,030	5.1%
2020	70,539	2,954	41,884	4.0%
2019	72,164	2,907	40,285	1.5%
2018	72,341	2,872	39,702	1.8%
2017	72,148	2,814	38,997	1.1%
2016	72,232	2,785	38,557	1.2%
2015	72,919	2,777	38,088	2.7%
2014	74,352	2,758	37,092	1.9%
2013	74,925	2,727	36,400	0.0%

The information above includes members in T-DROP. The schedule does not include retirees who return to work.

# Schedule of Retirees and Beneficiaries Added to and Removed from Rolls

	Estimate	d Number		Annual	% Increase	
Year	Added	Removed	Total Retirees	Allowance (Millions)	in Annual Allowance	Average Annual Allowances
2023	3,389	1,491	54,646	\$1,346.62	4.1%	\$24,643
2022	2,788	1,445	52,748	1,293.75	4.1%	24,527
2021	2,852	1,580	51,405	1,242.70	4.0%	24,175
2020	2,811	1,355	50,133	1,194.82	4.2%	23,833
2019	2,849	996	48,677	1,146.74	4.3%	23,558
2018	2,927	1,195	46,824	1,099.35	5.2%	23,478
2017	2,996	999	45,092	1,044.74	6.2%	23,169
2016	3,272	925	43,095	983.87	7.3%	22,830
2015	3,326	1,056	40,748	916.62	11.5%*	22,495
2014	3,156	932	38,478	822.19	7.7%	21,368

<sup>\*</sup> Increased percent due to T-DROP annuities included in 2015..



## **Short Condition Test**

ATRS' funding objective is to meet long-term benefit promises through contributions that remain approximately level from year to year as a percent 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 test.

A short condition test is one means of checking a system's progress under its funding program. In a short condition test, the plan's present assets (cash and investments) are compared with: 1) member contributions on deposit; 2) the liabilities for future benefits to present retired lives; and 3) the liabilities for service already rendered by members. In a system that has been

following the discipline of level percent-of-payroll financing, the liabilities for 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 rare circumstances). In addition, the liabilities for service already rendered by 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 unusual, but highly desired.

The schedule below illustrates the history of Liability 3 of the System and is indicative of the ATRS' objective of following the discipline of level percent-of-payroll financing.

Val. Date June 30	(1) Member Contrb.	(2) Retirees and Benef.	(3) Active and Inactive Members (Employer Financed Portion)	Present Valuation Assets	Portion (1)	of Present Present (2)		vered by Total
		\$ Mill	ions					
2014	1,077	8,777	7,456	13,375	100%	100%	47%	77%
2015	1,128	9,778	7,230	14,434	100%	100%	49%	80%
2016	1,184	10,430	7,198	15,239	100%	100%	50%	81%
2017#*	1,254	11,337	7,707	16,131	100%	100%	46%	79%
2018#	1,312	11,851	7,772	16,756	100%	100%	46%	80%
2019#	1,377	12,460	7,872	17,413	100%	100%	45%	80%
2020#	1,455	12,890	8,007	18,007	100%	100%	46%	81%
2021#*	1,544	13,596	8,847	19,343	100%	100%	48%	81%
2022#	1,648	14,044	9,005	20,328	100%	100%	51%	82%
2023#	1,751	14,511	9,330	21,015	100%	100%	51%	82%

<sup>\*</sup> Revised actuarial assumptions or methods.

<sup>#</sup> Legislated benefit or contribution rate change.



# Actuarial Gain (Loss) by Risk Area During the Period July 1, 2022 to June 30, 2023

	Gain (Loss)	in Period
Type of Risk Area	\$ Millions	Percent of Liabilities
Economic Risk Areas		
Pay increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	\$ (219.1)	(0.89)%
Gross Investment Return. If there is greater investment return recognition than assumed, there is a gain. If less return recognition, a loss.	(73.4)	(0.30)%
Non-Economic Risk Areas		
Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	(1.8)	(0.01)%
Disability Retirements. If there are fewer disabilities than assumed, there is a gain. If more, a loss.	(0.5)	0.00 %
Death-in-Service Benefits. If there are fewer than assumed, there is a gain. If more, a loss.	0.0	0.00 %
Withdrawal. If more liabilities are released by other separations than assumed, there is a gain. If smaller releases, a loss.	52.1	0.21 %
Death After Retirement. If there are more deaths than assumed, there is a gain. If fewer, a loss.	47.5	0.19 %
Actuarial Gain (Loss) During Period	\$ (195.2)	(0.80)%
Beginning of Year Accrued Liabilities	\$ 24,697.5	100.0 %



## **Summary of Actuarial Assumptions and Methods**

An actuarial valuation is based upon an actuarial cost method, an asset valuation method, and actuarial assumptions. These methods and assumptions are chosen by the Board of Trustees after consultation with the Actuary and other advisors.

The Entry Age Actuarial Cost Method of the valuation was used in determining accrued liabilities and normal cost. This method is consistent with the Board's level percent-of-payroll funding objective. With this method, the level percent-of-payroll is determined that will fund a member's retirement benefit over the member's entire working lifetime, from date of hire (Entry Age) to date of exit from the active member population. T-DROP members are treated as active members. Normal cost runs from the date of entry to the date of retirement. Differences in the past between assumed and actual experience become part of unfunded actuarial accrued liabilities and are amortized with level percent-of-payroll contributions. This cost method was first used in the **June 30, 1986** valuation.

