Arkansas State Police Retirement System
Annual Financial Report
For the year ending June 30, 2017

Arkansas State Police Retirement System

A Pension Trust Fund of the State of Arkansas

Annual Financial Report

For the fiscal year ended June 30, 2017

Gail H. Stone, Executive Secretary

Colonel Bill Bryant, Director of State Police

Prepared by
Arkansas Public Employees Retirement System
124 West Capitol Avenue, Suite 400
Little Rock, AR 72201

Table of Contents

Table of Contents

INTRODUCTION

A BRIEF HISTORY OF ASPRS

With the passage of Act 311 on March 19, 1951, the Arkansas General Assembly created the State Police Retirement System (ASPRS or the System). This System provides for the retirement of police officer employees of the Department of Arkansas State Police.

In the beginning, all ASPRS members participated in a contributory plan whereby employers and employees made contributions to the System. However, in 1977, Act 793 was signed by then Governor David Pryor. This legislation offered a choice to employees who were currently under the contributory plan. They could remain under the contributory plan or change over to the new non-contributory plan in which only employers make contributions to the System. This choice was offered to employees who were ASPRS members at some previous time and returned to work for the System on or after January 1, 1978; however, anyone joining the System on or after, January 1, 1978 who was not previously an ASPRS member is automatically covered under the new non-contributory plan.

Act 1071 of 1997 created the Tier Two Benefit Plan for the State Police Retirement System (Tier II) for all officers hired on or after April 3, 1997. Members of the plan in effect before April 3, 1997 (Tier I) had one year from April 3, 1997 to elect participation in Tier II.

Act 1242 of 2009 merged the investable assets of ASPRS with those of the Arkansas Public Employees Retirement System (APERS). All authority over investment of the merged assets was granted to the Board of Trustees of the Arkansas Public Employees Retirement System (APERS Board). Investment schedules contained herein reflect the market values accruing to each system.

This annual financial report, which covers the period from July 1, 2016 through June 30, 2017, provides comprehensive information about the System including a description of the retirement plan; investment policies and objectives; financial statements; an actuarial report; and historical and statistical information on active members, annuitants, and benefit payments.

SYSTEM HIGHLIGHTS
(as of June 30, 2017)

Active Members (Excludes DROP participants)

Tier I		Tier II	
Number	58	Number	411
Average Age (yrs.)	49.6	Average Age (yrs.)	38.6
Average Service (yrs.)	22.1	Average Service (yrs.)	9.6
Average Annual Salary	$67,533	Average Annual Salary	$50,691

Inactive Vested Members	
Number	80

2017 Retirees (Includes DROP participants)

	Age and Service	Disability
Retired Members	27	4
Average Age (yrs.)	54.78	40.0
Average Credited Service (yrs.)	26.44	11.0
Average Monthly Benefit	$3,451.37	$1,666.75

Total Retirees
(Including DROP Participants, Disability Recipients, & Death-In-Service Beneficiaries)

Retired Members	709
Average Monthly Benefit	$3,153.24

TROOP HEADQUARTERS

Troop "A" 501-618-8282
1 State Police Plaza Drive - Little Rock, AR 72209
Captain Mike Hagar - Commander

Troop "B" 870-523-2701
3200 Highway 67 North - Newport, AR 72112
Captain Jeffrey Drew - Commander

Troop "C" 870-935-7302
2216 Browns Lane Access Rd - Jonesboro, AR 72403
Captain John Carter - Commander

Troop "D" 870-633-1454
3205 North Washington - Forrest City, AR 72335
Captain Jackie Clark - Commander

Troop "E" 870-247-1483
6816 Princeton Pike - Pine Bluff, AR 71602
(position vacant) - Commander

Troop "F" 870-226-3713
1237 North Myrtle - Warren, AR 71671
Captain Charles Hubbard - Commander

Troop "G" 870-777-4641
2501 North Hazel - Hope, AR 71801
Captain Brady Gore - Commander

Troop "H" 479-783-5195
5728 Kelly Highway - Fort Smith, AR 72914
Captain Jason Aaron - Commander

Troop "I" 870-741-3455
2724 Airport Road - Harrison, AR 72602
Captain Wesley Smithee - Commander

Troop "J" 479-754-3096
2700 West Main - Clarksville, AR 72830
Captain Dale Saffold - Commander

Troop "K" 501-767-8550
200 Karen Street - Hot Springs, AR 71901
Captain Ron Casey - Commander

Troop "L" 479-751-6663
900 South 48th St - Springdale, AR 72766
Captain Lance King - Commander

LETTER OF TRANSMITTAL

Dear ASPRS Members:

The Arkansas State Police Retirement System (ASPRS or the System) is pleased to present the Annual Financial Report for the period ending June 30, 2017. The report is designed to provide a clear and concise picture of the financial conditions of the System. The report includes the following six sections:

- The Introduction contains the administrative organization, a letter of transmittal, and the chairman's report;
- The Financial Section contains the financial statements and required supplementary information;
- The Investments Section contains a report on investment activity, investment policies, investment results, and various investment schedules;
- The Actuarial Section contains the actuary's certification letter and the results of the annual actuarial valuation;
- The Statistical Section includes significant trend data pertaining to the System;
- The Appendix contains combined ASPRS and APERS financial statements.

Accounting System

The accrual basis of accounting is used to record the assets, liabilities, revenues, and expenses of the ASPRS trust fund. Revenues are recognized in the accounting period in which they are earned, without regard to date of collection, and expenses are recorded when incurred, regardless of when payment is made. Investments are reported at market values determined by the custodial agent. The agent's determination of market value includes, among other things, using pricing services or prices quoted by independent brokers at current exchange rates.

Revenues

The fiscal year 2017 revenue from employer contributions totaled $6.4 million. This amount is $164,844 less than the amount received in fiscal year 2016. Court fees and driver's license reinstatement fees for the fiscal year were $2.14 million, a decrease of $66,607 from fiscal year 2016. In 2017, motor vehicle title fees totaling $4.67 million were collected in accordance with Act 718 of 2011.

In addition to the funding provided in previous years, Act 1071 of 1997 provided for a transfer from insurance premium taxes to the State Police Retirement Fund. This transfer is equal to the difference between the actuarially computed contribution rate minus other funding sources (employer contributions and driver's license reinstatement fees). The fund received $6.69 million from the insurance premium tax transfer during fiscal year 2017 and $6.23 million in fiscal year 2016.

The System earned net investment income of $31.48 million in fiscal year 2017 after expenses of just over $1.3 million, an increase of $31.7 million from fiscal year 2016. Overall, the System's revenues increased $31.94 million over fiscal year 2016 due primarily to excellent investment returns.

Expenses

Benefit payments for fiscal year 2017 were $24.63 million, which is $1,403,679 less than fiscal year 2016. Administrative expenses were $208,424, of which $42,300 was for professional fees and $157,463 was transferred to APERS for indirect administrative costs.

Funding

The System is funded through contributions from the state and from investment income. The general financial objective of the System is to establish and receive contributions which, expressed as a percent of active member payroll, will remain approximately level from generation to generation.

Investments

Act 1242 of 2009 effectively merged the ASPRS investment program with that of APERS and granted the APERS Board all investment authority. In accordance with the Investment Code contained in the Arkansas Code Annotated, the APERS Board has established a policy which requires that the funds be invested in conformity with the "prudent investor rule." The Investment Code permits the fund to establish an investment policy based upon certain investment criteria and allows for delegation of investment authority to professional investment managers. The statement of investment policy outlines the responsibility for the investment of the fund and reflects the degree of risk that is deemed appropriate for the fund. Investment managers are to execute the investment policy in accordance with statutory authority and the policies and respective guidelines of the APERS Board, but they are free to use full discretion within those policies and guidelines. Compliance by the current investment managers is monitored on a continuing basis by the investment consulting firm Callan Associates Inc. and APERS staff. The investment managers retained by the APERS Board are listed on page 15 of this report.

Professional Services

Professional services are provided to ASPRS by firms selected by the APERS Board to aid in the efficient and effective management of the System. A list of firms retained during the year can be found on page 15 of this report.

Acknowledgments

This report is the result of the combined efforts of the APERS staff under the direction of the Board of Trustees of the State Police Retirement System. Its purpose is to provide complete and reliable information as a basis for making management decisions, as a means for determining compliance with legal provisions, and as a means for determining responsible stewardship over the assets contributed by the members and employers.

Sincerely yours,

Lt. Brant Tosh

Gail H. Stone

BOARD OF TRUSTEES

ASPRS SENIOR STAFF

Ms. Gail Stone
Executive Director

Mr. Jay Wills
Deputy Director

Mr. Jason Willett
Chief Financial Officer

Mr. Carlos Borromeo
Chief Investment Officer

Ms. Allison Woods
Director of Benefits Administration

Mr. Phillip Norton
Director of Information Technology

Ms. Becky Walker
Director of Operations

Ms. Jacobia Twiggs
Manager, Educational Outreach

Ms. Jennifer Taylor
Manager, Member and Retiree Services Section

Mr. Jon Aucoin
Manager, Communications Section

Ms. Jessica Middleton
Legal Counsel

Mr. John Owens
Internal Auditor

Ms. Usha Doolabh
Accounting Operations Manager, Investments

PROFESSIONAL SERVICE PROVIDERS

Custodian Bank

The Bank of New York Mellon
Pittsburgh, PA 15258

Actuary

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

Investment Consultant

Callan Associates, Inc.
Chicago, IL 60602

Investment Managers

AQR Capital Management
Greenwich, CT 06830

Artisan Partners
Milwaukee, WI 53202

Baillie Gifford Overseas Ltd.
Edinburgh, Scotland

Blackstone Alternative Asset Mgmt., LP
New York, NY 10154

CastleArk Management, LLC
Chicago, IL 60606

Double Line Capital
Los Angeles, CA 90071

Golden Capital Management
Charlotte, NC 28262

Fidelity Institutional Asset Management
Smithfield, RI 02917

Heitman America Real Estate
Chicago, IL 60606

Horrell Capital Management
Little Rock, AR 72211

INTECH
West Palm Beach, FL 33401

Invesco Real Estate
Dallas, TX 75240

LaSalle Investment Management
San Francisco, CA 94111

Lazard Asset Management
New York, NY 10020

MacKay Shields
New York, NY 10105

Manning & Napier Advisors
Dublin, OH 43017

Investment Managers (continued)

Mellon Capital Management
Pittsburgh, PA 15258

Newton Capital Management
New York, NY 10166-0005

Pinnacle Forest Investments, LLC
Little Rock, AR 72211

Prudential Investments, Inc.
Newark, NJ 07102

SSI Investment Management
Beverly Hills, CA 90210

Stephens Investment Management Group
Houston, TX 77046

TA Associates Realty
Boston, MA 02109

Wellington Management Company
Boston, MA 02210

Westwood Management Corp.
Dallas, TX 75201

FINANCIAL

MANAGEMENT'S DISCUSSION AND ANALYSIS

To help facilitate a better understanding of the financial condition of the Arkansas State Police Retirement System (ASPRS or the System) as of June 30, 2017, the results of its operation for the fiscal year ended, and the fiscal policies that govern its significant business operations, management has prepared this narrative analysis. The narrative is intended to supplement the System's financial statements and, as such, should be read in conjunction with these statements, which are presented beginning on page 25 and page 26.

Act 1242 of 2009 effectively merged the ASPRS investment program with that of the Arkansas Public Employees Retirement System (APERS) and granted the Board of Trustees of the Arkansas Public Employees Retirement System (APERS Board) all investment authority. The figures referred to in this section are ASPRS figures unless specifically stated otherwise.

Overview of the Financial Statements

This overview is intended to serve as an introduction to the System's financial reporting. Collectively, all the information contained in the Financial Section of this annual report presents the net assets held in trust for pension benefits as of June 30, 2017.

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

The Statement of Fiduciary Net Position reports the pension trust fund's assets, liabilities, and resulting net position such that assets – liabilities = net position at the end of the fiscal year. It is a snapshot of the financial position of the pension trust fund at that specific time. Below is a summary of total assets, total liabilities, and resulting net position for fiscal years 2016 and 2017:

Summary of Fiduciary Net Position

	2017	2016
Assets		
Cash and Cash Equivalents	$ 13,650,486	$ 15,281,566
Receivables	2,443,529	2,591,731
Investments	285,792,307	259,132,507
Securities Lending Collateral	26,898,979	32,572,338
Total Assets	$ 328,785,301	$ 309,578,142
Liabilities		
Other Liabilities	$ 521,887	$ 474,545
Investment Principal Payable	1,781,434	3,502,275
Securities Lending Collateral	26,956,862	32,681,310
Total Liabilities	29,260,184	36,658,130
Net Position Restricted For Pension Benefits	$ 299,525,117	$ 272,920,012

Totals may not add due to rounding.

The Statement of Changes in Fiduciary Net Position

The Statement of Changes in Fiduciary Net Position summarizes the pension trust fund's financial transactions that have occurred during the fiscal year such that additions – deductions = net change in net position. It supports the change that has occurred to the prior year's net position value on the Statement of Fiduciary Net Position. Below is a summary of the financial transactions of the trust fund for fiscal years 2016 and 2017:

Summary of Changes in Fiduciary Net Position

	2017	2016
Additions		
Employer Contributions	$ 6,416,736	$ 6,581,580
Member Contributions	43,037	30,170
Supplemental	6,693,915	6,233,769
Court	974,516	974,516
Driver's License Reinstatement Fees	1,164,959	1,231,566
Motor Vehicle Title Fees	4,667,895	4,661,683
Net Investment Income	31,484,250	(210,045)
Other Additions	8	11
Total Additions	$ 51,445,316	$ 19,503,250
Deductions		
Benefits	24,631,787	26,035,466
Administrative Expenses	208,424	205,342
Total Deductions	$ 24,840,211	$ 26,240,808
Net Increase / (Decrease)	$ 26,605,105	$ (6,737,558)
Net Position		
Beginning of Year	272,920,012	279,657,570
End of Year	$ 299,525,117	$ 272,920,012

Totals may not add due to rounding.

Additions to Fiduciary Net Position

The reserves needed to finance retirement benefits are accumulated through the collection of employer and employee contributions and through earnings on investments. Accumulations for fiscal year 2017 totaled approximately $51.4 million (see the following table):

Operating Additions	2017	2016
Employer Contributions	$ 6,416,736	$ 6,581,580
Member Contributions	43,037	30,170
Supplemental Contributions	6,693,915	6,233,769
Court Fees	974,516	974,516
Driver's License Reinstatement Fees	1,164,959	1,231,566
Motor Vehicle Title Fees	4,667,895	4,661,683
Net Investment Income	31,484,250	(210,045)
Miscellaneous Additions	8	11
Total	$ 51,445,316	$ 19,503,250

The overall increase in additions was approximately $31.9 million when compared to fiscal year 2016 and was due primarily to excellent investment returns. . The Investments Section of this report reviews investment activity and the results of the investment portfolio for fiscal year 2017.

Deductions to Fiduciary Net Position

The primary deductions from the System include the payment of benefits to members and beneficiaries, the refund of contributions to former members, and the cost of administering the System. Deductions for fiscal year 2017 totaled approximately $24.8 million (see the following table):

Operating Deductions	2017	2016
Benefit Payments	$ 24,631,787	$ 26,035,466
Administrative Expenses	208,424	205,342
Total	$ 24,840,211	$ 26,240,808

Totals may not add due to rounding.

The Notes to the Financial Statements

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

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

The required supplementary information provides additional detail and historical information considered to be useful in evaluating the condition of the plan administered by APERS. The System provides certain required schedules and related note disclosures that collectively demonstrate the System's annual progress toward funding its actuarial accrued liability and disclose the annual employer contributions required and the percentage contributed.

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

Funding

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

ASPRS overall pension fund net position increased during the fiscal year ended June 30, 2017 by $26.6 million. This increase can be attributed to an increase in the value of investments and their associated income.

System Investments as of June 30, 2017

The investments of the pension trust fund generated a 12.30% return for the fiscal year, which is higher than the prior year's return of 0.30%. The 12.30% return placed APERS in the fifty-first percentile when compared with a median return of 12.90% for large public plans. Investment results over time are compared with the System's benchmarks in the schedule of comparative investment results located in the Investments Section of this annual report. Below is a summary of the performance of the System's assets by class:

- Domestic Equity - The System had $3.246 billion in U.S. domestic equity securities, which is approximately a 11.69% increase from fiscal year 2016. Domestic equity posted a return of 17.52% for the fiscal year. The Russell 3000 Index posted a return of 18.51%.
- International Equity - The System had $2.051 billion in international equity securities which is approximately a 16.34% increase from fiscal year 2016. International equity posted a return of positive 18.39% for the fiscal year. The MSCI EAFE Index posted a return of positive 20.27%.
- Fixed Income - The System had $1.334 billion in fixed income securities, which is approximately a 2.52% increase from fiscal year 2016. Fixed income posted a return of 3.04% for the fiscal year. The Barclays Aggregate Index posted a return of (0.31%).
- Diversified Strategies - The System had $390 million in diversified strategies, which is approximately a 2.52% increase from fiscal year 2016. Diversified strategies posted a return of 5.51% for the fiscal year.
- Real Assets - The System had $1.243 billion in real assets, which is approximately a 0.66% increase from fiscal year 2016. Real assets posted a return of 3.27% for the fiscal year.

Securities Lending

The System earns additional investment income by lending investment securities to broker-dealers. This is done by the custodian bank, Bank of New York Mellon (BNYM). The broker-dealers provide collateral to BNYM and generally use the borrowed securities to cover short sales and failed trades for their clients. BNYM invests cash collateral to earn interest. For the fiscal year 2017, securities lending income to the System amounted to $4.998 million.

Actuarial Valuations and Funding Progress

The actuarial accrued liability and actuarial value of assets of the System as of June 30, 2017, amounted to $431.88 million and $305.85 million, respectively.

As of June 30, 2017, the System experienced an increase in its funded status from 67% to 69% on a market value basis. On a funding basis, the System had no change in its funded status remaining at 71%.

Requests for Information

This annual report is designed to provide a general overview of the finances of the System. Questions concerning any of the information provided in this report or requests for additional information should be addressed to the Arkansas Public Employees Retirement System, 124 W. Capitol, Suite 400, Little Rock, AR 72201.

