

Arkansas Judicial Retirement System Annual Financial Report

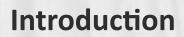
For the Fiscal Year Ended June 30, 2018

A Pension Trust Fund of the State of Arkansas

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A Brief History
System Highlights
Letter of Transmittal
Board of Trustees
AJRS Senior Staff
Professional Service Providers





A BRIEF HISTORY

Arkansas Judicial Retirement System

With the passage of Act 365 on March 28, 1953, the Arkansas General Assembly created the Arkansas Judicial Retirement System (AJRS or the System).

The statutes providing for and governing AJRS may be found in Chapters 2 and 8 of Title 24 of the Arkansas Code Annotated (A.C.A.). The administration and control of the System is vested in the Board of Trustees of the Arkansas Judicial Retirement System (the Board). The Board is appointed by the Arkansas Judicial Council.

The System provides for the retirement of all circuit judges, court of appeals judges,- and Arkansas Supreme Court justices. Act 399 of 1999 created a Tier II benefit plan for all persons who become members of the System after August 1, 1999. Any active member of the System prior to August 1, 1999 had until the end of the term in office in which the member is serving on the effective date to elect coverage under Tier II.

Act 744 of 2009 permits Tier I judges with at least 20 years of judicial service to continue making 6% employee contributions in exchange for a 2.5% increase in benefits for each additional year of service. The maximum benefit payable is 75% of final salary.

This annual financial report, which covers the period from July 1, 2017 through June 30, 2018, provides comprehensive information about the System including statements of financial condition, investment objectives and policy, an actuarial report, historical and statistical information on active members, annuitants and benefit payments, as well as a description of the retirement plan.

SYSTEM HIGHLIGHTS (as of June 30, 2018)

Active Members				
Number	Average Age (yrs.)	Average Service (yrs.)	Average Annual Salary	
139	60	16.9	\$ 168,595	
2018 Retirees				
Number	Average Age (yrs.)	Average Service (yrs.)	Average Monthly Benefit	
2	67	0	\$ 9,265.70	
All Retired Members				
Number	Average Age (yrs.)	Average Service (yrs.)	Average Monthly Benefit	
147	71.16	NA	\$ 7,369.85	

Introduction

LETTER OF TRANSMITTAL



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BOARD OF TRUSTEES
ROBERT EDWARDS, Chairman
Circuit Judge

RAYMOND ABRAMSON Court of Appeals Judge MARK HEWETT
Circuit Judge (Retired)

CHARLES YEARGAN
Circuit Judge

MARCIA HEARNSBERGER Circuit Judge GAIL H. STONE
AJRS Executive Director

Dear AJRS Members:

The Arkansas Judicial Retirement System (AJRS) is pleased to present the Annual Financial Report for the period ending June 30, 2018. The report is designed to provide a clear and concise picture of the financial conditions of the System. The report includes the following sections:

- Introduction
- Financial
- Investment
- Actuarial
- Statistical

Accounting System

The accrual basis of accounting is used to record the assets, liabilities, revenues, and expenses of the Arkansas Judicial Retirement System 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.

Funding

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

Investments

In accordance with the Investment Code contained in A.C.A. Title 24, Chapter 2, the Board is required to invest the funds in conformity with the "prudent investor rule." The Investment Code permits the Board to establish an investment policy based upon certain investment criteria and allows the Board to retain professional investment advisors to assist the Board in making investments. The Board has established



an investment policy that reflects the level of risk that is deemed appropriate for the fund. The investment advisor retained by the Board is listed in the schedule of professional services contractors.

Professional Services

Professional services are provided to AJRS by a firm selected by the Board to aid in the efficient and effective management of the System. A listing for this firm as well as other professional services contractors retained by AJRS is shown on page 12 of this report.

Acknowledgments

This report is the result of the combined efforts of the AJRS staff under the direction of the Board. 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.