The asset valuation method is a four-year smoothed market value method in which assumed investment return is recognized immediately each year and differences between actual and assumed investment return are phased-in over a closed four-year period. This asset valuation method is intended to give recognition to the long-term accuracy of market values while filtering out and dampening short-term market swings. This method was first used in the **June 30, 1995** valuation. It was modified following the 1997-2002 Experience Study to include an 80% - 120% market value corridor.

The actuarial assumptions used in producing the valuation fall into two broad classes: economic assumptions and demographic assumptions. Economic assumptions refer to long-term rates of investment return, wage growth, covered population growth, and inflation. Demographic assumptions refer to retirement rates, turnover rates, disability rates and mortality rates. The current assumptions are based upon a 2015-2020 study of experience of the Arkansas Teacher Retirement System. The assumptions are reviewed from time to time to keep them reasonably current with expected experience.

#### **Economic Assumptions**

The **price inflation** assumption is 2.50%, although no specific Price Inflation is needed for this valuation. It is assumed that the 3% COLA will always be paid.

The investment return rate used in the valuation was 7.25% per year, compounded annually (net after administrative expenses). This rate was first used for the **June 30, 2021** valuation. The

assumed real rate of return over price inflation is 4.75%.

The **wage inflation** assumption is 2.75%. This consists of 2.50% related to pure price inflation and 0.25% related to general economic improvements. This assumption was first used for the **June 30, 2017** valuation.

**Pay increase assumptions** for individual active members are shown in Table VII. Part of the assumption for each service year is for a merit and/or seniority increase, and the other 2.75% recognizes wage inflation. These rates were first used for the **June 30, 2021** valuation.

The Active Member Group (Active, T-DROP, RTW) size is assumed to remain constant at its present level.

**Total active member payroll** is assumed to increase 2.75% a year, which is the portion of the individual pay increase assumptions attributable to wage inflation. This rate was first used for the **June 30, 2017** valuation.

#### **Non-Economic Assumptions**

The mortality tables used were the Pub-2010 General Healthy Retired, General Disabled Retiree and General Employee Mortality amount weighted tables for males and females. Mortality rates were adjusted for future mortality improvements using projection scale MP-2020 from 2010. Related values are shown in Table I. These tables were first used for the **June 30**, **2021** valuation.

A limited fluctuation credibility procedure was used to determine the appropriate scaling factor of each gender and each member classification (see the 2015-2020 Experience Study), and are shown below:

	Scaling Factor
Healthy Male Retirees	105%
Healthy Female Retirees	105%
Disabled Male Retirees	104%
Disabled Female Retirees	104%
Male Active Members	100%
Female Active Members	100%



# Summary of Actuarial Assumptions and Methods (Continued)

The probabilities of retirement for members eligible to retire are shown in Tables II and III. The rates forfull retirement and reduced retirement were first used in the **June 30, 2021** valuation.

The assumed duration of T-DROP for present T-DROP members is shown in Table IV.

The probabilities of withdrawal from service, death-in-service and disability are shown for sample ages in Tables V and VI. These rates were first used in the **June 30, 2021** valuation.

#### The data about persons now covered and about present assets

was furnished by the System's administrative staff. Although examined for general reasonableness, the data was not audited by the actuary. Members whose dates of birth were not supplied were assumed to be 40 years old on the valuation date. Members whose salaries were not supplied and that entered T-DROP were assumed to have the group average pay of those with salary data as of the valuation date that entered T-DROP.



# Table I | Single Life Retirement Values

Sample Attained Ages in	Present \$1.00 Mont	Value of hly for Life	Present V Monthly Increasing ( Annu	for Life		Expectancy ars)		ng within Next ear
2023	Male	Female	Male	Female	Male	Female	Male	Female
40	\$159.96	\$162.49	\$213.47	\$218.30	\$45.36	\$48.37	0.09%	0.05%
45	155.57	158.81	205.04	210.97	40.12	43.08	0.12%	0.07%
50	149.87	153.98	194.63	201.82	35.02	37.91	0.29%	0.22%
55	142.93	148.16	182.42	191.08	30.14	32.96	0.43%	0.30%
60	134.14	140.50	167.74	177.74	25.44	28.11	0.66%	0.42%
65	123.21	130.50	150.50	161.41	20.97	23.41	0.97%	0.62%
70	109.70	117.76	130.52	141.96	16.74	18.90	1.49%	0.99%
75	93.73	102.22	108.40	119.79	12.85	14.69	2.51%	1.75%
80	76.09	84.50	85.47	96.11	9.43	10.92	4.50%	3.24%
85	58.67	66.08	64.10	73.00	6.64	7.75	8.29%	6.17%
Base	2705 x 1.05	2706 x 1.05	2705 x 1.05	2706 x 1.05				
Projection	964	965	964	965				

<sup>\*</sup>Rates and life expectancies in future years are determined by the MP-2020 projection scale.