STATEMENT OF FIDUCIARY NET POSITION (as of June 30, 2017)

	2017	2016
ASSETS		
Cash and Cash Equivalents	$ 13,650,486	$ 15,281,566
Receivables		
Contributions & Retiree Receivables	143,242	77,680
Investment Principal Receivable	1,621,784	1,900,325
Accrued Investment Income Receivable	678,531	613,726
Termination Agreement Receivable	0	0
Allowance for Doubtful Accounts	0	0
Total Receivables	2,443,556	2,591,731
Investments, At Fair Value		
Government Securities		
U.S. Government Securities	7,735,692	5,498,412
Futures	(3,508)	(52,873)
Government Agency Securities	2,432,764	4,379,389
Corporate Securities		
Collateralized Obligations	4,063,898	1,173,265
Corporate Bonds	8,734,771	14,153,850
Convertible Bonds	7,049,013	5,447,366
Convertible Preferred Stock	1,897,719	2,266,935
Common Stock	87,683,375	83,146,864
Equity Index Funds	30,978,911	24,674,864
High Yield Income Fund	2,218,325	2,172,498
International Securities		
Global Fixed Income Fund	21,323	0
Corporate Fixed Income	1,574,411	965,829
Equity Securities	41,131,418	34,693,313
Global Preferred Stock	80,183	51,234
Global Collateralized Obligations	20,475,851	20,555,577
Emerging Markets	52,957	0
Forward Contracts	1,163,394	0
Forward Contracts	(14,655)	(19,134)
Core Plus Bond Fund	16,187,869	15,615,380
Real Estate	28,261,992	26,088,015
Diversified Strategies	13,804,856	13,074,357
Timberland	3,951,301	4,796,841
Global Energy Fund	4,710,140	0
Commercial Loans	1,600,280	450,525
Total Investments	285,792,280	259,132,507
Securities Lending Collateral Investments, At Fair Value		
Receivables/Payables	(2,294)	0
Repurchase Agreements	6,815,753	2,919,862
Floating Rate Notes	13,242,837	20,289,877
Asset Backed Securities	6,842,683	6,811,629
Time Deposits	0	2,550,970
Total Securities Lending Collateral Investments	26,898,979	32,572,338
TOTAL ASSETS	328,785,301	309,578,142
LIABILITIES		
Accrued Expenses and Other Liabilities	521,887	474,545
Investment Principal Payable	1,781,434	3,502,275
Securities Lending Liability	26,956,862	32,681,310
TOTAL LIABILITIES	29,260,184	36,658,130
NET POSITION RESTRICTED FOR PENSION BENEFITS	$ 299,525,117	$ 272,920,012

Totals may not add due to rounding. The schedule of funding progress is on page 56.

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

(for the year ended June 30, 2017)

	2017	2016
Additions		
Contributions		
Employer	$ 6,416,736	$ 6,581,580
Member	43,037	30,170
Supplemental	6,693,915	6,233,769
Court	974,516	974,516
Drivers' License Reinstatement Fees	1,164,959	1,231,566
Motor Vehicle Title Fees	4,667,895	4,661,683
Total Contributions	19,961,058	19,713,284
Investment Income		
Interest	2,614,165	2,635,849
Dividends	2,921,991	2,871,021
Investment Gain/(Loss)	27,072,140	(4,786,973)
Security Lending Income	182,384	163,416
Other	12,786	23,048
Total Investment Income	32,803,468	906,361
Less: Investment Expense	1,319,219	1,116,406
Net Investment Income	31,484,249	(210,045)
Other Additions	8	11
Total Additions	51,445,315	19,503,250
Deductions		
Benefits	24,631,787	26,035,466
Administrative Expenses	208,424	205,342
Total Deductions	24,840,211	26,240,808
Net Increase / (Decrease)	26,605,105	(6,737,558)
Net Position Restricted for Pension Benefits		
Beginning of Year	272,920,012	279,657,570
End of Year	$ 299,525,117	$ 272,920,012

Totals may not add due to rounding.
See Notes to the Financial Statements beginning on page 27.

NOTES TO THE FINANCIAL STATEMENTS

Note 1: Plan Description

General Information

The Arkansas State Police Retirement System (ASPRS or the System) is a single-employer, defined benefit pension plan that was established on March 19, 1951 with the passage of Act 311 of 1951. The System provides for the retirement of police officers employed by the Department of Arkansas State Police. The laws governing the operations of ASPRS are set forth in Arkansas Code Annotated (A.C.A.), Title 24, Chapters 2 and 6. Act 1071 of 1997 created a Tier II benefit plan for all police officers hired on or after April 3, 1997.

Effective July 1, 2009, Act 1242 of 2009 transferred the assets of ASPRS to the Arkansas Public Employees Retirement System (APERS) to hold in trust for ASPRS. Act 1242 of 2009 also states that the State Police Trust Fund shall not be treated as segregated funds but shall be commingled with the assets of APERS strictly for investment purposes and that the assets of ASPRS and APERS shall be invested as determined by the Board of Trustees of the Arkansas Public Employees Retirement System (APERS Board).

Act 1242 of 2009 also created the Arkansas State Police Officers' Tier II Deferred Retirement Option Plan (DROP), and it changed the composition of the Board of Trustees of the State Police Retirement System (ASPRS Board).

Arkansas Code Annotated § 24-6-204 states that the membership of the ASPRS Board shall be composed of seven members as follows:

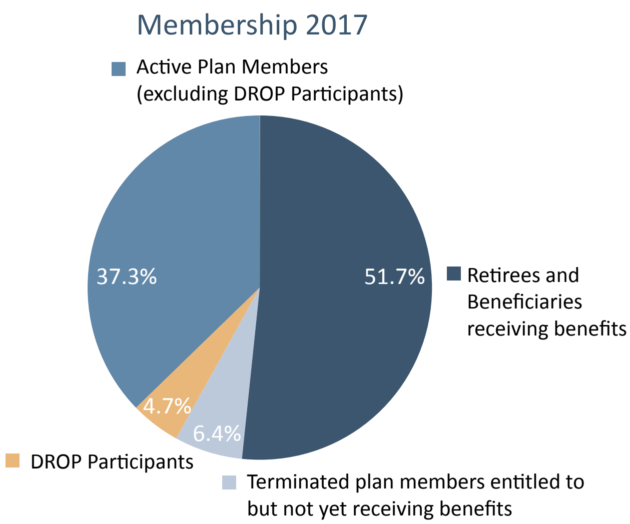
- One active member enrolled in the Tier I benefits program,
- One active, vested member enrolled in the Tier II benefits program,
- The State Police Commissioner who shall be appointed by the Governor,
- The Chief Fiscal Officer of State or his or her designee, and
- Three citizens at large who shall be appointed by the Governor.

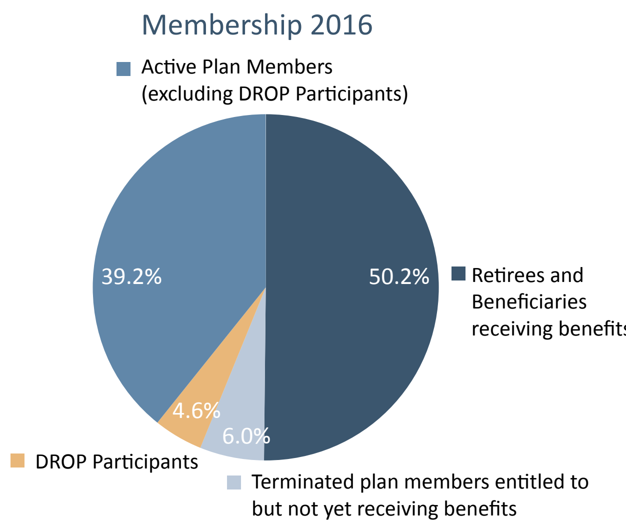
The members of the ASPRS Board are listed on page 13 of this report.

Membership

The membership as of the June 30 end of fiscal years 2016 and 2017 was as follows:

	2017	2016
Retirees and Beneficiaries Receiving Benefits	650	634
Terminated plan members entitled to but not yet receiving benefits	80	76
DROP Participants	59	58
Active Plan Members (Excludes DROP Participants)	469	496
	1,258	1,264





Totals may not add due to rounding.

Contributions

As of June 30, 2016 and 2017, there were no contributory members of ASPRS. Plan member contributions presented in the financial statements are related to service purchase payments. For fiscal year 2017, the employer contribution rate was 22% of salaries paid (A.C.A. § 24-6-209). Contribution provisions are established by state law and may be amended only by the Arkansas General Assembly.

Act 1071 of 1997 provides for a transfer from insurance premium taxes to the State Police Retirement Fund (the ASPRS fund). The ASPRS fund received $6.694 million of Act 1071 funds in fiscal year 2017 and $6.234 million in fiscal year 2016. Additional funds are collected from motor vehicle title fees in accordance with Act 718 of 2011. The ASPRS fund received $4.67 million of Act 718 funds in fiscal year 2017 and $4.66 million in fiscal year 2016.

Plan Administration

Costs of administering the plan are paid out of investment earnings.

Benefits

Benefit provisions are established by state law and may be amended only by the Arkansas General Assembly. Members are eligible for full retirement benefits after meeting the following minimum age and service requirements:

- under the Tier I contributory plan at age 50 with five years of actual service,
- under the Tier I non-contributory plan at age 52 with five years of actual service,
- under either the Tier I or Tier II plan at any age with 30 years of actual service, or
- under the Tier II plan at age 65 with at least five actual years of service.

The normal retirement benefit, paid on a monthly basis, is determined based on (a) the member's final average salary and (b) the number of years of service. Under the contributory plan, a member may retire with a reduced benefit after 20 years of service regardless of age. Under the non-contributory plan, a member may retire with a reduced benefit with at least five years of actual service if the member is within 10 years of normal retirement age.

Increases after Retirement

Retirees will receive a 3% cost of living adjustment (COLA) increase in their benefit each July 1. Eligibility for the COLA requires being retired from July 1 for a full 12 months.

Note 2: Summary of Significant Accounting Policies

Basis of Accounting

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

Use of Estimates

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

- The net position restricted for pensions at the date of the financial statements
- The net pension liability and other actuarial information presented in Note 5
- The required supplementary information as of the benefit information date
- The changes in fiduciary net position during the reporting period

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

Cash and Cash Equivalents

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

Note 3: Deposits and Investments

Deposits

Deposits are carried at cost and are included in "cash and cash equivalents." Cash and cash equivalents include demand accounts, cash in state treasury, and short-term investment funds (STIF). As of June 30, 2017, these totals were $23,889, $766,457, and $12,860,140 respectively. State Treasury Management Law governs the management of funds held in the State Treasury (cash in state treasury) and it is the responsibility of the Treasurer of State to ensure the funds are adequately insured and collateralized.

Custodial Credit Risk for Deposits

Custodial credit risk for deposits is the risk that, in the event of the failure of a depository financial institution, the System will not be able to recover deposits or collateral securities. The System's policy is to place deposits only in collateralized or insured accounts. As of June 30, 2017, the System's only deposits exposed to potential custodial credit risk were those holding its foreign currency balance of $275,397. The System holds foreign currency in banks outside the United States as a result of transactions by international investment managers.

Act 1242 of 2009 merged the investable assets of ASPRS with those of APERS. All authority over investment of the merged assets was granted to the APERS Board. Investment schedules reflect the market values accrued to each system.

Investments

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

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

Statement of Invested Assets by Type (fair value* as of June 30, 2017)

Investment Type	Combined	ASPRS	APERS
Government Securities			
U.S. Government Securities	$ 219,085,934	$ 7,735,692	$ 211,350,242
Futures	(99,357)	(3,508)	(95,849)
Agency Pooled Securities	68,899,370	2,432,764	66,466,606
Corporate Securities			
Collateralized Obligations	115,095,435	4,063,898	111,031,538
Corporate Bonds	247,381,285	8,734,771	238,646,514
Convertible Bonds	199,638,197	7,049,013	192,589,184
Convertible Preferred Stock	53,746,120	1,897,719	51,848,401
Common Stock	2,483,319,755	87,683,388	2,395,636,367
Equity Index Funds	877,367,341	30,978,911	846,388,430
High Yield Income Fund	62,826,152	2,218,325	60,607,827
International Securities			
Global Government Fixed	603,888	21,323	582,565
Corporate Fixed Income	44,589,585	1,574,411	43,015,174
Equity Securities	1,164,900,965	41,131,418	1,123,769,547
Global Preferred Stock	2,270,905	80,183	2,190,722
Equity Pooled Fund Units	579,905,564	20,475,851	559,429,713
Global Collateralized Obligations	1,499,825	52,957	1,446,868
Emerging Markets	32,949,011	1,163,395	31,785,616
Forward Contracts	(415,038)	(14,655)	(400,383)
Core Plus Bond Fund	458,463,740	16,187,869	442,275,871
Real Estate	800,420,302	28,261,992	772,158,310
Diversified Strategies	390,973,381	13,804,856	377,168,525
Timberland	111,906,523	3,951,301	107,955,222
Global Energy Fund	133,397,957	4,710,140	128,687,816
Commercial Loans	45,322,235	1,600,280	43,721,955
	8,094,049,074	285,792,293	7,808,256,781
Securities Lending Collateral Investments			
Receivables/Payables	(64,980)	(2,294)	(62,686)
Repurchase Agreements	193,031,939	6,815,753	186,216,186
Floating Rate Notes	375,056,196	13,242,837	361,813,359
Asset Backed Securities	193,794,633	6,842,683	186,951,950
	761,817,788	26,898,979	734,918,809
	$ 8,855,866,862	$ 312,691,272	$ 8,543,175,590

* Principal only. Totals may not add due to rounding.

Asset Allocation

Asset allocation guidelines have been established as follows:

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

Investments are reported at fair value as determined by the custodian bank. The custodian bank's determination of fair values includes, among other things, using pricing services or quotes by major independent brokers at current exchange rates, as available. The schedule on page 37 reflects the fair value of investments.

Custodial Credit Risk for Investments

Custodial credit risk for investments is the risk that, in the event of failure of the counterparty to a transaction, the System will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. Investment securities are exposed to custodial credit risk if the securities are (a) uninsured, (b) not registered in the name of the government, and (c) held by either the counterparty or the counterparty's trust department or agent but not in the System's name. Arkansas Code Annotated §24-2-606 addresses the custodianship of assets, and the investment policy states that "the custodian bank shall, by nominee agreement, hold any and all securities for the beneficial interest of the APERS fund." As of June 30, 2017, there were no investments exposed to custodial credit risk.

Credit Risk for Investments

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

The System's exposure to credit risk as of June 30, 2017, was as follows:

Moody's Credit Rating Dispersion Detail by Credit Rating

Investment Type and Fair Value	Aaa	Aa	A
Government Securities			
U.S. Government Securities	$ 219,085,934	0	0
Agency Debentures	0	0	0
Agency CMO	8,717,390	0	0
Agency Pooled	60,396,564	0	0
Corporate Securities			
Collateralized Obligations	16,651,707	4,636,166	7,414,335
Convertible Bonds	0	2,211,000	6,393,935
High Yield Income Fund	0	0	0
Corporate Bonds	4,019,456	5,054,626	66,420,127
International Securities			
Emerging Markets	0	3,699,933	5,591,916
Emerging Markets - Collateralized Obligations	0	0	0
Collateralized Obligations	0	0	0
Global - Collateralized Obligations	0	0	0
Corporate Bonds	0	54,763	790,310
Global Government Fixed	0	0	398,388
Global Corporate Fixed	0	2,702,637	9,255,040
Infrastructure Fund	0	0	4,245,197
Global Bond Fund	0	0	20,816,474
Core Plus Bond Fund	0	0	458,463,740
Domestic Commercial Loans	9,259,379	2,065,538	0
International Commercial Loans	0	0	0
High Yield Fund	0	0	0
	318,130,429	20,424,662	579,789,462

S&P's Credit Rating Dispersion Detail by Credit Rating

Investment Type and Fair Value	AAA	AA	A
Government Securities			
U.S. Government Securities	$ 0	219,085,934	0
Agency Debentures	0	0	0
Agency CMO	0	8,717,390	0
Agency Pooled	0	60,494,013	0
Corporate Securities			
Collateralized Obligations	2,217,000	1,489,595	6,883,386
Convertible Bonds	1,456,991	0	10,441,359
High Yield Income Fund	0	0	0
Corporate Bonds	3,452,116	6,385,642	65,294,204
International Securities			
Emerging Markets	0	4,147,098	3,260,847
Emerging Markets - Collateralized Obligations	0	0	0
Collateralized Obligations	0	0	990,326
Global - Collateralized Obligations	0	0	0
Corporate Bonds	0	54,763	790,310
Global Government Fixed	0	0	398,388
Global Corporate Fixed	246,955	2,470,551	6,157,831
Infrastructure Fund	0	0	4,245,197
Global Bond Fund	0	0	0
Core Plus Bond Fund	0	0	458,463,740
Domestic Commercial Loans	0	0	0
International Commercial Loans	0	0	0
High Yield Income Fund	0	0	0
	7,373,062	302,844,985	556,925,588
Securities Lending Collateral	$ 151,592,567	310,823,688	56,701,038

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

Baa	Ba	B	Caa or below	NR	Fair Value*
0	0	0	0	0	$ 219,085,934
0	0	0	0	0	0
0	0	0	0	0	8,717,390
0	0	0	0	8,502,806	68,899,370
1,171,431	1,379,090	8,081,745	17,522,166	42,927,366	99,784,005
28,092,880	26,201,838	12,168,245	1,435,225	176,881,194	253,384,317
0	0	0	0	0	0
127,535,999	21,347,415	7,495,108	2,551,253	9,565,961	243,989,943
12,700,190	1,823,214	3,458,570	210,000	5,465,188	32,949,011
0	0	0	0	0	0
3,003,508	0	0	0	3,590,533	6,594,041
499,825	0	0	0	1,000,000	1,499,825
1,863,578	208,675	0	474,015	0	3,391,342
0	205,500	0	0	0	603,888
23,177,333	2,561,599	4,722,418	118,188	2,052,371	44,589,585
0	0	0	0	0	4,245,197
0	0	0	0	0	20,816,474
0	0	0	0	0	458,463,740
249,935	4,944,862	9,092,543	936,050	18,239,939	44,788,245
0	0	0	0	533,991	533,991
38,031,576	0	24,794,577	0	0	62,826,152
236,326,254	58,672,192	69,813,204	23,246,896	268,759,347	1,575,162,448

BBB	BB	B	CCC or below	NR	Fair Value*
0	0	0	0	0	$ 219,085,934
0	0	0	0	0	0
0	0	0	0	0	8,717,390
0	0	0	0	8,405,357	68,899,370
733,172	1,987,124	956,781	18,083,222	67,433,725	99,784,005
43,753,635	30,055,272	22,113,983	1,435,225	144,127,852	253,384,317
0	0	0	0	0	0
129,810,991	25,234,571	5,213,997	2,020,603	6,577,820	243,989,943
17,036,584	2,051,781	1,973,789	0	4,478,911	32,949,011
0	0	0	0	0	0
1,506,457	0	0	0	4,097,258	6,594,041
500,000	0	0	0	999,825	1,499,825
1,863,578	0	208,675	212,625	261,390	3,391,342
0	205,500	0	0	0	603,888
26,133,910	8,355,932	550,893	0	673,514	44,589,585
0	0	0	0	0	4,245,197
20,816,474	0	0	0	0	20,816,474
0	0	0	0	0	458,463,740
3,483,456	12,629,831	21,185,545	936,050	6,553,362	44,788,245
0	0	0	0	533,991	533,991
38,031,576	24,794,577	0	0	0	62,826,152
283,669,833	105,314,588	52,203,662	22,687,725	244,143,006	1,575,162,448
0	0	0	4,369,842	238,330,653	$ 761,817,788

Concentration of Credit Risk for Investments

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

Interest Rate Risk for Investments

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

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

As of June 30, 2017, the System had the following debt security investments and maturities:

Investment Type	Investment Maturity (In Years)				
	Fair Value*	Less than 1	1 - 5	6 - 10	More than 10
Government Securities					
U.S. Government Securities	$ 219,085,934	$ 21,900,402	$ 96,774,608	$ 51,528,167	$ 48,882,757
Agency CMO	8,717,390	0	0	0	8,717,390
Agency Pooled	68,899,370	315,652	63,798	303,935	68,215,985
Corporate Securities					
Collateralized Obligations	99,784,005	22,237,254	202,950	2,003,119	75,340,682
Convertible Bonds	253,384,317	62,017,004	113,496,507	31,288,346	46,582,461
Corporate Bonds	243,989,943	11,815,957	83,836,474	83,422,526	64,914,986
International Securities					
Emerging Markets	32,949,011	1,602,078	2,621,403	20,589,638	8,135,891
Collateralized Obligations	6,594,041	5,097,465	0	0	1,496,576
Global Collateralized Obligations	1,499,825	1,499,825	0	0	0
Corporate Bonds	3,391,342	0	1,352,163	754,178	1,285,000
Global Government Fixed	603,888	0	0	398,388	205,500
Global Corporate Fixed	44,589,585	1,585,662	21,757,031	18,649,940	2,596,951
Infrastructure Fund	4,245,197	0	4,245,197	0	0
Global Bond Fund	20,816,474	0	0	20,816,474	0
Core Plus Bond Fund	458,463,740	0	0	458,463,740	0
Commercial Loans	45,322,235	0	18,668,380	26,653,856	0
High Yield Income Fund	62,826,152	0	62,826,152	0	0
	$ 1,575,162,448	$ 128,071,299	$ 405,844,663	$ 714,872,307	$ 326,374,178
Securities Lending Collateral					
Asset Backed Floating Rate Notes	$ 193,794,633	$ 96,524,757	$ 92,900,034	$ 0	$ 4,369,842
Floating Rate Notes	375,056,196	132,633,915	242,422,281	0	0
Repurchase Agreements	193,031,939	193,031,939	0	0	0
	$ 761,882,768	$ 422,190,610.93	$ 335,322,315	$ 0	$ 4,369,842

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

Foreign Currency Risk

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

The System's exposure to foreign currency risk on June 30, 2017, was as follows:

Currency	%	Fair Value*	Equities	Cash	Forward Contracts
Australian Dollar	1.77	$ 24,127,071	$ 24,127,071	$ 0	$ 0
Brazilian Real	0.64	8,721,693	8,721,693	0	0
British Pound Sterling	21.21	288,988,950	288,988,949	1	0
Canadian Dollar	3.48	47,370,222	47,224,426	145,796	0
Chinese Yuan Renminbi	0.31	19,702,032	20,080,981	0	(378,949)
Danish Krone	3.59	48,908,326	48,908,334	(7)	0
Euro Currency	32.88	447,919,831	447,919,852	(21)	0
Hong Kong Dollar	1.01	13,778,204	13,778,204	0	0
Indian Ruphia	0.47	6,375,331	6,375,331	0	0
Israeli Shekel	0.98	13,291,798	13,214,447	77,351	0
Japanese Yen	11.37	162,697,516	162,733,605	0	(36,089)
Malaysian Ringgit	0.20	2,672,632	2,672,632	0	0
Mauritian Rupee	0.15	2,060,373	2,060,373	0	0
Mexican New Peso	0.30	4,050,729	4,050,729	0	0
Norwegian Krone	0.94	12,805,897	12,805,892	4	0
New Zealand Dollar	0.48	6,532,347	6,532,347	0	0
Papua New Guinea Kina	0.05	614,989	614,989	0	0
Philippines Peso	0.13	1,790,829	1,790,829	0	0
Russian Ruble	0.17	2,270,588	2,270,588	0	0
Singapore Dollar	2.13	28,965,021	28,965,021	0	0
South African Rand	1.13	15,447,911	15,447,911	0	0
South Korean Won	3.15	42,890,574	42,890,574	0	0
Swedish Krone	2.75	37,471,762	37,419,468	52,294	0
Swiss Franc	9.80	133,721,639	133,721,661	(22)	0
Taiwan Dollar	0.77	10,525,491	10,525,491	0	0
Thailand Baht	0.16	2,232,923	2,232,923	0	0
	100.00%	$ 1,385,934,679	$ 1,386,074,319	$ 275,397	$ (415,038)

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

Asset-Backed Securities

Asset-backed securities (ABSs) are bonds or notes backed by loan paper or accounts receivable originated by banks, credit card companies, or other credit providers. The originator of the loan or accounts receivable paper sells it to a specially created trust, which repackages it as securities. ABSs have been structured as pass-through securities and as structures with multiple bond classes. The System's ability to recover the amount of principal invested in these securities depends on the performance and quality of the trust assets.

Mortgage-Backed Securities

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

MBSs are subject to credit risk, the risk that the borrower will be unable to meet its obligations. They are also subject to risks created by significant changes in interest rates. Prepayment risk refers to the possibility that interest rates may decline and remain low, encouraging borrowers to refinance their existing loans and thereby cause MBS holders to be repaid more quickly than originally anticipated. Prepayments reduce the weighted average life of the security. Alternatively, extension risk acknowledges the possibility that interest rates could rise and remain high for long periods of time, reducing the number of borrowers seeking to refinance their mortgages. As a result, MBS holders are repaid over longer periods of time. This extension of the mortgage increases the weighted average life of the security.

A collateralized mortgage obligation (CMO) is an MBS that comprises classes of bonds created by prioritizing the cash flows of the underlying mortgage pool. This approach redistributes prepayment risk and credit risk among the various bond classes in the CMO structure. Income is derived from payments and prepayments of principal and interest generated from collateral mortgages. CMOs may be collateralized by whole-loan mortgages, mortgage pass-through securities, or stripped mortgage-backed securities.

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

Corporate Bonds

Corporate bonds are a debt security issued by a corporation. The backing for the bond is usually the payment ability of the company, which is typically money to be earned from future operations. In some cases, the company's physical assets may be used as collateral for bonds. They usually have a fixed 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

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

Pooled Funds

Pooled funds are funds from many individual investors that are aggregated for the purposes of investment and benefit from economies of scale. The System could be indirectly exposed to credit and market risks associated with forward currency contracts to the extent that these pooled funds hold forward currency contracts for purposes of managing exposure to fluctuations in foreign exchange rates. APERS and ASPRS have approximately $579 million invested in international pooled funds.

Securities Lending

Arkansas Code Annotated § 24-2-602 and the APERS Board's investment policy permit the System to participate in a securities lending program to augment investment income. The System lends its securities to brokers-dealers and other entities with a simultaneous agreement to return the collateral for the same securities in the future. The System has entered into an agreement with BNY Mellon to act as agent in securities lending transactions. BNY Mellon serves as the custodian and is therefore the counterparty to securities lending transactions. The legal and contractual authorization for the securities lending program is contained in the Securities Lending Discretionary Agency Agreement executed between APERS and the custodian.

Whoever borrows the securities provides collateral in the form of cash and cash equivalents, U.S. Treasury or government agency securities, or letters of credit (for the marginal percentage collateralization only). U.S. securities are loaned versus collateral valued at 102.25% of the market value of the securities plus any accrued interest for domestic loans. Non-U.S. securities are loaned versus collateral valued at 105.93% of the market value of the securities plus any accrued interest. Collateral is marked-to-market daily if price movements exceed certain minimal thresholds.

The custodian provides for full indemnification to the System funds for any losses that might occur in the program due to the failure of a broker to return a security that was borrowed (and if the collateral is inadequate to replace the securities lent) or failure to pay the trust funds for income of the securities while on loan. The collateral securities received cannot be pledged or sold unless the borrower defaults. Cash collateral received is invested in APERS' name; accordingly, investments made with cash collateral appear as an asset on the Statement of Fiduciary Net Position. A corresponding liability is recorded because APERS must return the cash collateral to the borrower upon expiration of the loan. The loan maturity dates generally do not match the maturity dates of the investments made with cash collateral received.

As of June 30, 2017, the cash collateral investments had an average weighted maturity of 32 days, whereas the weighted average loan maturity was three days. Investments with cash collateral were approximately $828 million

Derivative Instruments

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

Derivative instruments are financial contracts or agreements whose values depend on the values of one or more underlying assets, reference rates, or financial indexes. Derivative instruments include futures contracts, forward contracts, swap contracts, options contracts, and forward foreign currency exchange. APERS, through its external investment managers, could hold such instruments. The external investment managers may enter these certain investments on behalf of APERS primarily to enhance the performance and reduce the volatility of its portfolio. The external investment managers could enter into swaps and futures contracts to gain or hedge exposure to certain markets and to manage interest rate risk. They primarily use forward foreign exchange contracts to hedge foreign currency exposure. APERS could be exposed to risk if the counterparties to the contracts are unable to meet the terms of the contracts. APERS' external investment managers seek to control this risk through counterparty credit evaluations and approvals, counterparty credit limits, and procedures for monitoring exposure. APERS' external investment managers anticipate that the counterparties will be able to satisfy their obligations under the contracts. Investments in limited partnerships and commingled funds may include derivatives that are not shown in any derivative totals.

Swaps

APERS' investment managers have entered into various swaps, including interest rate swaps, credit default swaps, and foreign currency swaps.

Interest Rate Swaps

An interest rate swap is the exchange of one set of cash flows based on interest rate specifications for another based on a specified principal amount over a period in the future. Interest rate swaps typically exchange a fixed payment for a floating payment. The floating payment is usually the London Interbank Offering Rate

(LIBOR). In the most common interest rate swap arrangement, one party agrees to pay fixed interest rate payments on designated dates to a counterparty who, in turn, agrees to make return interest rate payments that float with a specified reference rate. Long swap positions (receive fixed) increase exposure to long-term interest rates, and short positions (pay fixed) decrease exposure to interest rate risk. The System had no interest rate swaps at June 30, 2017.

Credit Default Swap

A credit default swap is a contract whereby the credit risk associated with an investment is transferred by entering into an agreement with another party, who in exchange for periodic fees, agrees to make payments in the event of a default or predetermined credit event. The System had no credit default swaps at June 30, 2017.

Foreign Currency Swap

A foreign currency swap is an agreement to swap principal and interest payments on a loan made in one currency for principal and interest payments of a loan of equal value in another currency. The System had no foreign currency swaps at June 30, 2017.

Foreign Currency Forward Contracts

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

The System had the following foreign currency forwards at June 30, 2017:

	Pay	Receive	Notional Value	Market Value	Unrealized Gain/Loss
Japanese Yen	JPY	USD	$ (8,194,132)	$ (8,230,221)	$ (36,089)
Chinese Yuan Renminbi	CNY	USD	(15,524,267)	(15,903,216)	(378,949)
					$ (415,038)

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

Financial Futures

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

The System had the following financial futures at June 30, 2017:

Futures Contracts	Expiration	Notional Value	Fair Value	Unrealized Gain/(Loss)
U.S. 2-year Treasury Note	Sept 2017	$ (44,146,875)	$ (44,086,313)	$ 60,562
U.S. 5-year Treasury Note	Sept 2017	38,385,545	38,296,680	(88,865)
U.S. 10-year Treasury Note	Sept 2017	(5,648,906)	(5,648,906)	0
U.S. 30-year Treasury Bond	Sept 2017	(10,379,695)	(10,450,750)	(71,055)
		$ (21,789,932)	$ (21,889,289)	$ (99,357)

Mortgage-Backed To Be Announced (TBA)

The phrase "to be announced" (TBA) is used to describe forward MBS trades. The term is derived from the fact that the actual mortgage-backed security that will be delivered to fulfill a TBA trade is not designated at the time the trade is made. The securities are announced 48 hours prior to the established trade settlement date.

The System had the following mortgage-backed TBA at June 30, 2017:

Mortgage-Backed TBA	CUSIP	Notional	Fair Market Value	Duration	Credit Rating
FGLMC 3.500% 07/01/2047	02R032679	$ 2,166,938	$ 2,157,372	30.02	Aaa/AA+
FNMA 3.500% 07/01/2047	01F032674	2,082,494	2,074,681	30.02	Aaa/AA+
FNMA 4.000% 07/01/2047	01F040677	4,188,350	4,173,304	28.68	Aaa/AA+
		$ 8,437,781	$ 8,405,357		

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

Fair Value Measurements

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

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

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

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

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

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

Investments and Derivative Instruments Measured at Fair Value (as of June 30, 2017)

	Fair Value	Level 1	Level 2	Level 3
Investments at Fair Value				
U.S. Domestic Equities	$ 69,398,021	$ 69,398,021	$ 0	$ 0
Convertible Securities	8,726,109	968,259	7,757,850	0
Preferred Securities	158,378	0	158,378	0
International Equities	56,071,148	55,912,349	0	158,800
Lazard	3,345,902	3,345,902		
Convertible Securities	241,650	241,650	0	0
Preferred Securities	87,428	80,183	7,245	0
Fixed Income	3,268,513	0	3,268,513	0
Loans/JV interest	17,789	0	0	17,789
Domestic Fixed Income	0	0	0	0
Global Bond Fund	735,008	735,008		
Infrastructure Fund	149,893	149,893		
U.S. Government Securities	7,735,692	7,735,692	0	0
Futures	(3,508)	(3,508)	0	0
Equity Securities	0	0	0	0
Corporate Bonds	14,588,355	0	14,588,355	0
Loans/JV interest	1,580,982	0	0	1,580,982
Total Investments	$ 166,101,360	$ 138,563,448	$ 25,780,341	$ 1,757,571
Securities Lending Collateral Investments at Fair Value				
Repo	6,815,753	0	6,815,753	0
Floating Rate Notes	13,242,837	0	13,242,837	0
Asset Backed Floating Securities	6,842,683	0	6,842,683	0
Total Securities Lending Collateral	26,901,273	0	26,901,273	0
Total Investments at Fair Value	$ 193,002,633	$ 138,563,448	$ 52,681,614	$ 1,757,571

Investments at the Net Asset Value (NAV)	
High Yield Core Fund	$ 875,470
Defensive Bond Fund	1,342,855
Domestic Equity Index Funds	30,978,911
Core Plus Bond Fund	16,187,869
Timberland	25,316,705
Global Energy Plus Fund	4,710,140
Global Equity Pooled Funds	
Invesco Global REITS	5,310,330
Pyramis	14,280,620
Real Estate	
Invesco Core	14,242,537
Heitman	10,834,585
TA Fund X	887,799
TA Fund XI	703,145
LaSalle Fund Fund VI	584,692
LaSalle Fund Fund VII	1,009,236
Diversified Strategies	
AQR Global Risk Premium	4,118,901
Newton Global Real Return	3,858,383
Blackstone	5,827,571
Total Investments at the NAV	$ 141,069,748

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

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

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

Investments Measured at the Net Asset Value (NAV)

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

Investments Measured at the Net Asset Value (NAV)

	Fair Value	Strategy Type	Fund Life of Non-redeemable Mandates	Unfunded Commitments	Redemption Frequency (if currently eligible)	Redemption Notice Period	Other Redemption Restrictions	Restriction Time Remaining
High Yield Core Fund	$ 875,470	Active High Yield Fixed Income	N/A	none	monthly	T + 3	N/A	N/A
Defensive Bond Fund	1,342,855	Income Oriented	N/A	none	daily	T + 1	N/A	N/A
Domestic Equity Index Funds	30,978,911	S & P 500 Index	N/A	none	daily	T + 3	N/A	N/A
Core Plus Bond Fund	16,187,869	Active Global Fixed Income	N/A	none	daily	T + 3	N/A	N/A
Timberland	25,316,705	Timber	N/A	none	none	N/A	N/A	partnership terminates in December 2027
Global Energy Fund	4,710,140	Global Energy stocks	N/A	none	daily	T + 3	N/A	N/A
International Equity Pooled Funds								
Invesco Global REITS	5,310,330	Global Real Estate securities	N/A	none	daily	T + 1	N/A	N/A
Fidelity	14,280,620	International Equities	N/A	none	daily	T + 1	N/A	N/A
Real Estate								
Invesco	14,242,537	Core Real Estate	N/A	none	quarterly	T + 45	N/A	N/A
Heitman	10,834,585	Core Real Estate	N/A	none	quarterly	T + 90	N/A	N/A
TA Fund X	887,799	Value Add Real Estate	N/A	none	7-year lock up	N/A	N/A	currently in capital redistribution phase
TA Fund XI	703,145	Value Add Real Estate	N/A	$1,062,302	7-year lock up	N/A	N/A	the lock up period starts on the day of the last capital call
LaSalle Fund Fund VI	584,692	Value Add Real Estate	N/A	none	7-year lock up	N/A	N/A	currently in capital redistribution phase
LaSalle Fund Fund VII	1,009,236	Value Add Real Estate	N/A	$756,211	7-year lock up	N/A	N/A	the lock up period starts on the day of the last capital call
Diversified Strategies								
AQR Global Risk Premium	4,118,901	Risk Premia	N/A	none	weekly and monthly	T + 2	N/A	N/A
Newton Global Real Return	3,858,383	Global Real Return	N/A	none	daily	T + 3	N/A	N/A
Blackstone	5,827,571	Fund of Funds	N/A	none	last day of each quarter	1yr; 2yrs; 3yrs; >3yrs	55% liquidity; then 20%; then 15%; then 10%	N/A
Total	$ 141,069,749			$1,818,513				

High Yield Core Fund

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

Defensive Bond Fund

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

Domestic Equity Index Funds

This is an S&P 500 Index fund.

Core Plus Bond Fund

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

Timberland

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

Global Energy Fund

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

International Equity Pooled Funds

- Invesco Global REITs — The objective of this collective trust fund is to achieve higher than market return with average market risk over the long-term by investing in the universe of global real estate securities.
- Fidelity Select International Strategy — The Select International strategy utilizes a disciplined investment approach that capitalizes on fundamental research by combining qualitative stock selection with quantitative risk control. The available investment universe is comprised of stocks in Japan, the United Kingdom, Europe ex UK, and Asia Pacific ex Japan rated attractive by Fidelity's analysts. The strategy uses a quantitative model to match the regional weights of the portfolio to the index. This approach is designed to diversify specific risk, reduces tracking error and factor risk, and controls transaction costs.

Real Estate

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

- Invesco Core Real Estate (ICRE) — The ICRE strategy is a portfolio of U.S. properties diversified by property type and geographic location, with an emphasis on attractive current income returns and the opportunity for both income and capital growth. It is based on top-down economic fundamentals combined with bottom-up local market intelligence.
- Heitman America Real Estate Trust (HART) — The HART strategy creates a high-quality, low-risk portfolio of stabilized, income-producing assets diversified by property type and economic exposure through acquiring assets in infill locations within major metropolitan areas, focusing on strong site attributes such as proximity to amenities and transportation networks, and ensuring that assets are well constructed with features that will appeal to tenants over long periods of time.
- TA Realty Funds X and XI — TA Realty has managed value-add, commingled real estate funds for approximately 30 years. They have investments in 35 markets, and 4 property types (office, industrial, multifamily, and retail). The firm has developed and refined a consistent approach focused on creating diversified real estate portfolios that can generate strong cash flow, benefit from an intensive asset management approach and result in the long-term creating of value of the life of the fund(s).
- LaSalle Funds V and VI — The Funds pursue non-core properties that exhibit strong fundamentals and are expected to generate both income and appreciation. The sectors that are focused on are office, multifamily, retail, industrial, and specialty.