Judge Robert Edwards

Robert Educida

Gail H. Stone

Chairman, AJRS Board

Executive Director

Tail H. Stone

Introduction

BOARD OF TRUSTEES

The Honorable Robert Edwards, Chair Circuit Judge 1600 E. Booth, Suite 500 Searcy, AR 72143

The Honorable Raymond Abramson Arkansas Court of Appeals Judge 625 Marshall Street Little Rock, AR 72201-1080

The Honorable Mark Hewett Circuit Judge 7201 Highland Park Fort Smith, AR 72916

The Honorable Charles Yeargan Circuit Judge P.O. Box 820 Murfreesboro, AR 71958

The Honorable Marcia Hearnsberger Circuit Judge 501 Ouachita Avenue, Room 304 Hot Springs, AR 71901

Administrative Office

Gail Stone - Executive Director Arkansas Judicial Retirement System 124 West Capitol Avenue, Suite 400 Little Rock, AR 72201 501-682-7800 1-800-682-7377



AJRS 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. Abbi Bruno 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

Introduction

OUTSIDE 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

QS Investors, LLC Boston, MA 02116

Baillie Gifford Edinburgh, Scottland

Invesco Real Estate Dallas, TX 75240

MacKay Shields New York, NY 10105

Boston Partners Boston, MA 02108

Wellington Management Company Boston, MA 02210

Financial

Management's Discussion and Analysis Statement of Fiduciary Net Position Statement of Changes in Fiduciary Net Position

Notes to the Financial Statements

Note 1: Plan Description

Note 2: Summary of Significant Accounting Policies

Note 3: Legally Required Reserves

Note 4: Deposits and Investments

Note 5: Net Pension Liability

Required Supplementary Information

Schedule of Employer Contributions

Schedule of Funding Progress

Schedule of Changes in Net Pension Liability and Related Ratios

Schedule of Net Pension Liabilities

Schedule of Investment Returns

Notes to Required Supplementary

Information

Schedule of Administrative Expenses

Schedule of Investment Expenses

Schedule of Payments for Professional

Consultants





MANAGEMENT'S DISCUSSION AND ANALYSIS

To help facilitate a better understanding of the financial condition of the Arkansas Judicial Retirement System (AJRS or the System) as of June 30, 2018, management has prepared this narrative analysis. This 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 16.

Revenues

The revenue from employer and employee contributions in fiscal year 2018 totaled \$8.85 million. This amount is \$64,654 less than fiscal year 2017.

Net investment income for fiscal year 2018 was \$19.16 million after investment expenses of \$1,268,777, a decrease of \$8.882 million from fiscal year 2017. Overall, the System's total additions decreased by \$8.992 million from fiscal year 2017. The primary reason for this decrease was the lower investment return achieved in fiscal year 2018.

Expenses

Benefit payments for fiscal year 2018 were \$12.769 million, or \$458,753 more than fiscal year 2017. Administrative expenses were \$142,311, of which \$24,700 was for professional fees and \$108,301 was transferred to the Arkansas Public Employment Retirement System (APERS) for indirect administrative costs.



STATEMENT OF FIDUCIARY NET POSITION

(as of June 30, 2018)

	2018	2017
Assets		
Cash and Cash Equivalents	\$ 6,979,395	\$ 2,922,192
Receivables		
Contributions	161,407	152,233
Deceased Retirant Receivable	0	0
Investment Principal Receivable	618,582	895,359
Accrued Investment Income Receivable	 706,260	 806,969
Total Receivables	1,486,249	1,854,561
Investments, At Fair Value		
Government Securities		
U.S. Government Securities	17,333,142	22,515,095
U.S. Government Agency Securities	10,213,314	2,453,138
Futures	(32,594)	(7,085)
Corporate Securities		
High Income Yield Fund	14,488,347	14,227,853
Collateralized Obligations	425,791	1,069,691
Corporate Bonds	35,321,825	35,863,298
Common Stock	57,070,526	55,719,007
Domestic Equity Commingled	44,207,418	39,970,217
International Securities		
Global Commingled	40,582,467	37,192,075
Global Corporate Fixed Income	5,810,786	3,339,344
Forwards	0	0
Global Equity	0	0
Global Government Fixed		628,000
Emerging Markets	490,308	0
Real Estate	22,772,116	21,007,817
Commercial Loans	 4,585,316	 5,225,706
Total Investments	 253,268,764	 239,204,156
Total Assets	261,734,407	243,980,909
Liabilities		
Accrued Expenses and Other Liabilities	327,764	311,542
Investment Principal Payable	4,898,512	2,849,719
Total Liabilities	5,226,277	 3,161,261
Net Position Restricted for Pension Benefits	\$ 256,508,130	\$ 240,819,648



STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

(as of June 30, 2018)

	2018		2017
Additions			
Contributions			
Employer	\$ 7,834,355	\$	7,898,543
Employee	1,016,180		1,016,646
Court Fees	 586,818	_	586,818
Total Contributions	9,437,353		9,502,007
Investment Income			
Interest	3,159,611		2,771,749
Dividends	2,696,384		2,053,919
Currency Gain/(Loss)	0		(2,370)
Investment Gain/(Loss)	14,575,383		24,334,103
Total Investment Income	20,431,379		29,157,400
Less: Investment Expense	1,268,777		1,113,027
Net Investment Income	19,162,602		28,044,374
Other Additions			
Miscellaneous Additions	12		45,833
Total Additions	28,599,967		37,592,213
Deductions			
Benefits	12,769,175		12,310,422
Refunds of Contributions	0		79,011
Administrative Expenses	 142,311		168,702
Total Deductions	12,911,485		12,558,134
Net Increase (Decrease)	15,688,482		25,034,079
Net Position Held in Trust for Benefits			
Beginning of Year	 240,819,648		215,785,569
End of Year	\$ 256,508,130	\$	240,819,648

Totals may not add due to rounding. The accompanying notes are an integral part of these financial statements.



NOTES TO THE FINANCIAL STATEMENTS

Note 1: Plan Description

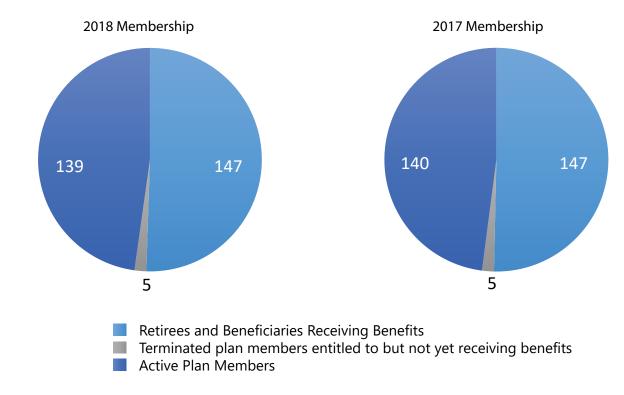
AJRS is a single-employer, defined benefit pension plan established on March 28, 1953.

The System provides for the retirement of all circuit judges, court of appeals judges, and Supreme Court justices. The laws governing operations of AJRS are set forth in Arkansas Code of 1987 Annotated (A.C.A.) §§ 24-8-201 through 24-8-228 and §§ 24-8-701 through 24-8-717. The administration and control of the System is vested in the Board of Trustees of the Arkansas Judicial Retirement System (the Board), which includes five members selected by the Arkansas Judicial Council.

Membership

As of June 30, 2018 and 2017, membership was as follows:

Membership	2018	2017
Retirees and Beneficiaries Receiving Benefits	147	147
Terminated plan members entitled to but not yet receiving benefits	5	5
Active Plan Members	139	140
Total	291	292





Contributions

Contribution provisions are established by state law and may be amended only by the Arkansas General Assembly. The contribution rate of each member of the System is 6% of annual salary for Tier I (A.C.A. § 24-8-209) and 5% of annual salary for Tier II (A.C.A. § 24-8-706). When a judge is certified as eligible for retirement, no further contribution is required of that member for Tier I (A.C.A. § 24-8-211) or for Tier II (A.C.A. § 24-8-708). The employer contribution rate is 12% of salaries paid.