	Benefit Increasing 3.0%	Portion of A Still	
Age	Simple Annually	Male	Female
60	\$100.00	100%	100%
65	115.00	96%	98%
70	130.00	91%	94%
75	145.00	84%	89%
80	160.00	73%	81%
Ref		2705 x 1.05	2706 x 1.05



# Table II | Probabilities of Retirement for Members

% of Active Participants Retiring with Unreduced Benefits

_	Edu	cation	Cur	port
Retirement - Ages	Male	Female	Male	Female
48	8%	7%	8%	8%
49	8%	7%	8%	8%
50	8%	7%	8%	8%
51	8%	7%	8%	8%
52	8%	7%	8%	8%
53	8%	7%	8%	8%
54	8%	7%	8%	8%
55	8%	8%	8%	8%
56	10%	8%	8%	8%
57	10%	10%	8%	11%
58	10%	12%	8%	11%
59	14%	15%	8%	15%
60	17%	18%	13%	15%
61	24%	20%	13%	16%
62	27%	29%	28%	26%
63	27%	26%	25%	20%
64	27%	28%	25%	24%
65	60%	57%	57%	59%
66	60%	57%	47%	49%
67	50%	42%	44%	40%
68	45%	42%	44%	40%
69	45%	42%	44%	40%
70	45%	42%	44%	40%
71	45%	42%	44%	40%
72	45%	42%	44%	40%
73	45%	42%	44%	40%
74	45%	42%	44%	40%
75	100%	100%	100%	100%
Ref	3245	3246	3247	3248



# Table III | Probabilities of Reduced Retirement for Members

% of Active Participants Retiring with Reduced Benefits

Retirement	Edu	cation	Sup	port
Ages	Male	Female	Male	Female
45	1.0%	1.0%	2.0%	3.0%
46	1.0%	1.0%	2.0%	3.0%
47	1.0%	1.0%	2.0%	3.0%
48	1.0%	1.0%	2.0%	3.0%
49	1.0%	1.0%	2.0%	3.0%
50	2.0%	2.0%	3.0%	4.0%
51	3.0%	2.0%	3.0%	4.0%
52	3.0%	3.0%	4.0%	4.0%
53	4.0%	4.0%	4.0%	4.0%
54	5.0%	4.0%	5.0%	4.0%
55	6.0%	5.0%	6.0%	4.0%
56	6.0%	5.0%	7.0%	6.0%
57	8.0%	5.0%	7.0%	6.0%
58	9.0%	6.0%	7.0%	6.0%
59	6.0%	6.0%	7.0%	6.0%
Ref	3249	3250	3251	3252

# **Table IV | Duration of T-DROP for Members**

Present T-DROP members are assumed to remain in T-DROP according to the following table:

Entry Age	Assumed Duration Years
50-56	7
57	6
58	5
59+	4

It was assumed that members will participate in the T-DROP to the extent that participating in the T-DROP would provide the highest value of benefits.



# Table V | Teachers Separations from Active Employment Before Age and Service Retirement

Percent of Active Members Separating within the Next Year

Sample Ages in 2023	Years of Service	Death*		Disability		Other	
		Male	Female	Male	Female	Male	Female
	0					17.00%	13.00%
	1					13.80%	11.30%
	2					11.30%	10.50%
	3					8.90%	8.30%
	4					6.30%	6.50%
25	5 & up	0.03%	0.01%	0.02%	0.02%	5.80%	6.50%
30		0.05%	0.02%	0.02%	0.02%	4.20%	4.80%
35		0.07%	0.03%	0.02%	0.03%	2.90%	3.20%
40		0.09%	0.04%	0.04%	0.07%	2.00%	2.10%
45		0.11%	0.06%	0.13%	0.17%	1.70%	1.70%
50		0.14%	0.08%	0.31%	0.37%	1.60%	1.70%
55		0.21%	0.12%	0.61%	0.63%	1.60%	1.70%
60		0.33%	0.19%	0.82%	0.89%	1.50%	1.60%
65		0.47%	0.28%	0.82%	0.89%	1.20%	1.30%
Ref		2723 x 1.00	2724 x 1.00	1217 x 1	1218 x 1	1364	1365
						1574	1575

<sup>\*</sup>Rates and life expectancies in future years are determined by the MP-2020 projection scale.



# Table VI | Support Employees Separations from Active Employment Before Age and Service Retirement

Percent of Active Members Separating within the Next Year

Sample Ages	Years of	Dea	ath*	Disa	bility	Ot	her
in 2023	Service	Male	Female	Male	Female	Male	Female
	0					54.50%	48.50%
	1					29.90%	27.20%
	2					19.80%	19.00%
	3					15.50%	15.30%
	4					12.00%	12.80%
25	5 & up	0.03%	0.01%	0.02%	0.01%	10.60%	9.90%
30		0.05%	0.02%	0.05%	0.03%	7.80%	7.00%
35		0.07%	0.03%	0.10%	0.04%	5.70%	5.10%
40		0.09%	0.04%	0.13%	0.08%	4.40%	4.30%
45		0.11%	0.06%	0.21%	0.16%	3.70%	4.00%
50		0.14%	0.08%	0.45%	0.33%	3.50%	3.90%
55		0.21%	0.12%	0.88%	0.61%	3.50%	3.70%
60		0.33%	0.19%	1.36%	0.79%	3.40%	3.20%
65		0.47%	0.28%	1.36%	0.79%	2.70%	2.50%
Ref		2723 x 1.00	2724 x 1.00	1219 x 1	1220 x 1	1366	1367
						1576	1577

<sup>\*</sup>Rates and life expectancies in future years are determined by the MP-2020 projection scale.