Diversified Strategies

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

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

Note 4: Legally Required Reserves

A description of reserve accounts and their balances for the year ended June 30, 2017, are as follows:

The Member Deposit Account (MDA) represents members' contributions held in trust until their retirement, at which time contributions are transferred to the Retirement Reserve Account.

The MDA Interest Reserve represents the accumulated interest paid on the MDAs held in trust. As members retire, the interest on their contributions is transferred to the Retirement Reserve Account.

The Employers' Accumulation Account accumulates employers' contributions to be used in providing the reserves required for transfer to the Retirement Reserve Account as members retire or become eligible for disability benefits.

The Retirement Reserve Account is the account to which member contributions, interest on those contributions, and employer contributions are transferred upon member retirement.

The DROP Reserve Account is the account established for the accumulation of balances paid to members who have been approved by the ASPRS Board to participate in the DROP. When a member retires, these amounts can be paid to the member as a lump sum, transferred to an authorized account, or be received as an annuity.

The Deferred Annuity Account is the account established to cover estimated retirement benefits to inactive vested members who are not currently receiving benefit payments.

The Outlawed Warrants Reserve is a cumulative total of warrants not cashed in prior years that have been outlawed. These amounts will be paid if members request payment from the Arkansas State Claims Commission and the commission approves payment.

As of June 30, 2017*	Totals
Member Deposit Account Reserve	$ 569,087
MDA Interest Reserve	(31,300)
Employer Accumulation Account	38,096,455
Retirement Reserve Account	249,063,541
DROP Reserve Account	9,026,368
Deferred Annuity Reserve	2,799,872
Outlawed Warrants Reserve	1,095
Total	$ 299,525,117

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

Note 5: Net Pension Liability

The components of the net pension liability of the System as of the June 30 end of fiscal years 2016 and 2017 were as follows:

	FY 2017	FY 2016
Total Pension Liability	$ 437,870,023	$ 413,882,894
Fiduciary Net Position	$ 299,525,117	$ 272,920,012
Net Pension Liability	$ 138,344,906	$ 140,962,882
Fiduciary Net Position as a Percentage of Total Pension Liability	68.41%	65.94%

Actuarial Assumptions

The total pension liability was determined by an actuarial valuation as of June 30, 2017, using the following actuarial assumptions, applied to all periods included in the measurement:

Valuation Date	June 30, 2017
Actuarial Cost Method	Entry Age Normal Cost
Amortization Method	Level Percent-of-Payroll
Remaining Amortization Period	22-Year Closed
Asset Valuation Method	4-Year Smoothed Market
Actuarial Assumptions:	
Investment Rate of Return	7.15%
Projected Salary Increases	3.25% - 10.25%
Including Price Inflation at	3.25%
Cost-of-Living Increases	3.0% Annual Compound Increases
Retirees and Beneficiaries Receiving Benefits	650
Terminated Plan Members Entitled to But Not Yet Receiving Benefits	80
DROP Members	59
Active Plan Members	469
Total	1,258

Long-Term Expected Return on Plan Assets

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

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the current asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for the 10-year period from 2017 to 2025 were based upon capital market assumptions provided by the investment consultants. For each major asset class that is included in the Systems' current asset allocation as of June 30, 2017, these best estimates are summarized in the following table:

Asset Class	Current Allocation	Long-Term Expected Real Rate of Return
Broad Domestic Equity	37%	5.97%
International Equity	24	6.54
Real Assets	16	4.59
Absolute Return	5	3.15
Domestic Fixed	18	0.83
Total	100%	
Total Real Rate of Return		4.82%
Plus: Price Inflation - Actuary's Assumption		2.50
Less: Investment Expenses (Passive)		0.00
Net Expected Return		7.32%

For the year ended June 30, 2017, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 11.82%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Discount Rate

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

Sensitivity of the Net Pension Liability

The following presents the net pension liability of the System, calculated using the discount rate of 7.15%, as well as what the System's net pension liability would be if it were calculated using a discount rate that is one percentage point lower (6.15%) or one percentage point higher (8.15%)than the current rate:

	1% Decrease	Current Discount Rate	1% Increase
	6.15%	7.15%	8.15%
ASPRS	$ 189,590,841	$ 138,344,906	$ 95,445,084

Note 6: Deferred Retirement Option Plan

A Deferred Retirement Option Plan (DROP) is available to members of the System as authorized by A.C.A. §§ 24-4-801 - 24-4-806. In lieu of terminating employment and accepting a retirement benefit under the System, any member who has at least 28 years of actual service in the System can elect to participate in the DROP. The DROP allows a member to defer the receipt of retirement benefits for a maximum of seven years. During that time, a percentage of a member's chosen benefit is deposited into an account that accrues interest at a rate of 3.25% annually. The System had a balance of $9,026,368 in the DROP reserve as of June 30, 2017.

REQUIRED SUPPLEMENTARY INFORMATION

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

Schedule of Funding Progress

(dollars in millions)

Actuarial Valuation Date	Actuarial Valuation of Assets (a)	Entry Age AAL (b)	UAAL (b)-(a)	Funded Ratio (a)/(b)	Annual Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b-a)/(c)]
6/30/2008	$ 238.04	$ 320.10	$ 82.06	74.4%	$ 25.91	316.7%
6/30/2009#@	206.32	325.94	119.62	63.3	26.80	446.4
6/30/2010	211.07	333.60	122.53	63.3	28.51	429.7
6/30/2011	208.05	343.21	135.16	60.6	28.06	481.6
6/30/2012	215.01	355.30	140.29	60.5	28.43	493.5
6/30/2013@	233.15	361.46	128.31	64.5	28.01	458.1
6/30/2014@	259.46	381.86	122.40	67.9	28.55	428.7
6/30/2015@	274.83	398.96	124.14	68.9	29.93	414.8
6/30/2016	289.24	408.74	119.50	70.8	29.45	405.8
6/30/2017	305.85	416.56	110.72	73.4	29.08	380.8
6/30/2017@	$ 305.85	$ 431.88	$ 126.03	70.8%	$ 29.08	433.4%

After legislated changes in benefit provisions; @ After changes in actuarial assumptions or methods.
Please note that differences between columns designated (a) and (b) may not add to UAAL due to rounding.

Schedule of Employer Contributions
(in millions)

Year Ended June 30	Actuarially Determined Contribution	Actual Contribution*	Contribution Deficiency (Excess)	Covered Payroll	Actual Contribution as % of Covered Payroll
2008	$ 10.0	$ 11.7	$ (1.7)	$ 26.4	44.32
2009	10.5	12.1	(1.6)	27.6	43.84
2010	12.7	20.5	(7.8)	28.5	71.93
2011	12.6	14.1	(1.5)	28.2	50.00
2012	14.1	19.7	(5.6)	29.5	66.78
2013	13.6	19.5	(5.9)	28.1	69.40
2014	14.0	19.5	(5.5)	29.1	67.01
2015	14.2	19.8	(5.6)	29.9	66.22
2016	14.3	19.7	(5.4)	29.4	67.01
2017	$ 14.1	$ 20.0	$ (5.9)	$ 29.1	68.73%

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

Schedule of Changes in Net Pension Liability and Related Ratios

Year Ended June 30	2017	2016	2015	2014
Total Pension Liability				
Service Cost	$ 5,473,626	$ 5,488,445	$ 6,101,608	$ 4,866,199
Interest	30,322,786	29,469,678	29,218,802	28,558,511
Benefit Changes	0	0	0	0
Differences Between Expected And Actual Experience	(3,052,763)	1,757,687	(3,107,531)	(454,349)
Assumption Changes	15,875,267	0	8,703,080	8,970,858
Benefit Payments, including refunds of employee contributions	(24,631,787)	(26,035,466)	(23,358,801)	(21,688,239)
Net Change in Total Pension Liability	$ 23,987,129	$ 10,680,344	$ 17,557,158	$ 20,252,980
Total Pension Liability, Beginning of Year	413,882,894	403,202,550	385,645,392	365,392,412
Total Pension Liability, End of Year (A)	$ 437,870,023	$ 413,882,894	$ 403,202,550	$ 385,645,392
Fiduciary Net Position				
Contributions - Employer	$ 19,961,066	$ 19,713,295	$ 19,784,130	$ 19,501,684
Contributions - Member	0	0	94,814	0
Net Investment Income	31,484,250	(210,045)	6,131,684	43,307,746
Benefit Payments, including refunds of employee contributions	(24,631,787)	(26,035,466)	(23,358,801)	(21,688,239)
Administrative Expense	(208,424)	(205,342)	(196,231)	(189,658)
Other Additions	0	0	6	0
Net Change in Fiduciary Net Position	26,605,105	(6,737,558)	2,455,602	40,931,533
Fiduciary Net Position, Beginning of Year	$ 272,920,012	$ 279,657,570	$ 277,201,968	$ 236,270,435
Fiduciary Net Position, End of Year (B)	$ 299,525,117	$ 272,920,012	$ 279,657,570	$ 277,201,968
Net Pension Liability, End of Year (A) - (B)	$ 138,344,906	$ 140,962,882	$ 123,544,980	$ 108,443,424
Fiduciary Net Position as a Percentage of the Total Pension Liability	68.41%	65.94%	69.36%	71.88%
Covered-Employee Payroll	$ 29,076,764	$ 29,448,593	$ 29,929,358	$ 28,548,873
Net Pension Liability as a Percentage of Covered-Employee Payroll	475.79%	478.67%	412.79%	379.85%

Totals may not add due to rounding.

Schedule of Net Pension Liability

FY Ending June 30	Total Pension Liability	Fiduciary Net Position	Net Pension Liability	Fiduciary Net Position as a % of Total Pension Liability	Covered Payroll	Net Pension Liability as a % of Covered Payroll
2014	$385,645,392	$277,201,967	$108,443,425	71.88%	$28,548,873	379.85%
2015	$403,202,550	$279,657,570	$123,544,980	69.36%	$29,929,358	412.79%
2016	$413,882,894	$272,920,012	$140,962,882	65.94%	$29,448,593	478.67%
2017	$437,870,023	$299,525,117	$138,344,906	68.41%	$29,076,764	475.79%

Schedule of Investment Returns

Annual money-weighted rate of return, net of investment expense	
2014	18.75%
2015	2.26%
2016	(0.08)%
2017	11.82%

NOTES TO REQUIRED SUPPLEMENTARY INFORMATION

Schedule of Administrative Expenses

(for the fiscal year ended June 30, 2017)

	2017	2016
Communications		
Printing and Advertising	$ 2,458	$ 5,011
Services and Charges		
Professional Fees and Services	42,300	37,550
Conference Fees and Travel	469	491
Bank and Federal Service Charges	5,734	4,828
IRS Penalties	0	0
Total Services and Charges	48,503	42,868
Transfer to APERS for Administrative Expenses	157,463	157,463
Total Administrative Expenses	$ 208,424	$ 205,342

Schedule of Investment Expenses

(for the fiscal year ended June 30, 2017)

	2017	2016
Investment Consultant Fee	$ 9,526	$ 9,397
Money Manager Fees*	1,134,765	1,058,433
Custodian Bank Fees	13,428	17,945
Other Investment Expenses	161,500	30,631)
Total Investment Expenses#	$ 1,319,219	$ 1,116,406

*See the schedule of investment fees shown on page 77 in the Investments Section of this report.
#Total investment expenses include international withholding taxes, which are not included in the schedule of investment fees referenced above.

Payments for Professional Consultants

(for the fiscal year ended June 30, 2017)

	2017	2016
Gabriel, Roeder, Smith & Company	$ 42,300	$ 37,550

Totals may not add due to rounding.

INVESTMENTS

CHIEF INVESTMENT OFFICER'S REPORT

Dear Members,

Oh behalf of the investment department of the Arkansas State Police Retirement System (ASPRS), it is my pleasure to present the Investment Section of the ASPRS Annual Financial Report for the fiscal year ended June 30, 2017.

Performance and Stability

For fiscal year 2017, the ASPRS investment portfolio closed with total investments of $318,780,396. (This figure includes ASPRS cash and securities lending.) The investment return for the fiscal year was 12.30%.

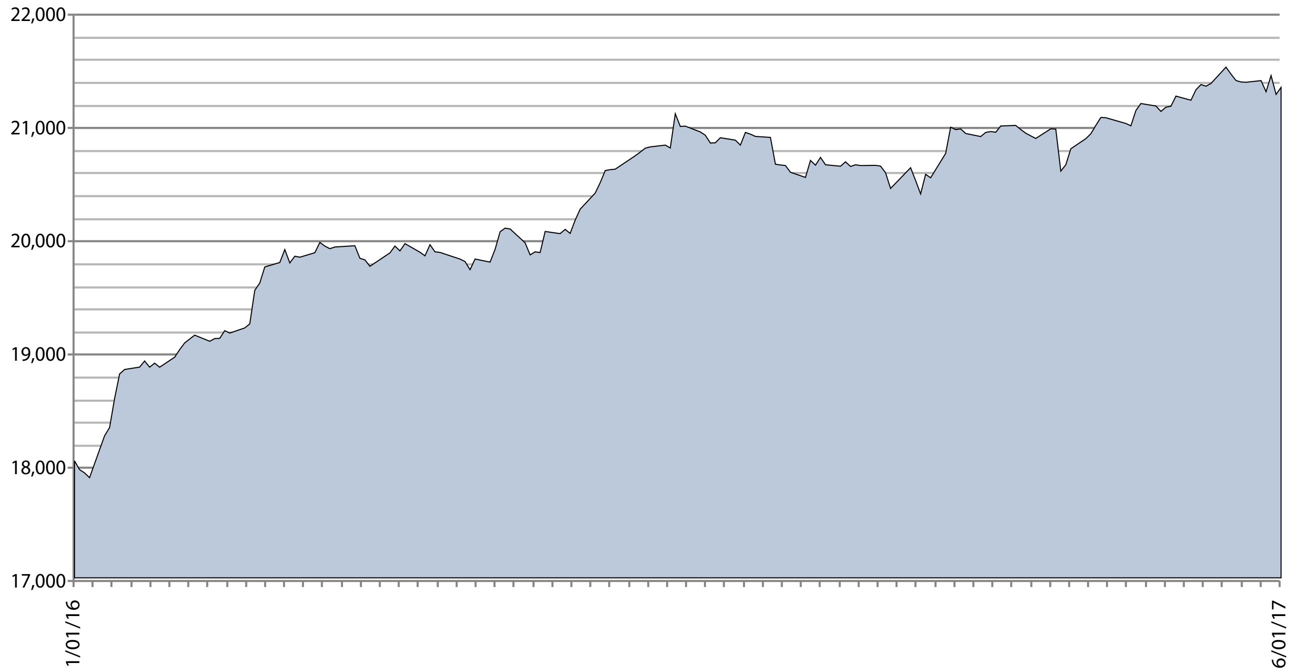
Fiscal Year 2017 Financial Market Recap

One of the last paragraphs that I wro te last year stated that the previous fiscal year was definitely volatile. The first two quarters of the fiscal year continued to see economic uncertainty. Geopolitical events as well as volatility across all asset classes, all major indices, and the currency markets have made the past fiscal year and the beginning of the upcoming fiscal year challenging. The Brexit vote and its repercussions were feared to be the most material exogenous shock to the global economy since the beginning of the post 2008 recovery.

When Donald Trump was elected to be the President of the U.S., it was definitely a watershed moment. His perceived economic platform had the equity markets extremely optimistic. The U.S. financial markets experienced a "Trump bump" as well as a "growth acceleration trade." The U.S. stock markets and interest rates both were propelled higher. The yield on the U.S. 10-year note rose 85bps. British 10-year GILTS rose 49bps, and the 10-year German Bund rose 33bps. The U.S. Federal Reserve tightened monetary policy and hiked the Fed Funds rates 25bps in the middle of December.

Other Central Banks remained in stimulation mode. The Bank of Japan was facing rising bond yields and reasserted its intent to maintain lower rates by offering to purchase unlimited quantities of JGBs of specific maturities and yields. The ECB announced it will trim its monthly bond purchasing program from €80 billion to €60 billion starting in March 2017 and also stated that the deflation risk "has largely disappeared."

U.S. labor conditions remained tight. The November unemployment rate fell to 4.6% . The U.S. had a third-quarter annualized GDP of 2.9%, which was the best in eight quarters. Europe's GDP for the same period was 1.2% annualized. At the end of November, OPEC agreed to cut oil production by 1.2million barrels a day. West Texas Intermediate (WTI) crude oil rallied through year-end. WTI closed the year at $54 which was a 45% increase for the year.



The first quarter of 2017 (third quarter of the fiscal year) saw the markets reassess the Trump bump. The administration strived to garner enough Republican support in the House of Representatives to repeal and replace Obamacare. "Repeal and replace" was the battle cry of the president's campaign, along with tax cuts, deregulation, and infrastructure spending. The financial markets reconsidered the timing and likelihood of the new administration's stimulative policies. The Federal Reserve raised the Fed Funds target in March which was widely expected. The FOMC also signaled that three more rate hikes are likely in 2017. The U.S. Treasury yield curve flattened.

Britain invoked Article 50 of the Lisbon Treaty which set the two-year Brexit process in motion. Inflation data crept up in a number of major markets. The U.S. core Personal Consumption Expenditure Index less food and energy exceeded the Fed's 2% target as it came in at 2.1%. The U.K came in at 2.3%, and Japan had its first back-to-back rise since 2015 as it came in at 0.2%. West Texas Intermediate closed at $47.73 which was down $11.15 for the quarter. The global markets kept a close eye on other elections, particularly in Europe. The defeat of Geert Wilders in the Netherlands was a positive for the capital markets, and the first round of the French presidential election impacted the sovereign debt markets. French candidate Marine Le Pen's rise caused spreads of French OATs (Obligations Assimilables du Tresor) to widen against German bunds.

The second quarter of 2017 (fourth quarter of the fiscal year) focused mostly on politics and central bank activity. The Federal Reserve laid out its plans to reduce its $4.5 trillion balance sheet. The tapering was

expected to start later in 2017. The Fed also raised the Fed Funds target rate to 1.25% at their June meeting, which was expected. The U.S. unemployment rate fell to 4.3%, which was a 16 year low.
As of June 30, there had not been any hard economic data to validate a "Trump bump." The new administration had not enacted any new tax cuts, begun any infrastructure expansion, or succeeded in repealing and replacing the Affordable Care Act. Despite the administration's inability to deliver on its platform promises, the markets continued to be focused on whether corporate earnings will continue to rise at a healthy clip in spite of what is going on inside the beltway and around the globe, which includes increased tension between the U.S. and North Korea, and the continuing conflict in Syria.

As I write this, global stocks have continued to grind higher in the third quarter of the year (the first quarter of the 2018 fiscal year), despite political turmoil in D.C., the volatile situation in the Middle East, and the increased Brexit uncertainty with investors apparently choosing to be optimistic about the proposed Republican tax plan, an increase in oil prices, buoyant job growth, and a somewhat positive global economic backdrop as we go into the final quarter of the calendar year.

Weather, geopolitics, and presidential tweets did cause some temporary strains. Hurricane Harvey devastated Houston. The Caribbean and Florida got slammed by Hurricanes Irma and Maria. Puerto Rico, a U.S. territory, took the brunt of the devastation. Tensions continue to escalate on the Korean peninsula as North Korea continued to test its nuclear arsenal and fired a missile over Japan prompting Trump to threaten "dire consequences" in a tweet.