In addition to the 12% employer rate and the statutory fees, the Chief Fiscal Officer of the State is required to transfer from the Constitutional and State Central Services Fund an amount that is equal to the difference between the mandatory contribution rate and the actuarially determined rate necessary to fund the plan (A.C.A. § 24-8-210).

Additionally, supplemental contributions are paid to the system from the Constitutional and Fiscal Agencies Fund in accordance with Section 8 of Act 922 of 1983.

Plan Administration

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

Benefits

An active member in Tier I with a minimum of 10 years of credited service may voluntarily retire upon reaching 65 years of age or thereafter upon filing a written application with the Board. Any other Tier I member who has a minimum of 20 years of credited service may retire regardless of age, and any judge or justice who has served at least 14 years is eligible for benefits upon reaching age 65. In all cases of age and service retirement for judges or justices elected after July 1, 1983 and remaining in Tier I, the member must have a minimum of 8 years of actual service as a justice of the Arkansas State Supreme Court or a judge of the circuit courts or the Arkansas Court of Appeals (A.C.A. § 24-8-215). An active or former member in Tier II may retire at age 65 with 8 or more years of actual service or after 20 years of actual service regardless of age (A.C.A. § 24-8-710).



Increases after Retirement

For any person who was a member on or before June 30, 1983, the retirement benefits are increased or decreased from time to time as the salary for the particular judicial office is increased or decreased. For all judges or justices first elected on or after July 1, 1983, and who have received retirement benefits from the System for at least 12 full calendar months, the retirement benefits are increased each July 1st by 3%. Post retirement increases for members are authorized in A.C.A. sections as follows:

Tier I judges first elected prior to July 1, 1983:	§ 24-8-218 (c) (1) (B)
Tier I judges first elected after July 1, 1983:	§ 24-8-223
Tier II judges:	§ 24-8-717

Funded Status and Funding Progress

The funded status of the plan as of June 30, 2018, the most recent actuarial date, is as follows (dollar amounts in thousands):

						(6)
		(2)	(3)			UAAL as a
	(1)	Actuarial	Unfunded	(4)	(5)	Percentage of
	Actuarial	Accrued	AAL	Funded	Annual	Covered
	Value of	Liability	(UAAL)	Ratio	Covered	Payroll
Valuation Date	Assets	(AAL)	(2) - (1)	(1)/(2)	Payroll	[(2-1)/(5)]
6/30/2018	\$ 249,096	\$ 279,175	\$ 30,078	89.2%	\$ 23,435	128%



Note 2: Summary of Significant Accounting Policies

Basis of Accounting

AJRS accounts and records are maintained using fund accounting principles, and its financial statements are prepared using the accrual basis of accounting. Contributions and other revenues are recorded in the accounting period in which they are earned, and expenses are recognized when due and payable in accordance with the terms of the System.

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, cash in 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 a bank-sponsored commingled fund that is invested in U.S. Government and agency securities and other short-term instruments.

Risks and Uncertainties

Certain data in this report – including contributions to the System and the net pension liability, as well as other actuarial information in Note 5 and the required supplementary information – has been formulated based on certain projections about interest rates, inflation rates, and employee compensation and demographics. Due to the dynamic nature of these factors, it is possible that these projections will need to be revised in the near term. Moreover, because of the uncertainties inherent in making such projections, the effect of any such changes could be material to the financial statements.



Note 3: Legally Required Reserves

A description of reserve accounts and their balances for the years ended June 30, 2018 and 2017 are as follows:

The Members' Deposit Account (MDA) represents members' contributions held in trust until each member's retirement, at which time contributions are transferred to the Retirement Reserve Account, described below.