# **Table VII | Individual Pay Increases**

	Educ	cation			Suj	pport	
		Increase Assump an Individual Me				Increase Assump In Individual Me	
Years of Service	Merit & Seniority	Base (Economic)	Increase Next Year	Years of Service	Merit & Seniority	Base (Economic)	Increase Next Year
1	2.50%	2.75%	5.25%	1	3.00%	2.75%	5.75%
2	2.20%	2.75%	4.95%	2	2.60%	2.75%	5.35%
3	1.90%	2.75%	4.65%	3	1.60%	2.75%	4.35%
4	1.80%	2.75%	4.55%	4	1.45%	2.75%	4.20%
5	1.70%	2.75%	4.45%	5	1.35%	2.75%	4.10%
6	1.60%	2.75%	4.35%	6	1.25%	2.75%	4.00%
7	1.50%	2.75%	4.25%	7	1.20%	2.75%	3.95%
8	1.40%	2.75%	4.15%	8	1.15%	2.75%	3.90%
9	1.30%	2.75%	4.05%	9	1.10%	2.75%	3.85%
10	1.25%	2.75%	4.00%	10	1.05%	2.75%	3.80%
11	1.20%	2.75%	3.95%	11	1.00%	2.75%	3.75%
12	1.15%	2.75%	3.90%	12	0.95%	2.75%	3.70%
13	1.10%	2.75%	3.85%	13	0.90%	2.75%	3.65%
14	1.05%	2.75%	3.80%	14	0.80%	2.75%	3.55%
15	1.00%	2.75%	3.75%	15	0.75%	2.75%	3.50%
16	0.95%	2.75%	3.70%	16	0.70%	2.75%	3.45%
17	0.85%	2.75%	3.60%	17	0.65%	2.75%	3.40%
18	0.75%	2.75%	3.50%	18	0.60%	2.75%	3.35%
19	0.65%	2.75%	3.40%	19	0.50%	2.75%	3.25%
20	0.55%	2.75%	3.30%	20	0.45%	2.75%	3.20%
21	0.50%	2.75%	3.25%	21	0.40%	2.75%	3.15%
22	0.45%	2.75%	3.20%	22	0.35%	2.75%	3.10%
23	0.40%	2.75%	3.15%	23	0.30%	2.75%	3.05%
24	0.30%	2.75%	3.05%	24	0.25%	2.75%	3.00%
25	0.20%	2.75%	2.95%	25	0.25%	2.75%	3.00%
26	0.15%	2.75%	2.90%	26	0.25%	2.75%	3.00%
27	0.10%	2.75%	2.85%	27	0.25%	2.75%	3.00%
28	0.25%	2.75%	3.00%	28	0.25%	2.75%	3.15%
29+	0.25%	2.75%	2.75%	29+	0.40%	2.75%	2.75%
29+	0.00%	Z.15%	Z.10%	∠9+	0.00%	Z.10%	2.15%
Ref	931			Ref	932		



### Comments

**General Financial Objective.** Section 24-7-401(a) of the Arkansas Code provides as follows (emphasis added):

"6.01. (1) The general financial objective of each Arkansas public employee retirement plan shall be to **establish and receive contributions which**, **expressed as percents of active member payroll**, will remain approximately level from generation to generation of Arkansas citizens.

More specifically, contributions received each year shall be sufficient both to (i) fully cover the costs of benefit commitments being made to members for their service being rendered in such year and (ii) make a level payment which if paid annually over a reasonable period of future years will fully cover the unfunded costs of benefit commitments for service previously rendered....."

Arkansas Teacher Retirement System Status: Based upon the results of the June 30, 2023 actuarial valuations, ATRS is satisfying the financial objective of level-contribution-percent financing.

The amortization period this year is 26 years, unchanged from last year's period of 26 years. On a market value basis, the

amortization period is 30 years. While an amortization period of 26 years meets statutory requirements, the ATRS has targeted 18 years in recent legislation. The contribution rate based upon the target amortization period (18 years) would be approximately 17.2% of payroll.

The Arkansas Teacher Retirement System remains stable with an 82.1% funded position as of June 30, 2023. If experience is reasonably in line with expectations in Fiscal Year 2024, the amortization period is likely to increase in the next valuation due to the scheduled phase-in of net investment losses.

The rate of investment return on a market value basis was 8.71%\* this year. As of June 30, 2023, the actuarial value of assets exceeded the market value of assets by approximately \$340 million. Investment gains and losses that occur each year are smoothed in over a 4-year period. After considering smoothing, the recognized return this year was 6.88%, compared to an assumed 7.25% return for Fiscal Year 2023.