The domestic equity markets have viewed the administration's proposed corporate tax cut favorably. The Dow Jones closed the fiscal year end (06/30/2017) at 21,068, and at the time of this letter, the DJIA has touched an all-time high of 23,485 during the month of October. However, political turmoil continues.

The special counsel continues to investigate Russia's meddling in the 2016 political election. Facebook, Google, and Twitter all testified before the Senate Intelligence Committee on how Russia may have used their social media platform to meddle in the election. Federal Reserve Chairperson Janet Yellen will not be reappointed to her position. President Trump has nominated Jerome Powell to be the next Chairperson. How will the markets react to a new Chairperson? He's not as dovish as Yellen.

Also, the most recent updated proposed tax reform could eliminate the deductions for medical and dental expenses, student loan interest, alimony, moving expenses, casualty, disaster & theft losses, and adoption, and it will eliminate the federal tax credit for electric cars. It will also cap the mortgage interest tax break as well as the deduction for property taxes. I am not quite sure how those recent proposals help the average working class American.

With all that said, can the financial markets continue on their upward trajectory? I am hopeful, but skeptical.

I would like to thank each member of the Board of Trustees, the ultimate fiduciaries of APERS, for embracing the current investment structure that allowed APERS to achieve strong results for our members and the Arkansas taxpayers. APERS' staff is committed to placing the System in the best position to continue to face the challenges of the global financial markets and to ensure that APERS' assets are positioned to provide long-term financial stability for you, the members.

Respectfully yours,

Carlos Borromeo
Chief Investment Officer

INVESTMENT POLICY SUMMARY

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

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

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

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

ASSET ALLOCATION

To avoid extreme exposure to investment risk, the following percentages represent the minimum and maximum portion at market of the portfolio that may be invested by types:

Market Value Exposure

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

The Board of Trustees of the Arkansas Public Employees Retirement System (the APERS Board) shall review its asset allocation at least annually to determine if the asset allocation is consistent with an acceptable level of risk and volatility.

Review of Investment Process

1. On a timely basis, at least twice a year, the APERS Board will review actual results achieved by the investment managers (with a perspective toward a three to five-year period or a peak-to-peak or trough-to-trough market cycle) to determine whether their performance

    a. followed the APERS' investment philosophy and policy guidelines,

    b. achieved the investment objectives, and

    c. compared satisfactorily with the performance of other similarly managed funds.

2. In addition to reviewing each investment manager's results, the APERS Board will periodically re-evaluate its progress in achieving its objectives for the total fund and its equity, fixed-income, and international equity segments.
3. The periodic re-evaluation will also consider the continuing appropriateness of

    a. the manager structure,

    b. the allocation of assets among the managers, and

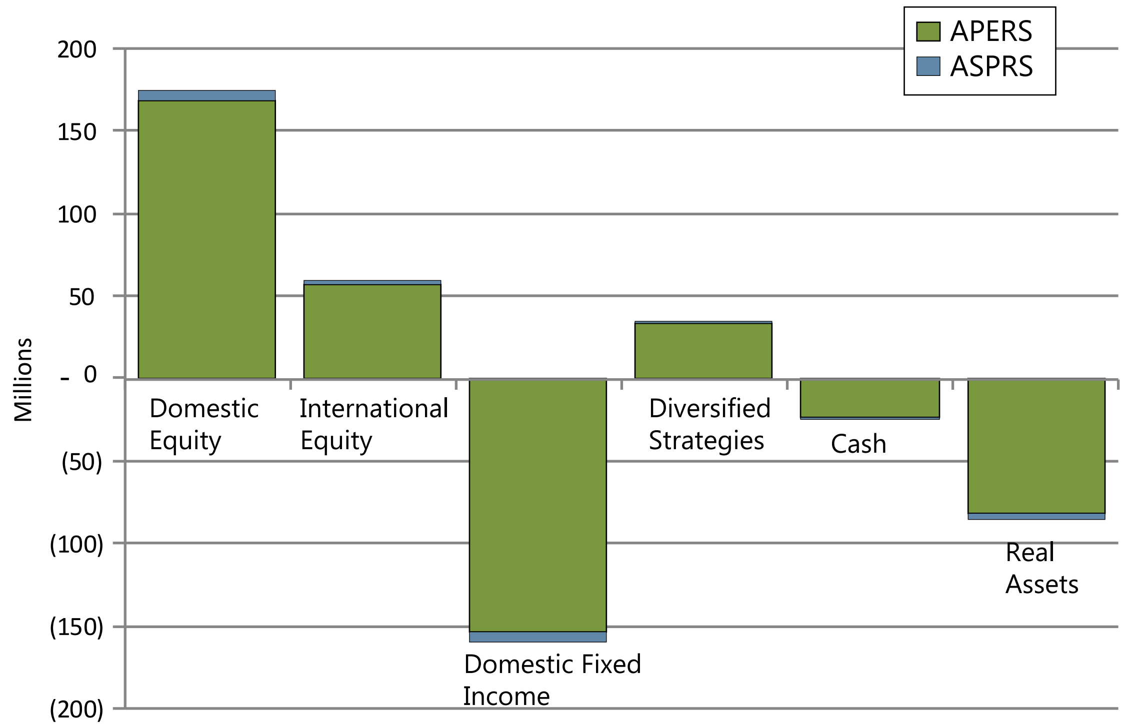
    c. the investment objectives for the fund's assets.

4. The APERS Board may appoint investment consultants to assist in the ongoing evaluation process. These consultants are expected to be familiar with the investment practices of other similar retirement plans and will be responsible for suggesting appropriate changes in the fund's investment program over time.

ASSET ALLOCATION

Actual vs. Target Allocation (as of June 30, 2017)

The current target and new target are as follows:



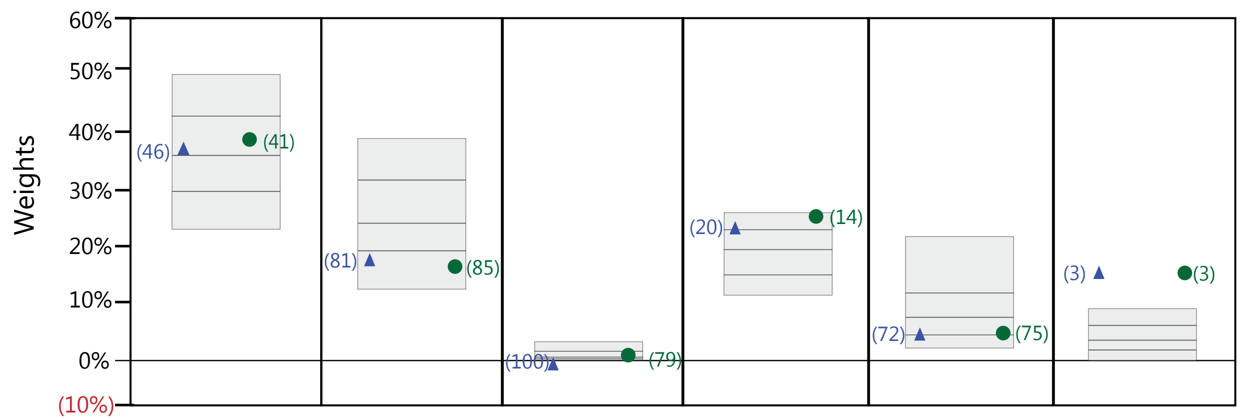
Asset Class	$000s Actual	ASPRS	Actual	Target	Difference	ASPRS Difference
Domestic Equity	$ 3,246,103	$ 114,616	39.1%	37.0%	2.1%	$ 6,165
Int'l Equity	2,051,253	72,428	24.7	24.0	0.7	2,081
Domestic Fixed Income	1,334,692	47,127	16.1	18.0	(1.9)	(5,634)
Other	34,991	1,235	0.4	0.0	0.4	1,235
Diversified Strategies	390,973	13,805	4.7	5.0	(0.3)	(851)
Real Assets	1,243,340	43,901	15.0	16.0	(1.0)	(2,997)
Total	$ 8,301,352	$ 293,112	100%	100%		

Asset Class	$000s Actual	APERS	Actual	Target	Difference	APERS Difference
Domestic Equity	$ 3,246,103	$ 3,131,487	39.1%	37.0%	2.1%	$ 168,438
Int'l Equity	2,051,253	1,978,825	24.7	24.0	0.7	56,847
Domestic Fixed Income	1,334,692	1,287,565	16.1	18.0	(1.9)	(153,917)
Other	34,991	33,756	0.4	0.0	0.4	33,756
Diversified Strategies	390,973	377,168	4.7	5.0	(0.3)	(23,243)
Real Assets	1,243,340	1,199,439	15.0	16.0	(1.0)	(81,880)
Total	$ 8,301,352	$ 8,008,240	100%	100%		

Totals may not add due to rounding.

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

Asset Class Weights vs Public Fund Sponsor Database



	Domestic Equity	Domestic Fixed-Income	Other	Intl Equity	Other Alternatives	Real Assets
10th Percentile	49.97	38.64	3.63	25.99	21.64	9.10
25th Percentile	43.28	32.01	2.19	23.11	11.99	6.18
Median	36.20	24.04	1.22	19.68	7.81	3.54
75th Percentile	29.84	19.32	0.55	15.51	4.72	2.14
90th Percentile	23.32	13.12	0.16	12.01	2.60	0.72
Fund ●	39.10	16.08	0.42	24.71	4.71	14.98
Target ▲	37.00	18.00	0.00	24.00	5.00	16.00
% Group Invested	98.70%	97.40%	70.13%	97.40%	46.91%	21.43%

SCHEDULE OF MANAGER DISTRIBUTION

As of June 30, 2017

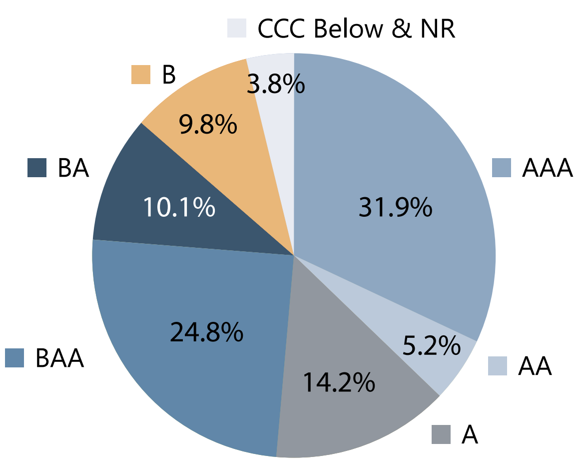
Asset Allocation	Market Value	Percent of Total	ASPRS	APERS
Domestic Equity				
MCM S&P 500 Index Fund	$ 732,005,778	8.82%	$ 25,846,348	$ 706,159,430
MCM RU2000 Value Fund	160,361,854	1.93	5,662,207	154,699,647
CastleArk Mgmt.	427,931,225	5.15	15,109,798	412,821,427
Golden Capital Mgmt.	170,908,085	2.06	6,034,583	164,873,502
INTECH	385,945,531	4.65	13,627,328	372,318,203
Wellington Mgmt. Co.	289,733,939	3.49	10,230,198	279,503,741
Westwood Mgmt.	161,499,149	1.95	5,702,364	155,796,785
Lazard Asset Mgmt.	294,409,296	3.55	10,395,280	284,014,016
SSI Investment Mgmt.	257,772,889	3.11	9,101,687	248,671,202
Horrell Capital Mgmt.	103,603,215	1.25	3,658,120	99,945,095
Stephens Inv. Mgmt. Group	261,931,927	3.16	9,248,539	252,683,388
	$ 3,246,102,888	39.10%	$ 114,616,452	$ 3,131,486,436
International Equity				
Lazard Asset Mgmt.	$ 425,227,749	5.12%	$ 15,014,341	$ 410,213,408
Artisan Partners	431,920,834	5.20	15,250,667	416,670,167
Baillie Gifford	423,209,321	5.10	14,943,073	408,266,248
Manning & Napier	366,447,288	4.41	12,938,865	353,508,423
Fidelity	404,447,700	4.87	14,280,620	390,167,080
	$ 2,051,252,892	24.71%	$ 72,427,565	$ 1,978,825,327
Fixed Income				
Doubleline Capital	$ 426,157,255	5.13%	$ 15,047,161	$ 411,110,094
MacKay Shields	449,990,314	5.42	15,888,681	434,101,633
Prudential Investments	458,544,429	5.52	16,190,718	442,353,711
	$ 1,334,691,998	16.08%	$ 47,126,560	$ 1,287,565,438
Real Assets				
INVESCO Real Estate	$ 406,694,193	4.90%	$ 14,359,941	$ 392,334,252
INVESCO Global REITS	150,396,193	1.81	5,310,330	145,085,863
TA Associates Realty Fund X	25,143,743	0.30	887,799	24,255,944
TA Associates Realty Fund XI	19,914,072	0.24	703,145	19,210,927
CastleArk Mgmt.	133,397,957	1.61	4,710,140	128,687,817
CastleArk Mgmt. Global Energy Fund	43,893,488	0.53	1,549,833	42,343,655
Pinnacle Forest Investments	111,906,523	1.35	3,951,301	107,955,222
Heitman Real Estate Trust LP	306,851,029	3.70	10,834,585	296,016,444
LaSalle Inc & Growth VI LP	16,559,308	0.20	584,692	15,974,616
LaSalle Inc & Growth VII LP	28,583,023	0.34	1,009,236	27,573,787
	$ 1,243,339,529	14.98%	$ 43,901,001	$ 1,199,438,528
Diversified Strategies				
AQR Capital	$ 116,653,217	1.41%	$ 4,118,901	$ 112,534,316
Blackstone Hedge	165,045,201	1.99	5,827,571	159,217,630
Newton Capital	109,274,962	1.32	3,858,383	105,416,579
	$ 390,973,380	4.71%	$ 13,804,856	$ 377,168,524
Short-term Investment Fund*	$ 34,991,434	0.42%	$ 7,313,772	$ $27,667,053
Composite Fund	$ 8,301,352,121	100.00%	$ 299,190,206	$ 8,002,151,307

*Includes UBS receivables for APERS only for $10,680. Totals may not add due to rounding.

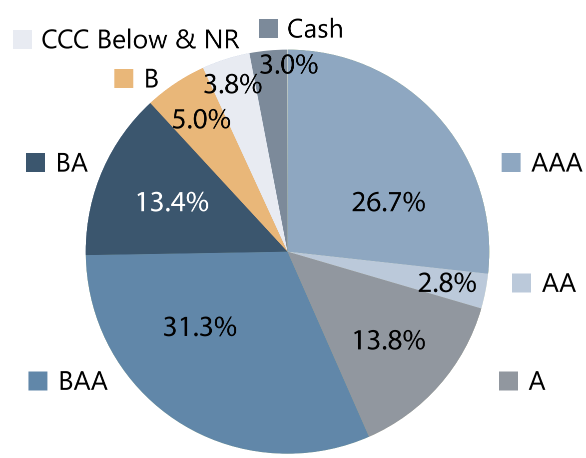
PORTFOLIO CHARACTERISTICS
(for fiscal years ended June 30, 2016 - 2017)

	2017	2016
Selected Bond Characteristics		
Yield to Maturity (Market)	3.29%	3.50%
Current Yield	3.51%	5.06%
Average Coupon Rate	3.46%	3.82%
Average Maturity	7.72 yrs.	7.54 yrs.
Quality Breakdown		
AAA (Includes Govts. & Agencies)	45.3%	31.9%
AA	4.6%	5.2%
A	12.2%	14.2%
BAA	22.7%	24.8%
BA	7.2%	10.1%
B	5.6%	9.8%
CCC Below & NR	2.4%	3.8%
Selected Stock Characteristics		
Average P/E Ratio	25.96x	24.17x
Estimated Earnings Growth Rate (Next 5 Years)	14.09%	13.14%
Current Yield	1.60%	1.70%

Quality Breakdown 2016



Quality Breakdown 2015



SCHEDULE OF COMPARATIVE INVESTMENT RESULTS BY YEAR
(for fiscal years ended on June 30, 2013 - 2017)

	2017	2016	2015	2014	2013
Total Fund					
Arkansas Public Employees Retirement System	12.30%	0.30%	2.67%	19.68%	15.58%
Callan Total Public Fund Median	12.42	0.54	3.24	16.30	11.98
Inflation (Consumer Price Index)	1.50	0.64	(0.38)	2.04	1.75
Equities					
Arkansas Public Employees Retirement System	17.52%	(0.38)%	7.25%	24.48%	20.99%
Callan Total Equity Database Median	19.48	(1.58)	7.17	25.26	22.83
Russell 3000 Index	18.51	2.14	7.29	25.22	21.46
International Equities					
Arkansas Public Employees Retirement System	18.39%	(6.88)%	(2.38)%	24.43%	20.88%
Callan Total Non-U.S. Equities Database Median	20.86	(8.20)	(1.80)	23.34	18.85
MSCI-EAFE Index	20.27	(10.16)	(4.22)	23.57	18.62
Fixed Income					
Arkansas Public Employees Retirement System	3.04%	5.06%	1.32%	7.03%	3.51%
Callan Total Fixed Income Database Median	1.16	4.48	1.59	5.54	0.91
Barclays Capital Aggregate Index	(0.31)	6.00	1.86	4.37	(0.69)
Diversified Strategies					
Arkansas Public Employees Retirement System	5.51%	2.86%	1.97%	13.91%	9.73%
Callan Int'l/Global Balanced Database Median	7.54	(1.73)	0.59	13.59	7.76
Real Assets					
Arkansas Public Employees Retirement System	3.27%	8.29%	0.19%	14.51%	10.26%
Consumer Price Index - U + 4%	5.63	5.01	4.13	6.07	5.76

SCHEDULE OF COMPARATIVE ANNUALIZED INVESTMENT RESULTS

(for the fiscal year ended June 30, 2017 and the preceding 3-year and 5-year rates of return)

	2017	3-Year Annualized	5-Year Annualized
Total Fund			
Arkansas Public Employees Retirement System	12.30%	4.96%	9.85%
Callan Total Public Fund Median	12.42	5.30	8.78
Inflation (Consumer Price Index)	1.50	0.58	1.11
Equities			
Arkansas Public Employees Retirement System	17.52%	7.88%	13.59%
Callan Total Equity Database Median	19.48	8.33	14.54
Russell 3000 Index	18.51	9.10	14.58
International Equities			
Arkansas Public Employees Retirement System	18.39%	2.48%	10.11%
Callan Total Non-U.S. Equities Database Median	20.86	3.13	9.92
MSCI-EAFE Index	20.27	1.15	8.69
Fixed Income			
Arkansas Public Employees Retirement System	3.04%	3.13%	3.98%
Callan Total Fixed Income Database Median	1.16	2.89	3.09
Bloomberg Aggregate Index	(0.31)	2.48	2.21
Diversified Strategies			
Arkansas Public Employees Retirement System	5.51%	3.43%	6.70%
Callan International/Global Balanced Database Median	7.54	2.84	5.69
Real Assets			
Arkansas Public Employees Retirement System	3.27%	3.87%	7.18%
Consumer Price Index - U + 4%	5.63	4.92	5.32

Source: Callan Associates Inc. (CAI database contains returns of over 115 Public retirement funds.)
Returns are reported gross of fees.