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

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

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

	2018	2017
Members Deposit Account	\$ 14,195,822	\$ 13,260,684
Members Deposit Account Interest Reserve	698	698
Employer Accumulation Account	82,546,830	86,795,271
Retirement Reserve Account	157,363,456	139,295,064
Deferred Annuity Account	2,401,325	1,467,931
Total	\$ 256,508,130	\$ 240,819,648



Note 4: Deposits and Investments

The deposits and investments of the System are exposed to risks that have the potential to result in losses. The following information discloses risks related to credit, interest rate and foreign currency risks, as well as policies related to these risks.

Deposits

Deposits are carried at cost and are included in "cash and cash equivalents". Cash and cash equivalents consisted of cash deposits with financial institutions of \$3,617, STIF accounts in the amount of \$6,974,964, and \$814 cash in state treasury. 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

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 held by an outside party. The System's deposit policy is to place deposits only in collateralized or insured accounts. As of June 30, 2018, the System's only deposits exposed to potential custodial credit risk would be any holdings in any foreign currency. As of June 30, 2018, the system had no foreign currency balances. The System holds foreign currency in banks outside the United States as a result of transactions by international investment managers.

Investments

Arkansas Code Annotated §§ 24-2-601 through 24-2-619 authorize the Board to have full power to invest and reinvest monies of the System and to hold, purchase, sell, assign, transfer or dispose of any of the investments, or proceeds of the investment in accordance with the prudent investor rule. Security transactions and any resulting gains or losses are accounted for on a trade basis. Net investment income includes net appreciation in the fair value of investments, interest income, dividend income, and total investment expense, which includes fees for 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% or more than 10% of the System's portfolio in Arkansas-related investments. AJRS 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."



Asset allocation guidelines have been established as follows:

Asset Allocation	Target	Lower Limit	Upper Limit
Domestic Equities	37 %	32 %	42 %
International Equities	15 %	10 %	20 %
Fixed Income	40 %	35 %	45 %
Real Estate	8 %	3 %	13 %

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 independent brokers at current exchange rates, as available.

As of June 30, 2018, the System had the following investments:

Investment Type	Fair Value*
Government Securities	
U.S. Government Securities	\$ 17,333,142
U.S. Government Agency Securities	10,213,314
Futures	(32,594)
Corporate Securities	
Fixed Income Commingled	
High Yield Income Fund	14,488,347
Collateralized Obligations	425,791
Corporate Bonds	35,321,825
Common Stock	57,070,526
Domestic Equity Commingled	44,207,418
International Securities	
Global Commingled	40,582,467
Global Corporate Fixed Income	5,810,786
Forwards	0
Global Equity	0
Global Govt Fixed	
Emerging Markets	490,308
Real Estate	22,772,116
Commercial Loans	4,585,316
Total	\$ 253,268,764

^{*} Principal only Totals may not add due to rounding.



Custodial Credit Risk

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. As of June 30, 2018, there were no investments exposed to custodial credit risk.

Interest Rate Risk

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 manager uses the measurement of effective duration to mitigate the interest rate risk of the fixed income investments. The 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, 2018, the System had the following debt security investments and maturities:

			Investment Maturity (In Years)		
Investment Type	Fair Value*	Less than 1	1 - 5	6 - 10	More than 10
U.S. Government Securities	\$ 17,333,142	\$ 0	\$ 4,684,911	\$ 4,604,354	\$ 8,043,877
Agency Pooled	10,213,314	0	0	3,312,148	6,901,166
Collateralized Obligations	425,791	274,065	151,727	0	0
High Yield Bond Fund	14,488,347	0	14,488,347	0	0
Corporate Bonds	35,321,825	4,132,225	10,808,058	11,928,106	8,453,437
Global Corporate Fixed	5,565,242	194,998	2,219,474	3,150,771	0
Commercial Loans	4,830,860	0	1,054,163	3,531,153	245,544
Emerging Markets	490,308	0	0	0	490,308
	\$ 88,668,829	\$ 4,601,287	\$ 33,406,679	\$ 26,526,531	\$ 23,644,024

^{*} Principal only 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 does not have a formal policy for foreign currency risk. All foreign currency investments are in equities, fixed income, cash and forward contracts.