\*This investment return figure was calculated by the actuary and may not exactly match your investment consultant's figure.



# **Statistics | Schedule of Retired Members by Type of Benefit**

Monthly	No. of		Type o	of Retiremen	nt*			Option Se	elected#	
Benefit	Retirees	1	2	3	4	5	Life	Opt. A	Opt. B	Opt. C
\$1-250	5,288	4,810	167	102	195	14	4,479	679	50	80
251-500	6,108	5,341	155	125	456	31	5,113	801	98	96
501-750	4,479	3,861	102	113	370	33	3,696	578	135	70
751-1,000	3,412	2,940	66	113	259	34	2,774	446	136	56
1,001-1,250	2,677	2,287	86	61	214	29	2,088	411	131	47
1,251-1,500	2,369	1,991	92	46	221	19	1,812	367	159	31
1,501-1,750	2,109	1,782	102	34	168	23	1,553	337	176	43
1,751-2,000	2,172	1,876	81	30	169	16	1,599	344	184	45
Over \$2,000	23,963	22,522	579	180	607	75	18,020	3,516	2,144	283
Total	52,577	47,410	1,430	804	2,659	274	41,134	7,479	3,213	751

- \* Type of Retirement
- 1. Normal retirement for age and service
- 2. Survivor payment normal or early retirement
- 3. Survivor payment death-in-service
- 4. Disability retirement
- 5. Survivor payment disability retirement

Excludes Act 793 and Act 808 retirees.

# Option Selected at Retirement

Life - Straight life annuity

Opt. A - 100% survivor annuity

Opt. B - 50% survivor annuity

Opt. C - annuity for 10 years ertain and life thereafter



# **Statistics | Schedule of Average Benefit Payments**

### Service at Retirement

				Serv	ıce	at Retire	me	nt		
Retiremen	nt Effective Dates	0-4#	5-9	10-14		15-19		20-24	25-29	30+
07/01/13 - 06/30/14	Average Monthly Benefit	\$ 144	\$ 294	\$ 626	\$	1,034	\$	1,481	\$ 2,553	\$ 3,195
	Average Final Salary	\$ 41,396	\$ 26,223	\$ 30,235	\$	37,996	\$	42,612	\$ 50,577	\$ 54,193
	Number of Active Retirees	42	497	472		336		358	1,060	122
07/01/14 - 06/30/15	Average Monthly Benefit	\$ 144	\$ 306	\$ 684	\$	1,069	\$	1,518	\$ 2,540	\$ 3,270
	Average Final Salary	\$ 40,803	\$ 27,540	\$ 32,878	\$	38,857	\$	44,433	\$ 52,059	\$ 56,908
	Number of Active Retirees	64	564	529		375		375	1,106	138
07/01/15 - 06/30/16	Average Monthly Benefit	\$ 112	\$ 293	\$ 669	\$	1,064	\$	1,466	\$ 2,522	\$ 3,490
	Average Final Salary	\$ 38,048	\$ 25,892	\$ 31,763	\$	37,947	\$	43,044	\$ 51,671	\$ 60,041
	Number of Active Retirees	48	494	600		389		387	1,122	109
									,	
07/01/16 - 06/30/17	Average Monthly Benefit	\$ 133	\$ 282	\$ 682	\$	1,011	\$	1,448	\$ 2,530	\$ 3,289
	Average Final Salary	\$ 38,412	\$ 25,606	\$ 31,940	\$	36,516	\$	42,814	\$ 52,510	\$ 57,847
	Number of Active Retirees	53	468	499		393		368	965	107
07/01/17 - 06/30/18	Average Monthly Benefit	\$ 150	\$ 284	\$ 681	\$	1,099	\$	1,587	\$ 2,548	\$ 3,105
	Average Final Salary	\$ 38,321	\$ 26,581	\$ 31,995	\$	39,389	\$	46,070	\$ 53,642	\$ 52,835
	Number of Active Retirees	62	496	486		375		346	965	113
07/01/18 - 06/30/19	Average Monthly Benefit	\$ 145	\$ 310	\$ 690	\$	1,172	\$	1,564	\$ 2,571	\$ 3,372
	Average Final Salary	\$ 38,105	\$ 29,390	\$ 32,619	\$	40,560	\$	45,151	\$ 53,701	\$ 60,369
	Number of Active Retirees	53	482	501		379		366	900	114
07/01/19 - 06/30/20	Average Monthly Benefit	\$ 120	\$ 284	\$ 637	\$	1,104	\$	1,533	\$ 2,577	\$ 3,108
	Average Final Salary	\$ 33,918	\$ 27,032	\$ 31,591	\$	39,704	\$	44,837	\$ 55,241	\$ 59,056
	Number of Active Retirees	47	464	496		365		320	882	139
07/01/20 - 06/30/21	Average Monthly Benefit	\$ 123	\$ 293	\$ 656	\$	1,138	\$	1,569	\$ 2,642	\$ 3,179
	Average Final Salary	\$ 33,575	\$ 27,101	\$ 31,717	\$	39,886	\$	44,936	\$ 55,249	\$ 58,864
	Number of Active Retirees	48	456	494		364		320	875	139
07/01/21 - 06/30/22	Average Monthly Benefit	\$ 126	\$ 306	\$ 708	\$	1,060	\$	1,565	\$ 2,638	\$ 3,287
	Average Final Salary	\$ 39,879	\$ 29,082	\$ 33,869	\$	37,765	\$	44,268	\$ 55,462	\$ 61,593
	Number of Active Retirees	53	438	398		352		342	1,001	131
07/01/22 - 06/30/23	Average Monthly Benefit	\$ 138	\$ 258	\$ 668	\$	1,073	\$	1,719	\$ 2,570	\$ 2,838
	Average Final Salary	\$ 42,352	\$ 25,857	\$ 33,325	\$	37,730	\$	47,389	\$ 56,197	\$ 55,728
	Number of Active Retirees	44	706	547		486		353	1,022	133