TEN LARGEST HOLDINGS*
(as of June 30, 2017)

Domestic Fixed Income Holdings	Par Value	Market Value	ASPRS	APERS
U.S. Treasury 2.00% 08/31/2021	$ 15,420,000	$ 15,555,542	$ 549,250	$ 15,006,292
U.S. Treasury 1.75% 03/31/2022	15,100,000	15,022,084	530,414	14,491,670
U.S. Treasury 2.00% 11/30/2020	14,210,000	14,377,110	507,641	13,869,469
U.S. Treasury 2.75% 11/15/2042	13,345,000	13,186,595	465,605	12,720,990
U.S. Treasury 1.625% 05/15/2026	12,480,000	11,831,664	417,764	11,413,900
U.S. Treasury 2.125% 02/29/2024	10,700,000	10,712,947	378,263	10,334,684
FNMA 2.50% 07/01/2046 Pool #0BE0484	10,743,597	10,265,614	362,468	9,903,146
FHLMC 3.50% 11/01/2046 Pool #G6-0933	9,951,023	10,259,405	362,249	9,897,156
U.S. Treasury 2.875% 08/15/2045	9,925,000	9,980,481	352,400	9,628,081
FHLMC 3.00% 03/01/2042 Pool #G6-0910	9,873,686	9,907,454	349,822	9,557,632
Total		$ 121,098,895	$ 4,275,874	$ 116,823,022

Domestic Equity Holdings	Shares	Market Value	ASPRS	APERS
Applied Materials Inc.	391,675	$ 16,180,094	$ 571,302	$ 15,608,792
Johnson & Johnson	122,234	16,170,336	570,957	15,599,378
Visa Inc.	168,644	15,815,434	558,426	15,257,008
The Charles Schwab Corp.	355,080	15,254,237	538,611	14,715,626
United Parcel Service Inc.	128,896	14,254,609	503,315	13,751,294
CME Group Inc.	111,300	13,939,212	492,179	13,447,033
EOG Resources Inc.	153,595	13,903,419	490,915	13,412,504
The Coca-Cola Company	305,729	13,711,946	484,154	13,227,791
Alphabet Inc. - Class C	14,308	13,002,109	459,091	12,543,018
Facebook Inc.	85,634	12,929,021	456,510	12,472,511
Total		$ 145,160,417	$ 5,125,460	$ 140,034,957

International Equity Holdings	Shares	Market Value	ASPRS	APERS
Medtronic PLC	585,338	$ 51,948,748	$ 1,834,255	$ 50,114,492
Samsung Electronics Co. Ltd.	15,154	31,482,801	1,111,624	30,371,177
Baidu Inc.	137,825	24,651,380	$870,414	23,780,965
Compass Group PLC	1,162,625	24,465,106	$863,837	23,601,269
Carlsberg A/A	228,843	24,415,584	$862,088	23,553,495
Diageo PLC	786,366	23,171,596	$818,164	22,353,431
UBS Group AG	1,183,139	20,063,883	$708,434	19,355,448
Nestle SA	226,280	19,718,129	$696,226	19,021,903
CIE Financiere Richemont SA	238,893	19,707,145	$695,838	19,011,306
Anheuser-Busch Inbev SA/NV	173,756	19,165,737	$676,722	18,489,015
Total		$ 258,790,107	$ 9,137,604	$ 249,652,502

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

SCHEDULE OF BROKERAGE COMMISSIONS

for the fiscal year ended of June 30, 2017)

Brokerage Firm	Number of Shares Traded	Total Commission	Commission Per Share	ASPRS	APERS
Citation Group/BCC Clrg, New York	5,728,275	$ 273,451	$ 0.048	$ 9,655	$ 263,795
J.P. Morgan Securities	8,217,462	233,654	0.028	8,250	225,404
Credit Suisse New York, London, & Melbourne	6,105,105	158,481	0.026	5,596	152,885
Merrill Lynch Pierce Fenner Smith Inc.	8,812,921	137,809	0.016	4,866	132,943
Bloomberg Tradebook, New York	4,620,913	137,694	0.030	4,862	132,832
Goldman Sachs International	6,000,763	123,475	0.021	4,360	119,115
UBS Securities	5,147,864	115,209	0.022	4,068	111,141
Sanford Bernstein & Co., NY	7,394,335	100,864	0.014	3,561	97,303
Morgan Stanley & Co. Inc.	13,449,804	97,362	0.007	3,438	93,925
Citigroup Global Markets Ltd.	5,134,389	96,686	0.019	3,414	93,273
Deutsche Bank Securities	5,169,569	89,691	0.017	3,167	86,524
Jefferies & Co.	4,214,911	85,659	0.020	3,025	82,634
Barclays Capital	4,076,776	73,307	0.018	2,588	70,719
Instinet Corp.	3,058,121	71,495	0.023	2,524	68,970
Capital Institutional Services, Inc.	1,549,223	62,345	0.040	2,201	60,144
Williams Capital Group LP	1,866,923	56,040	0.030	1,979	54,062
SG Americas Securities LLC	1,766,549	55,743	0.032	1,968	53,775
Investment Technology Group	2,673,407	55,516	0.021	1,960	53,556
Piper Jaffray & Co.	1,694,425	54,151	0.032	1,912	52,239
National Financial Services Corp.	1,853,247	52,951	0.029	1,870	51,081
Rosenblatt Securities LLC	1,434,540	40,805	0.028	1,441	39,364
William Blair & Co.	1,264,350	38,035	0.030	1,343	36,692
Robert W. Baird & Co.	987,729	36,219	0.037	1,279	34,940
CDH Securities LLC	1,111,800	33,354	0.030	1,178	32,176
Stifel, Nicolaus & Co.	886,737	33,042	0.037	1,167	31,875
Others (including 147 brokerage firms)	34,560,254	807,654	0.023	28,517	779,137
	138,780,392	$ 3,120,693		$ 110,188	$ 3,010,504

Totals may not add due to rounding.

SCHEDULE OF INVESTMENT FEES (as of June 30, 2017)

	Market Value	Fee	Basis Points	ASPRS Market Value	ASPRS Fee	APERS Market Value	APERS Fee
Domestic Equity							
MCM S&P 500 Index Fund	$ 732,005,778	$ 156,709	35	$ 25,846,348	$ 5,533	$ 706,159,430	$ 151,176
MCM RU2000 Value Fund	160,361,854	10,998	20	5,662,207	388	154,699,647	10,609
*Lombardia Capital	0	695,099	70	0	24,543	0	670,556
CastleArk Mgmt.	427,931,225	1,321,668	35	15,109,798	46,667	412,821,427	1,275,001
Golden Capital Mgmt.	170,908,085	369,231	22.5	6,034,583	13,037	164,873,502	356,194
INTECH	385,945,531	1,459,008	48	13,627,328	51,516	372,318,203	1,407,492
Wellington Mgmt. Co.	289,733,939	844,368	30	10,230,198	29,814	279,503,741	814,555
Westwood Mgmt.	161,499,149	965,142	25	5,702,364	34,078	155,796,785	931,064
Lazard Asset Mgmt.	294,409,296	852,479	30	10,395,280	30,100	284,014,016	822,379
SSI Investment Mgmt.	257,772,889	981,520	40	9,101,687	34,656	248,671,202	946,864
Horrell Capital Mgmt.	103,603,215	178,326	20	3,658,120	6,296	99,945,095	172,029
Stephens Inv. Mgmt. Group	261,931,927	1,694,796	77	9,248,539	59,841	252,683,388	1,634,955
Total Domestic Equity	$ 3,246,102,888	$ 9,529,344		$ 114,616,452	$ 336,471	$ 3,131,486,436	$ 9,192,873
International Equity							
Lazard Asset Mgmt.	$ 425,227,749	$ 1,187,084	65	$ 15,014,341	$ 41,915	$ 410,213,408	$ 1,145,170
Artisan Partners	431,920,834	2,250,809	55	15,250,667	79,474	416,670,167	2,171,336
Baillie Gifford	423,209,321	1,648,393	44	14,943,073	58,203	408,266,248	1,590,190
Manning & Napier	366,447,288	1,751,693	50	12,938,865	61,850	353,508,423	1,689,842
Fidelity	404,447,700	738,993	20	14,280,620	26,093	390,167,080	712,900
Total International Equity	$ 2,051,252,892	$ 7,576,973		$ 72,427,565	$ 267,535	$ 1,978,825,327	$ 7,309,438
Fixed Income							
Doubleline Capital	$ 426,157,255	$ 240,752	20	$ 15,047,161	$ 8,501	$ 411,110,094	$ 232,251
#MacKay Shields CP I	0	568,368	20	15,888,681	20,068	434,101,633	548,299
MacKay Shields CP II	449,990,314	660,352	15	0	23,316	0	637,036
Prudential Investments	458,544,429	896,078	20	16,190,718	31,640	442,353,711	864,438
Total Fixed Income	$ 1,334,691,998	$ 2,365,550		$ 47,126,560	$ 83,525	$ 1,287,565,438	$ 2,282,025
Real Assets							
INVESCO Real Estate	$ 406,694,193	$ 1,335,987	33	$ 14,359,941	$ 47,172	$ 392,334,252	$ 1,288,814
INVESCO GLOBAL REITS	150,396,193	886,972	59	5,310,330	31,318	145,085,863	855,654
+TA Associates Realty Fund X	25,143,743	908,016	200	887,799	32,061	24,255,944	875,955
+TA Associates Realty Fund XI	19,914,072	380,780	190	703,145	13,445	19,210,927	367,335
#CastleArk Mgmt AR Energy Fund	0	536,708	125	0	18,951	0	517,758
CastleArk Mgmt. Global Energy Plus	133,397,957	363,302	100	4,710,140	12,828	128,687,817	350,475
CastleArk Mgmt. Global Energy Fund	43,893,488	1,028,298	100	1,549,833	36,308	42,343,655	991,990
Pinnacle Forest Investments	111,906,523	1,030,157	90	3,951,301	36,374	107,955,222	993,783
Heitman Real Estate Trust LP	306,851,029	2,122,526	69	10,834,585	74,944	296,016,444	2,047,582
+LaSalle Inc & Growth VI LP	16,559,308	264,648	159	584,692	9,344	15,974,616	255,304
+LaSalle Inc & Growth VII LP	28,583,023	680,839	238	1,009,236	24,040	27,573,787	656,800
Total Real Assets	$ 1,243,339,529	$ 9,538,234		$ 43,901,001	$ 336,785	$ 1,199,438,528	$ 9,201,449
Diversified Strategies							
AQR Capital	$ 116,653,217	$ 755,275	72	$ 4,118,901	$ 26,668	$ 112,534,316	$ 728,607
Blackstone Hedge	165,045,201	1,610,547	100	5,827,571	56,867	159,217,630	1,553,680
Newton Capital	109,274,962	674,491	70	3,858,383	23,816	105,416,579	650,676
Total Diversified Strategies	$ 390,973,380	$ 3,040,313		$ 13,804,856	$ 107,350	$ 377,168,524	$ 2,932,963
Other Investment Service Fees							
Bank of New York Mellon (Custodian)		$ 510,989			$ 18,042		$ 492,946
Callan Associates (Consultant)		278,370			9,829		268,541
		789,359			70,171		761,487
Total Investment Service Fees		$ 32,839,773			$ 1,159,538		$ 31,680,236

* Terminated manager / # terminated strategy / + management fee is base fee plus performance fee

ACTUARIAL

ACTUARY'S CERTIFICATE LETTER

GRS Retirement Consulting

800.521.0498 | P: 248.799.9000 | F: 248.799.9020 | www.grsconsulting.com

November 21, 2017

Board of Trustees
Arkansas State Police Retirement System
Little Rock, Arkansas

Dear Board Members:

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

We performed an actuarial valuation and issued an actuarial valuation report for ASPRS as of June 30, 2017. The purpose of the June 30, 2017 annual actuarial valuation was to determine the contribution requirements for the fiscal year ending June 30, 2018 and to measure the System's funding progress. The actuarial valuation report should not be relied upon for any other purpose. The valuation process develops contribution rates that are sufficient to fund the plan's normal cost (i.e., the cost assigned by the valuation method to the year of service about to be rendered) as well as to fund unfunded actuarial accrued liabilities as a level percent of active member payroll over a period of up to thirty years. The most recent valuations were completed based upon population data, asset data, and plan provisions as of June 30, 2017. In addition, a separate report was issued (dated November 13, 2017) to provide actuarial information for GASB Statement No. 67 and GASB Statement No. 68.

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

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

Actuarial Section

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

Board of Trustees
November 21, 2017
Page 2

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

For actuarial valuation purposes, assets are valued on a market related basis that recognizes each year's difference between actual and assumed investment return over a closed four-year period.

Actuarial valuations are based upon assumptions regarding future activity in specific risk areas including the rates of investment return and payroll growth, eligibility for the various classes of benefits, and longevity among retired lives. These assumptions are adopted by the Board after considering the advice of the actuary and other professionals. The assumptions and the methods comply with the requirements of the Actuarial Standards of Practice. Each actuarial valuation takes into account all prior differences between actual and assumed experience in each risk area and adjusts the contribution rates as needed. The June 30, 2017 valuations were based upon assumptions that were recommended in connection with a study of experience covering the period 2006-2012 and a subsequent economic assumption study. The investment return assumption was changed for the June 30, 2017 valuation.

The computed employer contribution rate to satisfy the statutory funding requirements set forth in Section 24-6-209 of the Arkansas Code is 52.01% of covered payroll for the year beginning July 1, 2017. Actual revenues were greater than the statutory requirement for the last 10 years. ***ASPRS' on-going ability to satisfy statutory funding requirements is dependent upon its access to sufficient annual transfers from the remainder of insurance premium taxes enumerated in A.C.A.19-6-301(27) to finance unfunded actuarial accrued liabilities over a closed period of 22 years.***

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

The signing individuals are independent of the plan sponsor.

Mita D. Drazilov is a Member of the American Academy of Actuaries (MAAA) and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

Respectfully submitted,

Mita Drazilov

Mita D. Drazilov, ASA, FCA, MAAA

David L. Hoffman

David L. Hoffman

SUMMARY OF ACTUARIAL ASSUMPTIONS*

Economic Assumptions

The investment return rate used in making the valuation was 7.15% per year, compounded annually (net after investment expenses). The assumed real rate of return is the portion of investment return which is more than the wage inflation rate. Considering assumed wage inflation of 3.25%, the 7.15% investment return rate translates to an effective assumed real rate of return of 3.90%. The wage inflation assumption was revised for the June 30, 2015 valuation and the investment assumption was revised for the June 30, 2017 valuation.

Pay increase assumptions for individual active members are shown on page D-5. Part of the assumption for each age is for a merit and/or seniority increase, and the other 3.25% recognizes wage inflation. The wage inflation assumption consists of 2.5% for price inflation and 0.75% for real wage growth. The pay increase assumption for individual active members was revised for the June 30, 2015 valuation.

Total active member payroll is assumed to increase 3.25% a year, which is the portion of the individual pay increase assumptions recognizing wage inflation.

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

Non-Economic Assumptions

used to measure retired life mortality were the RP-2000 Combined Healthy Mortality Table, Projected to 2020 using Projection Scale BB, set-forward 2 years for males and 1 year for females. Related values are shown on page D-3. Disability post-retirement mortality was assumed to be the same as standard post-retirement mortality set forward an additional 10 years. Based upon the experience observed during the most recent experience study, it appears that at the time of the study, the current table provides for an approximate 14% margin for future mortality improvement. Pre-retirement mortality rates are assumed to be 50% of post-retirement mortality rates. The mortality assumption was revised for the June 30, 2013 valuation.

The probabilities of retirement for members eligible to retire are shown on page D-4. The assumption was revised for the June 30, 2013 valuation.

The probabilities of death-in-service, disability and withdrawal from service are shown for sample ages on page D-5. The assumption for death-in-service was revised for the June 30, 2013 valuation.

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

*The data referenced in this section is taken from the actuary's report, *Arkansas State Police Retirement System Actuarial Valuation and the Gain/(Loss) Analysis of Experience, June 30, 2017*, prepared by Gabriel Roeder Smith & Co. A PDF copy of the report is available for download at www.apers.org.

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

Unfunded actuarial accrued liabilities are amortized to produce contribution amounts (principal & interest) which are level percent-of-payroll contributions.

Present assets (cash & investments) were valued on a market related basis in which differences between actual and assumed returns are phased-in over a four year period.

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.

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

SUPPLEMENTARY INFORMATION

The information presented in the required supplementary schedules was determined as part of the actuarial valuations at the dates indicated. Additional information as of the latest valuation date follows:

Valuation Date	June 30, 2017
Actuarial Cost Method	Entry Age Normal Cost
Amortization Method	Level Percent-of-Payroll
Remaining Amortization Period	22-Year Closed
Asset Valuation Method	4-Year Smoothed Market
Actuarial Assumptions:	
Investment Rate of Return	7.15%
Projected Salary Increases	3.25% - 10.25%
Including Wage Inflation at	3.25%
Cost-of-Living Adjustments	3.0% Annual Compound Increases
Retirees and Beneficiaries Receiving Benefits	650
Terminated Plan Members Entitled to But Not Yet Receiving Benefits	80
DROP Members	59
Active Plan Members	469
Total	1,258

SINGLE LIFE RETIREMENT VALUES

Sample Attained Ages	Present Value of $1.00 Monthly for Life Increasing 3% Annually		Future Life Expectancy (Years)	
	Men	Women	Men	Women
50	$ 203.71	$ 215.32	31.13	34.64
55	186.13	199.31	26.58	29.98
60	166.56	180.97	22.23	25.44
65	145.34	160.75	18.14	21.14
70	122.67	139.27	14.35	17.16
75	99.59	117.12	10.95	13.56
80	77.21	94.80	8.02	10.35

Sample Attained Ages	$100 Benefit Increasing 3% Yearly
55	$100.00
60	115.93
65	134.39
70	155.79
75	180.60
80	209.36

SEPARATIONS FROM ACTIVE EMPLOYMENT BEFORE AGE AND SERVICE RETIREMENT
(as of June 30, 2017)

Sample Ages	Percentage of Active Members Separating Within the Next Year			
	Death			
	Men	Women	Disabilty	Other
20	0.02%	0.01%	0.06%	5.50%
25	0.02	0.01	0.09	5.50
30	0.03	0.01	0.19	5.50
35	0.04	0.02	0.31	4.18
40	0.06	0.04	0.43	2.64
45	0.08	0.06	0.55	1.43
50	0.13	0.09	0.67	0.55
55	0.22	0.14	0.79	0.00

PAY INCREASE ASSUMPTIONS FOR ACTIVE MEMBERS

Merit & Seniority	Base (Economic)	Increase Next Year
6.29%	3.25%	9.54%
5.39	3.25	8.64
4.01	3.25	7.26
2.29	3.25	5.54
1.50	3.25	4.75
1.10	3.25	4.35
0.80	3.25	4.05
0.60	3.25	3.85

PROBABILITIES OF RETIREMENT FOR MEMBERS ELIGIBLE TO RETIRE
(as of June 30, 2017)

	Percent of Eligible Active Members Retiring Within Next Year			Percent of Eligible Active Members Retiring Within Next Year
Retirement Ages	Tier One	Tier Two	Years of Service	Tier Two
47	2%			
48	2			
49	2			
50	6	2%	30	25%
51	6	2	31	15
52	10	2	32	15
53	10	6	33	20
54	10	6	34	35
55	10	25	35	40
56	10	20	36 & Over	100
57	15	18		
58	20	18		
59	35	20		
60	40	25		
61	50	30		
62	60	100		
63	80	100		
64	100	100		
65	100	100		

A member is assumed to be eligible to retire at age 52 (55 for Tier Two) with 17 years of service, or at any age with 30 years of service (Tier Two). A member is assumed to be eligible to retire early at age 47 (50 for Tier 2) with 17 years of service. For a Tier 2 member with 30 or more years of service at the beginning of a year, the percentages shown for service based retirement (30 or more years) take precedence over the percentages associated with age based retirement.