<sup>#</sup> May include cases where the service was not reported.

The figures in this chart are as of the year of retirement. They have not been updated for changes that occurred after retirement.

# Statistical 2023 Annual Comprehensive Financial Report



# **Schedule of Revenue by Source**

Year -Ending June 30,	Employer Contibutions	% of Annual Covered Payroll	Member Contributions	I	nvestment and Miscellenous Income	Total
2011	\$ 400,330,902	14.70%	\$ 139,460,601	\$	2,219,833,337	\$ 2,759,624,840
2012	398,822,946	16.30%	117,662,465		(118,654,190)	397,831,221
2013	400,933,872	14.30%	113,900,872		1,695,899,517	2,210,734,261
2014	404,920,441	14.20%	125,225,906		2,429,334,098	2,959,480,445
2015	408,230,472	14.21%	128,555,684		632,166,951	1,168,953,107
2016	410,358,229	14.21%	131,100,983		35,579,657	577,038,869
2017	414,954,939	14.20%	133,109,939		2,289,818,591	2,837,883,469
2018	424,488,126	14.22%	138,766,747		1,824,094,695	2,387,349,568
2019	430,864,656	14.23%	141,885,632		898,384,866	1,471,135,154
2020	446,228,128	14.50%	153,105,134		(165,763,064)	433,570,198
2021	472,567,147	14.75%	168,129,972		5,250,955,481	5,891,652,600
2022	501,522,604	15.10%	183,315,252		(1,082,845,164)	(398,007,308)
2023	536,619,031	15.37%	200,610,721		1,692,312,263	2,429,542,015

# **Schedule of Expense by Type**

Year -Ending June 30,	Bei	nefit Payments	Refunds	Other Expenses	 stment and enous Income
2011	\$	731,866,100	\$ 8,906,441	\$ 7,548,959	\$ 748,321,500
2012		791,844,923	9,225,151	7,752,975	808,823,049
2013		846,210,946	11,087,596	7,755,004	865,053,546
2014		914,250,015	10,485,103	8,034,235	932,769,353
2015		970,719,484	10,774,122	8,034,857	989,528,463
2016		1,035,958,950	10,145,471	8,059,030	1,054,163,451
2017		1,092,952,357	10,874,003	7,825,595	1,111,651,955
2018		1,160,738,237	9,455,405	9,336,430	1,179,530,072
2019		1,205,326,555	9,679,783	7,134,783	1,222,141,121
2020		1,255,065,794	9,592,091	8,457,862	1,273,115,747
2021		1,308,163,748	9,463,375	7,328,830	1,324,955,953
2022		1,374,220,915	10,426,792	6,650,448	1,391,298,155
2023		1,413,477,760	12,583,767	7,892,822	1,433,954,349



# Schedule of Benefit Expenses by Type

				FOT I	For the year Ended Jui	ne 30,			
Type of Benefit	2023	2022	2021	2020	2019	2018	2017	2016	2015
Age and Service	\$ 1,183,189,280 \$ 1,135,131,53	\$ 1,135,131,535	\$1,092,814,070	\$ 1,046,397,991	\$1,008,092,044	\$ 958,281,765	\$ 907,314,702	\$ 852,695,640	\$ 795,518,171
Disability	40,457,469	40,631,115	40,710,587	40,420,225	40,330,710	39,770,821	38,833,696	37,812,689	36,188,748
Option	39,659,615	36,681,111	34,124,252	31,767,042	30,013,681	28,756,398	26,843,481	24,637,113	23,056,130
Survivor	12,949,173	12,527,408	12,129,985	11,555,653	11,267,137	10,848,118	10,470,562	9,946,290	9,626,726
Reciprocity	67,375,786	64,615,316	61,382,530	58,429,113	55,891,519	52,914,304	49,175,662	45,746,432	41,958,663
Active Members Death Benefits	396,423	681,421	487,669	338,189	278,972	304,927	474,719	357,921	404,248
T-DROP	47,464,578	64,370,804	48,309,780	47,978,202	41,550,591	44,827,681	42,969,143	52,760,622	50,656,897
Act 808	1,605,876	1,953,045	2,013,072	2,215,262	2,439,111	2,725,690	2,874,444	3,000,785	3,139,880
Cash Balance Disbursements	17,726,519	15,630,112	13,978,659	13,241,312	13,318,361	11,297,546	9,735,670	8,600,786	8,923,390
Cash and Savings Help Program	2,653,041	1,999,048	2,213,146	2,722,804	2,144,429	11,010,987	4,260,278	400,673	1,246,632
Total	\$1,413,477,760	\$1,374,220,915	\$1,308,163,750	\$1,255,065,793	\$1,205,326,555	\$1,160,738,237	\$1,092,952,357	\$1,035,958,951	\$970,719,485





### **Participating Employers**

Academics Plus Charter School

Alma School District

Alpena School District

Apartment Department Of Workforce

Services

Arch Ford Education Service Co-Op

Arkadelphia Public Schools

Arkansas Department Of Higher

Education

Arkansas Activities Association

Arkansas Arts Academy Charter

Arkansas Association Educational

Administrators

Arkansas Connections Academy Charter

Arkansas Correctional School

Arkansas Department Of Career

Education (Rehab)

Arkansas Department Of Career

Education (Workforce)

Arkansas Department Of Commerce

Arkansas Department Of Education

Arkansas Department Of Education

Arkansas Department Of Health

Arkansas Department Of Public Safety

Arkansas Easter Seals

Arkansas Economic Development

Commission

Arkansas Educational Tv Network

Arkansas Northeastern College

Arkansas River Education Service Co-Op

Arkansas School Boards Association

Arkansas School For Math, Sciences &

Arts

Arkansas School For The Blind

Arkansas School For The Deaf

Arkansas State University

Arkansas State University-Beebe

Arkansas State University- Mid South Cc

Arkansas State University- Mt. Home

Arkansas State University- Newport

Arkansas Teacher Retirement System

Arkansas Tech University

Arkansas Virtual Academy Charter

Armorel School District

Ashdown School District

Atkins Public Schools

Augusta Public Schools

Bald Knob Public Schools

Barton-Lexa School District

Batesville School District

Bauxite School District

Bay School District

Bearden School District

Beebe Public School District

Benton School District

Bentonville Public Schools

Bergman Public Schools

Berryville Public Schools

Bismarck School District

Black River Technical College

Blevins School District

Blytheville Public Schools

Booneville School District

Boston Mountain Educational Co-Op

Bradford School District

Brinkley Public Schools

Brookland Public Schools

Bryant Public Schools

- (6.1 - 1 - 1 - 1 - 1 - 1

Buffalo Island Central School District

Cabot Public Schools

Caddo Hills School District

Calico Rock School District

Camden-Fairview School District

Capital City Lighthouse Charter School

Carlisle School District

Cave City School District

Cedar Ridge School District

Cedarville Public School District

Centerpoint School District

Charleston Public Schools

Clarendon School District

Clarksville School District

Cleveland County School District

Clinton Public Schools

College Of The Ouachitas

Concord School District

Conway Public Schools

Conway Vocational Center

Corning School District

Cossatot Community College - U Of A

Cossatot River School District

Cotter Public Schools

County Line Public Schools

Covenant Keepers Charter School

Cross County School District

Crossett School District

Crowley'S Ridge Educational Service

Co-Op

Crowleys Ridge Technical Institute

Cutter Morning Star Public Schools

Danville Public Schools

Dardanelle Public Schools

Dawson Education Service Co-Op

Decatur Public Schools

Deer/ Mt. Judea School District

Dequeen Public Schools

Dequeen-Mena Education Service

Dermott School District

Des Arc School District

Dewitt School District

Dhs-Divison Of Youth Services

Dierks Public Schools

Dollarway School District

Dover School District

Drew Central School District

Dumas Public Schools

Earle School District

East Arkansas Community College

East End School District

East Poinsett County School District

Economics Arkansas

El Dorado Public Schools

Elkins School District

Emerson-Taylor-Bradley School

England Public School District

E-Stem Public Charter School

Eureka Springs Public Schools



### **Participating Employers (Continued)**

Exalt Academy Charter School Farmington Public Schools

Fayetteville Public Schools

First Student

Flippin School District

Fordyce Public Schools

Foreman Public Schools

Forrest City School District

Fort Smith Public Schools

Fouke School District

Fountain Lake School District

Friendship Aspire - Southeast Pine Bluff

Friendship Aspire Academy - Little Rock

Friendship Aspire Academy - Pine Bluff

Future School Of Ft. Smith Charter

Genoa Central School District

Gentry Public Schools

Glen Rose School District

Gosnell Public Schools

Gravette School District

Great Rivers Education Service Co-Op

Green Forest Public Schools

Greenbrier Public Schools

Greene County Tech School District

Greenland School District

Greenwood School District

Gurdon Public Schools

Guy Fenter Education Service Co-Op

Guy-Perkins School District

Haas Hall Academy - Bentonville Charter

Haas Hall Academy Charter - Fayetteville

Hackett School District

Hamburg School District

Hampton School District

Harmony Grove School District

Harmony Grove School District

Harrisburg School District

Harrison School District

Hazen School District

Heber Springs School District

Hector School District

Helena-West Helena Schools

Henderson State University

Hermitage Public School District

Highland Public School District

Hillcrest School District

Hope Academy Of Northwest Arkansas

Hope Public Schools

Horatio School District

Hot Springs School District

Hoxie Public Schools

Huntsville School District

Imboden Area Charter School

Izard County Consolidated School District

Jackson County School District

Jacksonville Lighthouse Charter School

Jacksonville North Pulaski School

District

Jasper School District

Jessieville Public School District

Jonesboro Public Schools

Jonesboro Vocational Center