It was assumed that members eligible to enter the DROP will do so to maximize the value of their benefits.

ACTIVE MEMBERS IN ACTUARIAL VALUATION
(as of June 30, 2017)

		Group Averages		
June 30	Number*	Age	Service	Pay
2008	555	41.3 yrs	14.1 yrs	$ 46,687
2009	539	42.0	15.0	49,714
2010	545	42.0	14.3	52,318
2011	530	42.0	14.4	52,950
2012	534	41.6	13.9	53,236
2013	525	41.6	13.9	53,344
2014	530	41.6	13.9	53,866
2015	558	41.0	13.0	53,637
2016	554	40.9	13.1	53,156
2017	528	41.7	13.8	55,070

* Includes DROP participants.

TIER ONE AND TIER TWO PARTICIPANTS
(as of June 30, 2017)

		Group Averages		
	Number	Age	Service	Pay
Tier One	58	49.6	22.1	$ 67,533
Tier One - DROP	59	55.7	34.4	73,321
Tier Two	411	38.6	9.6	50,691
Total	528	41.7	13.8	$ 55,070

SHORT CONDITION TEST

The Arkansas SPRS 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 system's present assets (cash and investments) are compared with

- Member accumulated contributions;
- The liabilities for future benefits to present retired lives; and
- The employer financed portion of liabilities for service already rendered by nonretired members.

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

Ten-Year Comparative Statement
(dollars in millions)

	Entry Age Accrued Liability				Portion of Present Values Covered By Valuation Assets			
Valuation Date: June 30	(1) Active Member Contributions	(2) Retirees and Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation Assets	(1)	(2)	(3)	Total
		($ in Millions)						
2008	$ 0.44	$ 167.93	$ 151.73	$238.04	100%	100%	46%	74%
2009#@	0.45	169.43	156.06	206.32	100	100	23	63
2010	0.35	179.38	153.87	211.07	100	100	20	63
2011	0.28	205.40	137.53	208.05	100	100	2	61
2012	0.31	217.64	137.35	215.01	100	99	0	61
2013@	0.53	227.80	133.13	233.15	100	100	4	65
2014@	0.50	237.17	144.19	259.46	100	100	15	68
2015*	0.37	252.79	145.80	274.83	100	100	15	69
2016	0.57	260.49	147.68	297.91	100	100	19	71
2017	0.57	268.79	147.20	305.85	100	100	25	73
2017@	$ 0.57	$ 277.14	$ 154.17	$ 305.85	100%	100%	18%	71%

After legislated changes in benefit provisions
@ After changes in actuarial assumptions and/or methods
* (1) was estimated based on reported member contribution balances received by the actuary from ASPRS.

DERIVATION OF EXPERIENCE GAIN/(LOSS)
(as of June 30, 2017)

Actual experience will not (except by coincidence) match assumed experience. Gains and losses often cancel each other over a period of years, but sizable year-to-year fluctuations are common. Detail on the derivation of the experience gain/loss is shown below.

		(dollar figures in 1000's)
1.	UAAL* at Start of Year	$ 119,502
2.	Normal Cost from Last Valuation	6,202
3.	Employer Contributions	19,961
4.	Interest accrual: (1) x 0.075 + ((2) - (3)) x 0.0375	8,447
5.	Expected UAAL Before Changes: (1) + (2) - (3) + (4)	114,190
6.	Change for Revised Actuarial Assumptions and/or Valuation Methods	15,313
7.	Change from Benefit Changes	0
8.	Expected UAAL After Changes: (5) + (6) + (7)	129,503
9.	Actual UAAL at End of Year	126,030
10.	Gain/loss: (8) - (9)	$ 3,473
11.	Gain/Loss as Percentage of Actuarial Accrued Liabilities at Start of Year	0.8%

* Unfunded Actuarial Accrued Liability

ANALYSIS OF EXPERIENCE - GAINS/(LOSSES) BY RISK AREA

(during the period July 1, 2016 to June 30, 2017)

	Gain/Loss in Period	
Type of Risk Area	Total ($ in millions)	% of Accrued Liabilities
Economic Risk Areas		
Pay Increases: If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	$ 2.1	0.5%
Investment Return: If there is greater recognized investment return than assumed, there is a gain. If less return, a loss.	0.0	0.0
Non-Economic Risk Areas		
Age & Service Retirements: If members retire at older ages or with lower final average pays than assumed, there is a gain. If they retire at younger ages or higher average pays, a loss.	(1.4)	(0.3)
Disability Retirements: If there are fewer disabilities than assumed, there is a gain. If more, a loss.	0.1	0.0
Death-in-Service Benefits: If there are fewer claims than assumed, there is a gain. If more, a loss.	0.0	0.0
Withdrawal: If more liabilities are released by other separations than assumed, there is a gain. If smaller releases, a loss.	(0.3)	(0.1)
Actuarial Gains/(Losses)	$ 0.5	0.1%
Other (gains and losses resulting from group size change, data adjustments, timing of financial transactions, and retiree mortality)	3.0	0.7
Total Actuarial Gains/Losses	$ 3.5	0.8%

SUMMARY OF PLAN PROVISIONS

(Last changed as of July 1, 2009)

The Non-Contributory Plan was created by Act 793 of 1977 and was effective January 1, 1978. All non-retired members are now covered by non-contributory benefits. Act 1071 of 1997 created a Tier Two benefit plan for all officers hired on or after April 3, 1997. Existing members of the plan in effect prior to this date (Tier One) had one year to elect coverage under Tier Two.

Voluntary Retirement

With a full benefit, after 30 years of actual service, regardless of age, or at age 65 with 5 actual years of service for Tier One and Tier Two. The age requirement is reduced by 1 month for every 2 months of Public Safety service credit, but not below age 52 for Tier One or age 55 for Tier Two members.

Public Safety service credit is granted at the rate of 1.5 months of credit for each month of actual Public Safety employment for Tier One. Service is credited at a rate of one for one in Tier Two.

With a reduced benefit, once a member's age is within 10 years of becoming eligible for full benefits. The reduction for Tier One is equal to 1/2 of 1% for each month retirement precedes Normal Retirement Age. The reduction for Tier Two is equal to 3/4 of 1% for each month retirement precedes Normal Retirement Age.

Final Average Pay (FAP)

Average of the highest 60 calendar months' pays for Tier One or 48 calendar months for Tier Two.

Full Age and Service Retirement Benefit

Tier One: 1.55% of FAP times years and months of credited service. Tier Two: 2.475% of FAP times credited service. If retirement is prior to age 62, an additional .322% of FAP times credited service will be paid until the retiree attains age 62 for Tier One or .513% of FAP times credited service for Tier Two.

Public Safety service credit is granted at the rate of 1.5 months of credit for each month of actual Public Safety employment for Tier One. Service is credited at a rate of one for one in Tier Two.

For Tier One, the portion of the SPRS benefit based on service before 1978 cannot be less than the amount provided by contributory provisions in effect at time of retirement; and if there is credited service for time prior to July 1, 1991, the benefit cannot be less than under the provisions in effect July 1, 1990, (using Social Security offset), plus increases granted since that date.

For Tier One, the minimum monthly benefit is $150 minus any age and beneficiary option reductions.

Vested and Reduced Early Retirement Benefits

5 years of actual service, and leaving System-covered employment before full retirement age.

Deferred full retirement benefit, based on service and pay at termination, begins when full retirement age would have been reached by continuing covered employment.

In place of a deferred full benefit, a qualifying member may elect an immediate reduced benefit, provided the member is within 10 years of full retirement age. The reduced amount is the full amount reduced by 1/2 of 1% for Tier One and/or 3/4 of 1% for Tier Two for each month of difference in benefit commencement ages.

Death While in System Covered Employment

Member's accumulated contributions before 1978 are refundable.

If the deceased member has 5 or more years of service and has qualifying dependents, monthly benefits are payable instead. A surviving spouse receives a benefit as if the member had retired and elected the joint and 75% survivor option. Payment begins immediately if the member was eligible for a full age and service benefit or had 20 years of service; or payment begins at the spouse's age 50 if the member had 15 or more years of service; or payment begins at the spouse's age 62 if the member had less than 15 years of service.

If a member is killed while in the official line of duty and the surviving spouse is eligible for a deferred benefit, then the surviving spouse may elect to receive a reduced benefit immediately. The reduction of the benefit shall be 1/2 of 1% per month for each of the first 60 months that the benefit commences before when it would have otherwise commenced, plus; 1/4 of 1% per month for each month more than 60 months that the benefit commences before when it would have otherwise commenced. However, the total reduction shall not be more than 50%.

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

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

Total and Permanent Disability

Tier One eligibility: Disabled after 5 years of service.

Tier Two eligibility: Disabled after 5 years of service.

Amount is computed as an age and service benefit, based on service and pay to the time of disability.

Death after Retirement

Retiring member can provide protection for a beneficiary by electing an option which provides beneficiary protection by reducing the retired employee's benefit amount.

Under Tier One, if a straight life annuity is paid, upon the retiree's death, 50% of the retiree's benefit is continued to a surviving spouse. If the deceased retiree leaves children under age 18, 75% of the retiree's benefit is continued to the surviving spouse. If there is no surviving spouse, the 75% will be divided among the children under age 18.

Under Tier Two, if a straight life annuity is elected, no survivor benefit is payable.

Benefit Increases after Retirement

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

Member Contributions

None.

Arkansas State Police Officers Deferred Retirement Option Plan – Tier One (Act 967 of 1995)

Tier One members with 30 years of credited service and who are eligible to receive a service retirement pension may participate.

Participating members may continue in employment for up to 7 years and have their accrued monthly benefit (at date of participation) credited to an individual account in the Deferred Retirement Option Plan in lieu of any further benefit accruals.

The Deferred Retirement Option Plan accounts accumulate with interest and are paid to the member at termination of active membership in either a lump sum or as an annuity of equivalent value. Interest is credited annually at a rate established by the Board of Trustees.

Arkansas State Police Officers Deferred Retirement Option Plan – Tier Two (Act 1242 of 2009)

Tier two members with at least 30 years of actual service and are eligible to receive a service retirement pension may participate.

Participating members may continue in employment for up to 7 years and have seventy-two percent (72%) of their accrued monthly benefit (at date of participation) credited to an individual account in the Deferred Retirement Option Plan in lieu of any further benefit accruals.

The Deferred Retirement Option Plan accounts accumulate with interest and are paid to the member at termination of active membership in either a lump sum or as an annuity of equivalent value. Interest is credited annually to participant accounts at a rate established by the Arkansas State Police Retirement System Board of Trustees that shall not be greater than five percent (5%) nor less than one percent (1%) per annum.

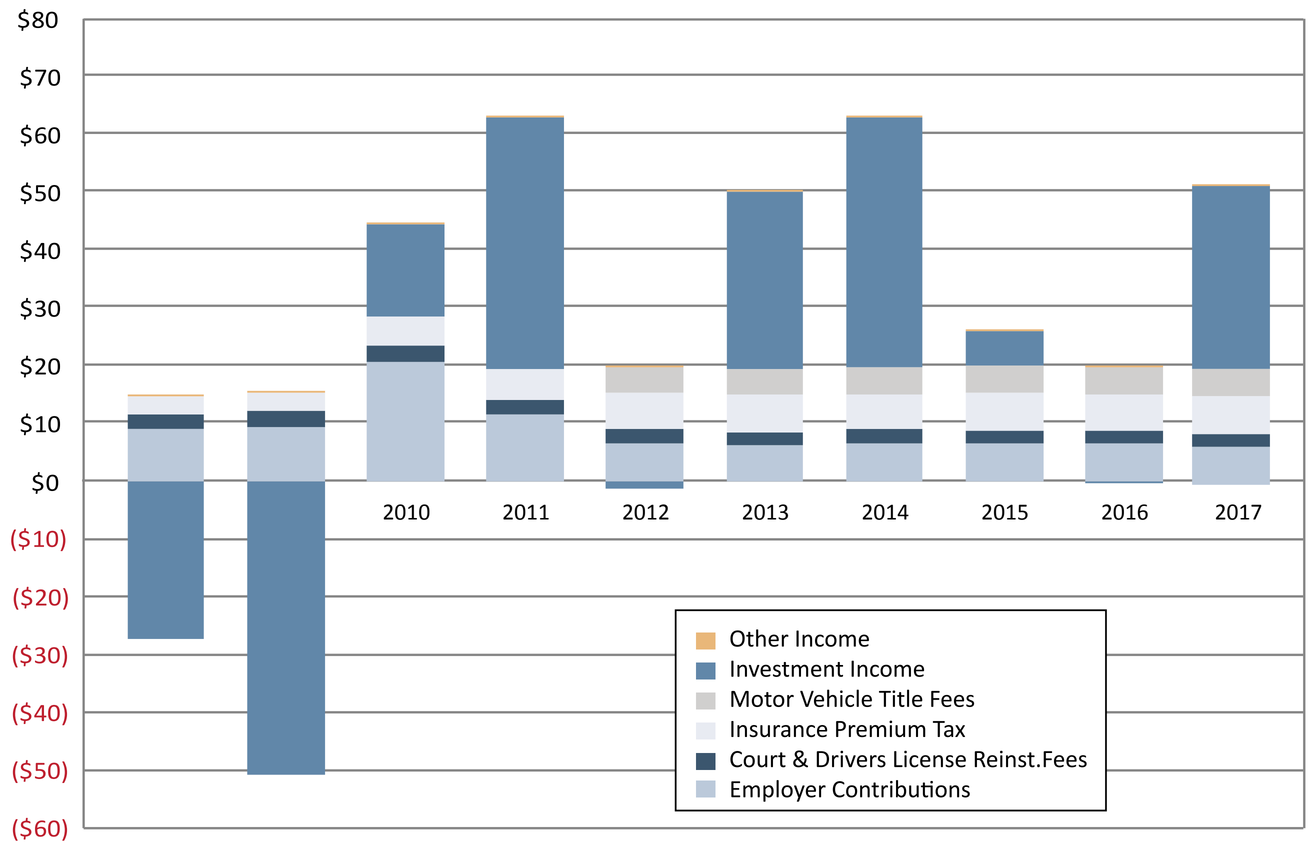
STATISTICAL

SCHEDULE OF REVENUES BY SOURCE

(for the fiscal year ended June 30, 2017)

	Employer Contributions	Court & Driver's License Reinst. Fees	Insurance Premium Tax	Motor Vehicle Title Fees	Investment Income	Other Income	Total
2008	$ 8,942,134	$ 2,656,777	$ 3,128,234	$ 0	$ (27,370,593)	$ 52,494	$ (15,719,188)
2009	9,416,710	2,606,871	3,343,844	0	(50,964,780)	118,479	(38,822,720)
2010	20,547,457	2,682,529	5,285,153	0	15,965,604	63,621	39,259,211
2011	11,434,257	2,675,335	5,232,634	0	43,395,542	18,470	57,523,604
2012	6,525,196	2,525,594	6,250,117	4,246,637	(1,302,063)	118,334	18,363,815
2013	6,183,721	2,111,570	6,697,200	4,356,659	30,531,555	124,067	50,004,772
2014	6,405,887	2,657,952	5,957,541	4,442,806	43,307,745	37,499	62,809,430
2015	6,409,752	2,234,350	6,574,376	4,565,652	6,131,684	94,820	26,010,634
2016	6,581,580	2,206,082	6,233,769	4,661,683	(210,045)	30,181	19,503,250
2017	$ 6,416,736	$ 2,139,475	$ 6,693,915	$ 4,667,895	$ 31,484,250	$ 43,045	$ 51,445,316

Schedule of Revenue by Source
(Millions)

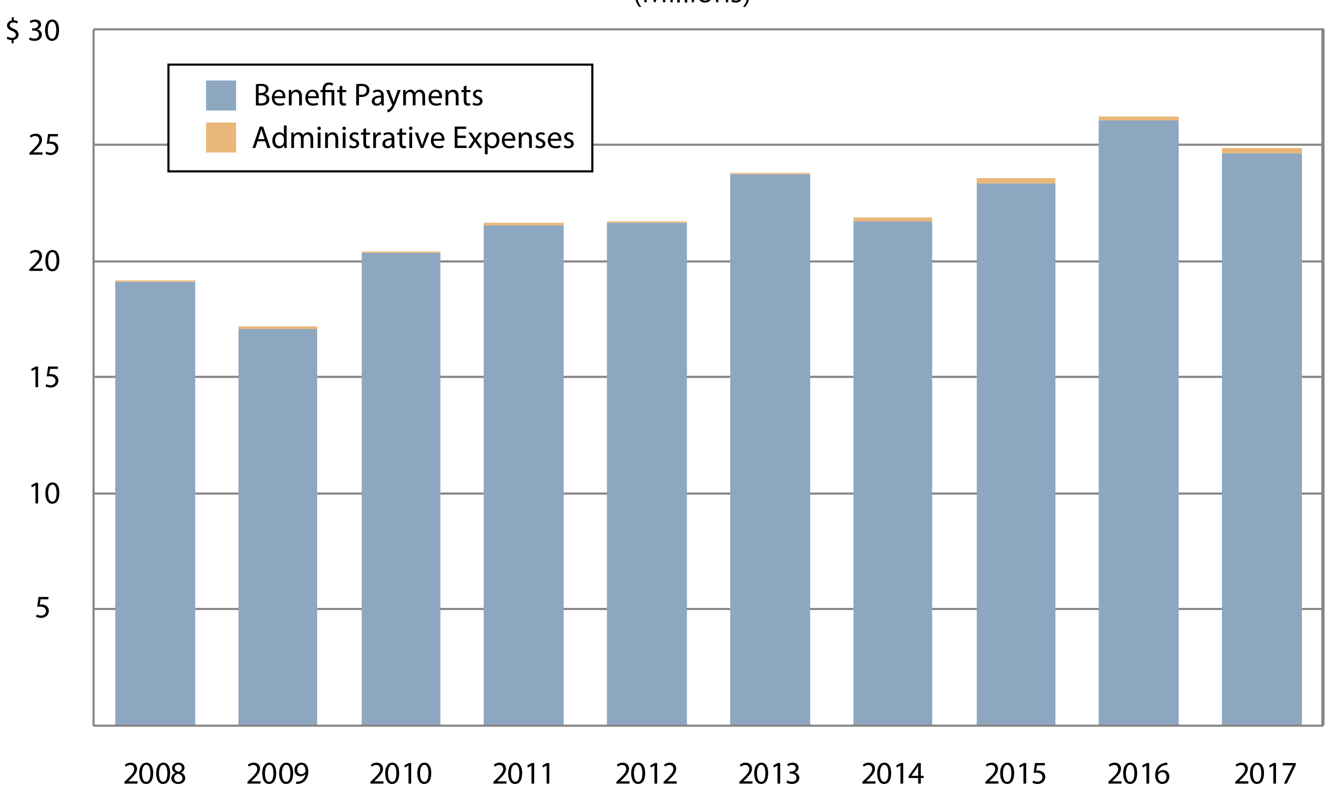


SCHEDULE OF EXPENSES BY TYPE
(for the fiscal year ended June 30, 2017)

Year Ended June 30	Benefit Payments*	Administrative Expenses	Total
2008	$ 19,087,918	$ 87,020	$ 19,174,938
2009	17,082,320	89,011	17,171,331
2010	20,319,683	79,878	20,399,561
2011	21,560,127	83,234	21,643,361
2012	21,649,158	80,842	21,730,000
2013	23,717,503	97,181	23,814,684
2014	21,688,239	189,658	21,877,896
2015	23,358,801	196,231	23,555,032
2016	26,035,466	205,342	26,240,808
2017	$ 24,631,787	$ 208,424	$ 24,840,211

*Includes DROP and PAW distributions.