Junction City School District

Kipp Delta College Preparatory Charter

Kirby School District

Lafayette County School District

Lake Hamilton School District

Lakeside School District

Lakeside School District

Lamar School District

Lavaca Public Schools

Lawrence County School District

Lead Hill School District

Lee County School District

Lincoln Consolidated School District

Lisa Academy Charter

Little Rock Preparatory Academy

Little Rock School District

Lonoke School District

Magazine School District

Magnet Cove School District

Magnolia School District

Malvern School District

Mammoth Spring School District

Manila Public Schools

Mansfield School District

Marion School District

Marked Tree School District

Marmaduke School District

Marvell - Elaine School District

Mayflower School District

Maynard School District

Mc Crory School District

Mcgehee Public Schools

Melbourne Public School District

Mena Public Schools

Metropolitan Vocational Center

Midland School District

Mineral Springs School District

Monticello School District

Monticello Vocational Center

Mount Ida Public Schools

Mountain Home Public Schools

Mountain Pine School District

Mountain View School District

Mountainburg Public Schools

Mt. Vernon-Enola School Distri

Mulberry-Pleasant View Bi-County Public

Schoole

Nashville School District

National Park Community College

Nemo Vista School District

Nettleton Public Schools

Nevada School District

Newport Special School District

Norfork School District

North Arkansas College

North Central Career Center

North Little Rock School District

Northcentral Arkansas Education Service

Co O

Northeast Arkansas Education Co-Op

Northwest Arkansas Classical Academy

Charter

Northwest Arkansas Community College

Northwest Arkansas Education Service

Co-Op



### **Participating Employers (Continued)**

Northwest Technical Institute

Omaha School District

Osceola School District

Ouachita Public Schools

Ouachita River School District

Ozark Montessori Academy Charter -Springdale

Ozark Mountain School District

Ozark Public Schools

Ozarka College

Ozarks Unlimited Resource Educational

Service Co-Op

Palestine-Wheatley School District

Pangburn School District

Paragould School District

Paris School District

Parkers Chapel School District

Pea Ridge School District

Perryville School District

Phillips Community College - Dewitt

Phillips Community College -U Of A

Piggott School District

Pine Bluff Lighthouse Charter School

Pine Bluff School District

Pocahontas Public Schools

Pottsville School District

Poyen School District

Prairie Grove School District

Premier High School Of Little Rock Charter

Premier High School Of North Little Rock

Premier High School Of Springdale

Prescott Public Schools

Pulaski County Special School District

Pulaski Technical College

Quest Middle Charter School - West Little

Quest Middle Charter School - Pine Bluff

Quitman Public Schools

Rector School District

Rich Mountain Community College

River Valley Career Academy

Rivercrest School District

Riverside School District

Riverside Vocational Technical School

Riverview School District

Rockbridge Montessori Charter School

Rogers Public Schools

Rose Bud School District

Russellville School District

Salem School District

Scholarmade Achievement Place

Scranton School District

Searcy County School District

Searcy School District

Sheridan School District

Shirley School District

Sia Tech Little Rock Charter

Siloam Springs School District

Sloan-Hendrix School District

Smackover-Norphlet School District

South Arkansas Community College

South Arkansas Developmental Center

South Central Service Co-Op

South Conway County School District

South Pike County School District

Southeast Arkansas College

Southeast Arkansas Education Service

Southeast Arkansas Prepartory High School

Southern Arkansas University

Southern Arkansas University Tech

Southside Bee Branch School District

Southside School District

Southwest Arkansas Education Co-Op

Spring Hill School District

Springdale Public Schools

Star City School District

Strong-Huttig School District

Stuttgart School District

Texarkana Career And Technological

Center

Texarkana School District

The Excel Center Charter At Goodwill

Trumann School District

Two Rivers School District

U Of A Community College - Batesville

U Of A Community College - Hope

U Of A Community College - Morrilton

University Of Arkansas - Fayetteville

University Of Arkansas - Fort Smith

University Of Arkansas - Little Rock

omveroity of financias Effice froof

University Of Arkansas - Monticello University Of Arkansas - Pine Bluff

University Of Arkansas Cooperative

Extension

University Of Arkansas For Medical

Sciences

University Of Central Arkansas

Valley Springs Public Schools

Valley View Public Schools

Van Buren School District

Vilonia School District

Viola School District

Waldron Public Schools

Warren School District

Warren Vocational Center

Watson Chapel School District

West Fork School District

West Memphis School District

West Side School District

Western Yell County School District

Westside Consolidated School District

Westside School District

Westwind School For Performing Arts

White County Central Schools

White Hall School District

Wilbur D Mills Education Service Co-Op

Wonderview School District

Woodlawn School District

Wynne Public Schools

Yellville-Summit Public School