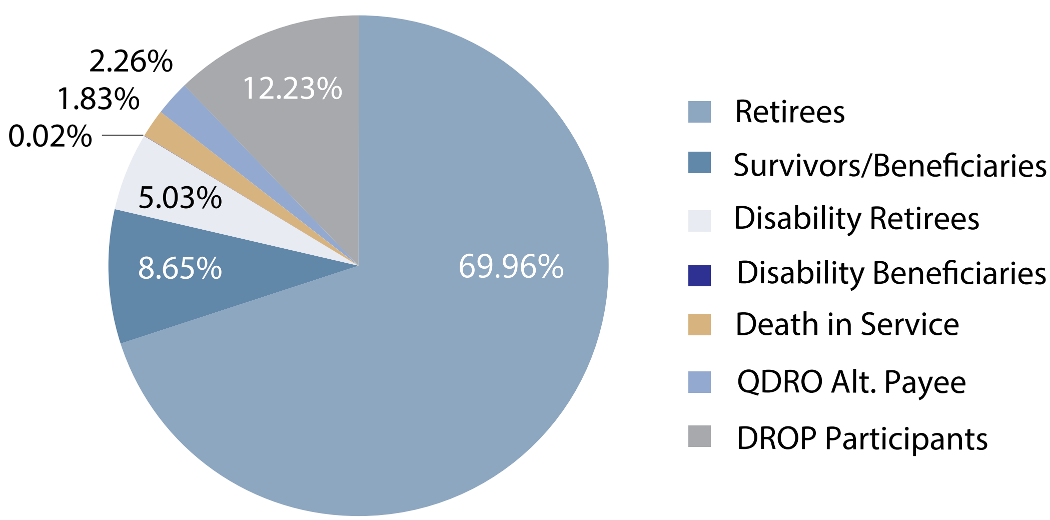
Schedule of Expenses by Type
(Millions)



SCHEDULE OF BENEFIT EXPENSES BY TYPE*
(for the fiscal year ended June 30, 2017)

	Age and Service		Disability				
Year Ended June 30	Retirees	Beneficiaries	Retirees	Beneficiaries	Death in Service	QDRO Alternative Payees	DROP Participants
2008	12,336,918	884,153	15,937,188		86,316		
2009	12,878,923	958,545	17,426,148		87,696		
2010	13,646,899	1,113,108	18,793,560		90,312		
2011	14,905,638	1,708,748	20,302,152		93,024		
2012	16,106,010	1,803,169	21,950,568		91,092		
2013	16,901,590	1,950,945	26,158,872		93,828		
2014	17,368,858	2,034,215	27,648,624		74,640		
2015	17,963,207	2,325,900	1,016,556	13,944	76,872	471,880	3,126,156
2016	18,805,319	2,355,686	1,064,772	14,364	79,188	532,792	3,434,940
2017	$ 18,769,461	$ 2,320,702	$ 1,350,504	$ 7,140	$ 491,004	$ 607,318	$ 3,281,616

*Expenses are based on annualized June 30 benefits amounts.
Prior to 2015, disability beneficiaries were reported in the same category as death-in-service beneficiaries.



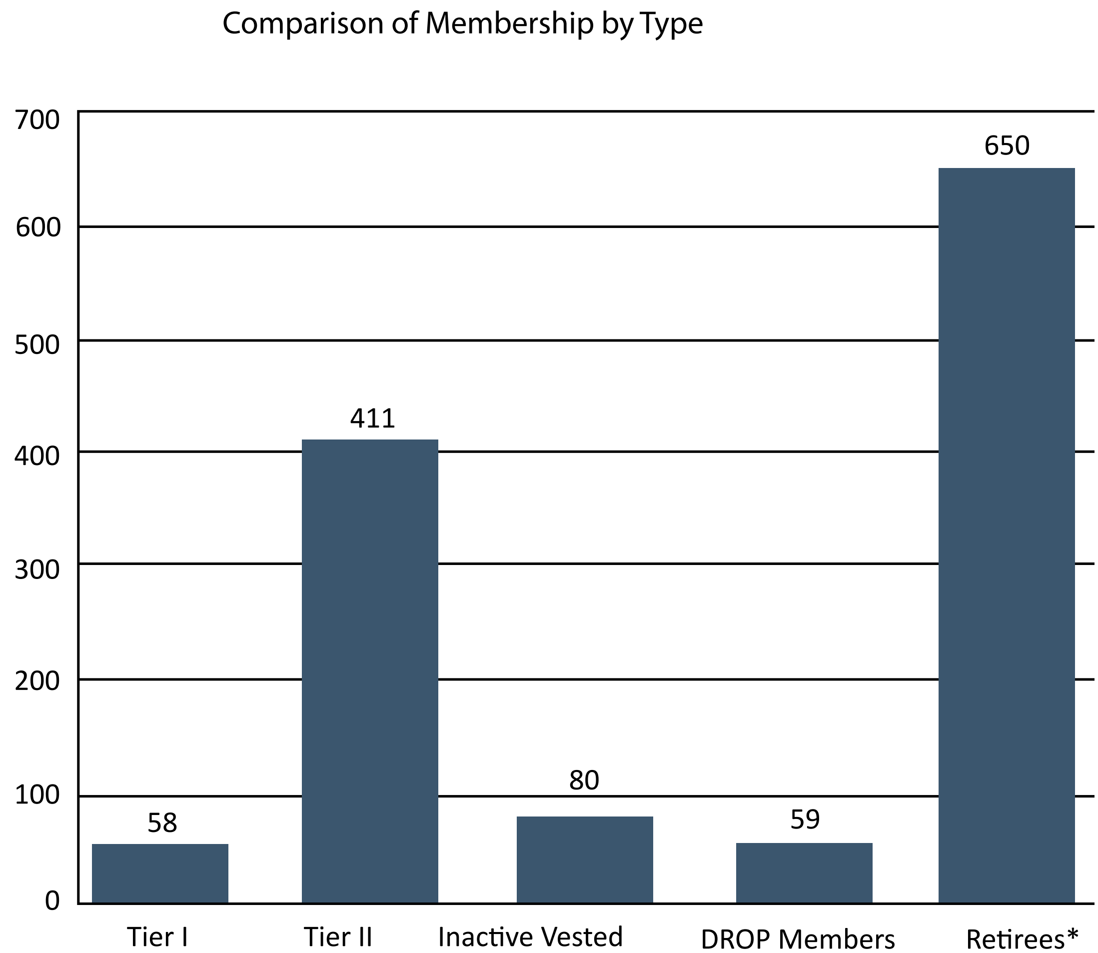
SCHEDULE OF RETIRED MEMBERS BY TYPE OF BENEFIT
(as of June 30, 2017)

Type of Benefit Being Paid	Number	Annual Pensions	Actuarial Accrued Liability
Age & Service Retirees			
Life	81	$ 2,698,616	$ 27,044,257
B-50	344	16,005,721	196,459,552
B-75	2	65,124	945,322
Totals	427	18,769,461	224,449,131
Beneficiaries of Age & Service Retirees			
B-50	103	2,294,181	22,546,719
B-75	2	26,521	355,364
Totals	105	2,320,702	22,902,083
Total Age & Service Retirees	532	21,090,163	247,351,214
Disability Retirees			
Life	23	425,796	5,134,266
B-50	28	920,544	10,983,167
B-75	1	4,164	73,238
Totals	52	1,350,504	16,190,671
Beneficiaries of Disability Retirees	1	7,140	77,944
Total Disability Retirees & Beneficiaries	53	1,357,644	16,268,615
Death-in-Service Beneficiaries	28	491,004	5,648,515
QDRO Alternate Payees	37	607,318	7,872,816
Total Retirees & Beneficiaries	650	23,546,129	277,141,160
DROP Participants (excluding DROP reserve)	59	3,281,616	44,191,698
Total Retirees, Beneficiaries and DROP Participants	709	$ 26,827,745	$ 321,332,858

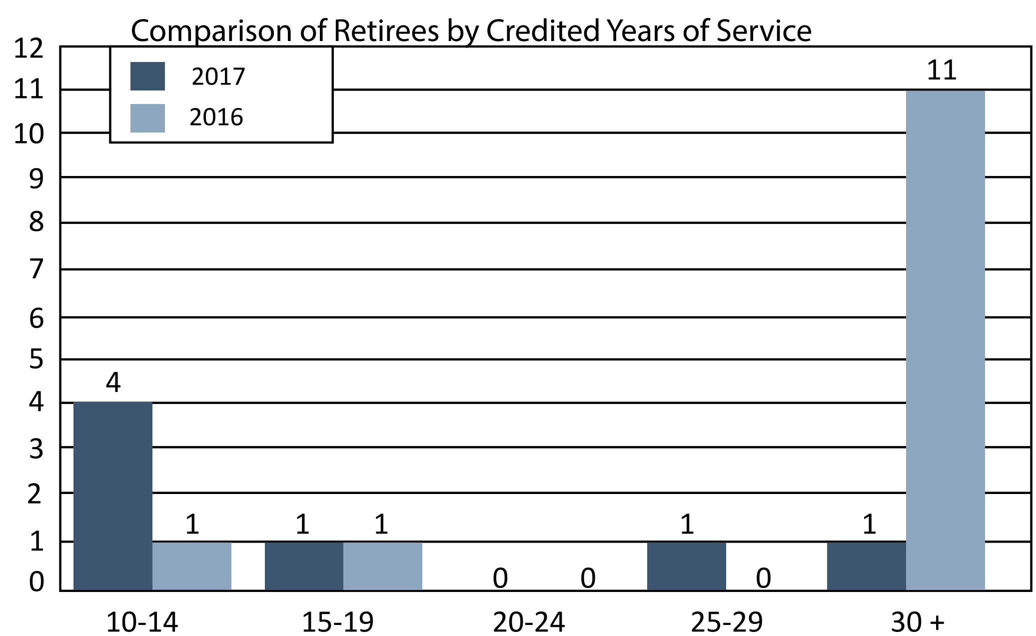
SCHEDULE OF AVERAGE BENEFIT PAYMENTS
(for fiscal years ended June 30, 2011 - June 30, 2017)

		Years of Credited Service				
		10-14	15-19	20-24	25-29	30+
Retirement Effective Dates - July 1, 2016 to June 30, 2017						
Average Monthly Benefit	$	805.00	1,107.00	0	2,847.00	4,290.00
Average Monthly Final Average Salary	$	1,971.96	3,285.00	0	4,693.58	4,865.95
Number of Active Retirees		4	1	0	1	11
Retirement Effective Dates - July 1, 2015 to June 30, 2016						
Average Monthly Benefit	$	495.00	903.00	0	0	3,447.25
Average Monthly Final Average Salary	$	2,823.75	2,550.17	0	0	4,646.77
Number of Active Retirees		1	1	0	0	4
Retirement Effective Dates - July 1, 2014 to June 30, 2015						
Average Monthly Benefit	$	0	0	2,153.00	0	4,314.29
Average Monthly Final Average Salary	$	0	0	4,094.17	0	5,750.73
Number of Active Retirees		0	0	2	0	7
Retirement Effective Dates - July 1, 2013 to June 30, 2014						
Average Monthly Benefit	$	308.33	0	1,442.00	2,623.00	2,308.67
Average Monthly Final Average Salary	$	1,465.50	0	4,227.00	4,104.75	4,483.19
Number of Active Retirees		3	0	1	1	3
Retirement Effective Dates - July 1, 2012 to June 30, 2013						
Average Monthly Benefit	$	0	0	0	0	3,345.00
Average Monthly Final Average Salary	$	0	0	0	0	5,314.47
Number of Active Retirees		0	0	0	0	3
Retirement Effective Dates - July 1, 2012 to June 30, 2017						
Average Monthly Benefit	$	580.00	1,005.00	1,916.00	2,735.00	3,862.14
Average Monthly Final Average Salary	$	1,888.51	2,917.58	4,138.44	4,399.17	5,062.88
Number of Active Retirees		8	2	3	2	28

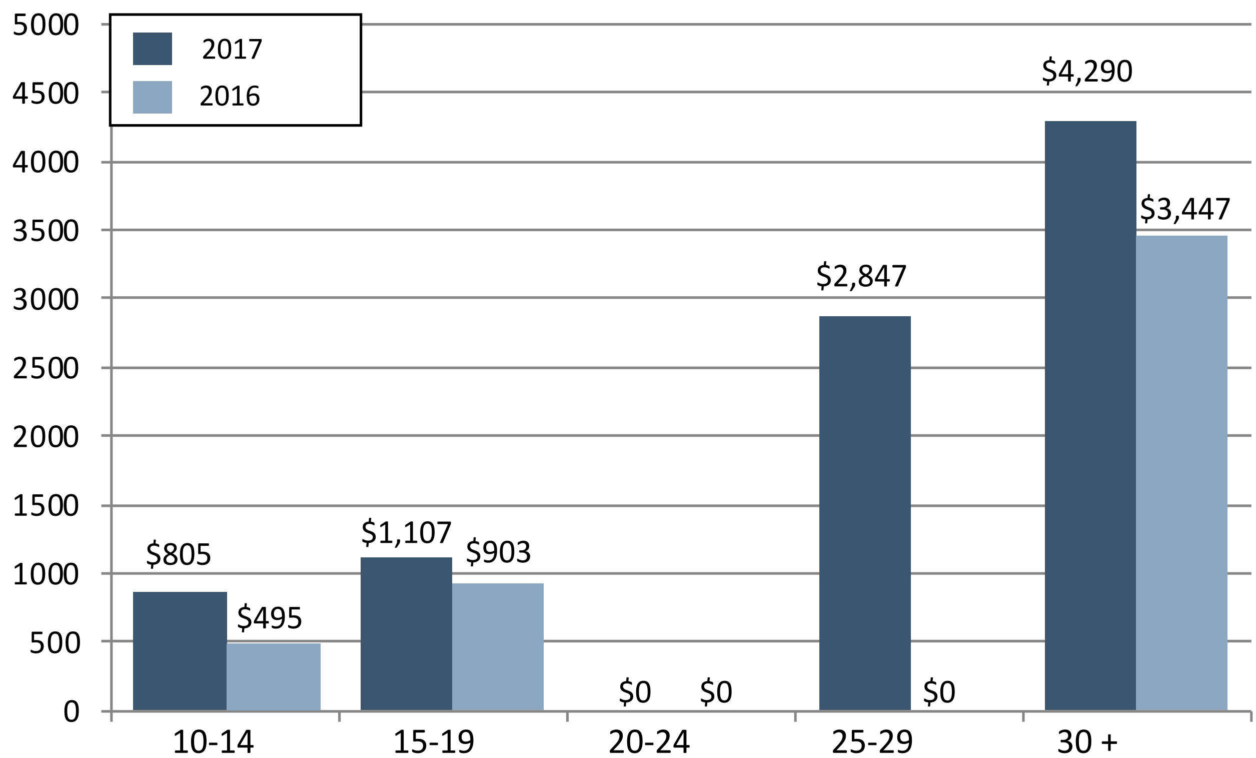
STATISTICAL GRAPHS



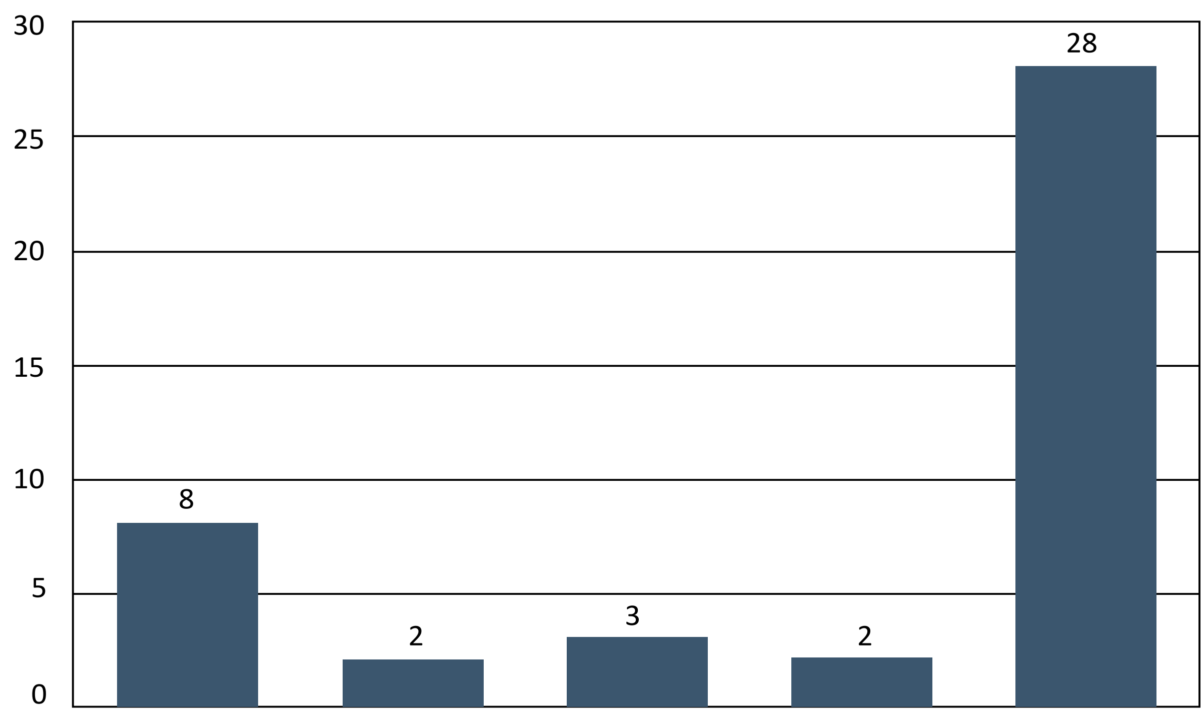
*Including Retirees, Disability Recipients, & Death-In-Service Beneficiaries.



Comparison of Monthly Annuity by Credited Years of Service



Retirees by Years of Credited Service - 5 year summary



Arkansas State Police Retirement System
124 West Capitol Ave., Suite 400
Little Rock, AR 72201
www.apers.org