Credit Risk

Credit risk of investments is the risk that the issuer or other counterparty will not meet its obligation. This credit risk is measured by the credit quality of investments in debt securities as described by nationally recognized statistical rating organizations. The System has a formal investment policy for credit risk. Exposure to a single issuer is limited to 5%. The Bank of New York Mellon provided the detail of Standard & Poor's (S&P) and Moody's ratings (see overleaf).



The System's exposure to credit risk as of June 30, 2018, was as follows:

Moody's Credit Rating Dispersion Detail by Credit Rating

Investment Type and Fair \	Aaa	Aa	Α		
Government Securities					
	U.S. Government Securities	\$17,333,142	\$ 0	\$ 0	
	Agency Pooled	10,213,314	0	0	
Corporate Securities					
	Collateralized Obligations	45,398	74,030	0	
	High Yield Bond Fund	0	0	0	
	Corporate Bonds	549,793	1,535,218	11,052,847	
	Emerging Markets	0	0	0	
International Securities					
	Global Corporate Fixed	0	194,998	1,293,239	
Commercial Loans		807,577	0	547,365	
		\$28,949,224	\$ 1,804,245	\$ 12,893,451	

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

Investment Type and Fair Value	AAA	AA	Α	
Government Securities				
U.S. Government Securities	\$ 0	\$ 17,333,142	\$ 0	
Agency Pooled	0	10,213,314	0	
Corporate Securities				
Collateralized Obligations	119,428	0	0	
High Yield Bond Fund	0	0	0	
Corporate Bonds	859,169	3,286,570	8,478,598	
Emerging Markets	0	0	0	
International Securities				
Global Corporate Fixed	0	194,998	756,281	
Commercial Loans	0	0	0	
	\$ 978,597	\$ 31,028,024	\$ 9,234,880	

^{*} Principal only Totals may not add due to rounding.



Baa		Ва			В	Caa	or below		NR	F	Fair Value*
\$	0	\$	0	\$	0	\$	0	\$	0	\$	17,333,142
	0		0		0		0		0		10,213,314
	0	15	1,727		0		154,637		0		425,791
	0		0		6,359,856		0		8,128,491		14,488,347
15,867,	951	4,120	6,789		0		0		2,189,227		35,321,825
490,	308		0		0		0		0		490,308
2,721,	645	1,228	8,305		0		0		372,600		5,810,786
393,	784	93	3,407		833,466		0		1,069,717		4,585,316
\$ 19,473,	688	\$ 6,440	0,228	\$	7,193,321	\$	154,637	\$	11,760,036	\$	88,668,829
DDD		D.D.			D	ccc			ND	_	`a:\/a a*
BBB		ВВ			В	CCC	or below		NR	F	-air Value*
	0		0	¢				¢			
BBB \$	0	BB \$	0	\$	0	CCC \$	0	\$	0		17,333,142
	0 0		0 0	\$				\$			
	0	\$	0	\$	0		0 0	\$	0 0		17,333,142 10,213,314
\$	0	\$ 151	0	\$	0 0		0 0 154,637	\$	0 0		17,333,142 10,213,314 425,791
\$ 8,128,	0 0 491	\$	0 1,727 9,856	\$	0 0 0		0 0 154,637 0	\$	0 0 0		17,333,142 10,213,314 425,791 14,488,347
\$ 8,128, 18,731,	0 0 491 887	\$ 151 6,359	0 1,727 9,856 0	\$	0 0 0 0		0 0 154,637 0	\$	0 0 0 0		17,333,142 10,213,314 425,791 14,488,347 31,356,224
\$ 8,128,	0 0 491 887	\$ 151	0 1,727 9,856 0	\$	0 0 0		0 0 154,637 0	\$	0 0 0		17,333,142 10,213,314 425,791 14,488,347
\$ 8,128, 18,731,	0 0 491 887 308	\$ 151 6,359	0 1,727 9,856 0 3,083	\$	0 0 0 0		0 0 154,637 0	\$	0 0 0 0		17,333,142 10,213,314 425,791 14,488,347 31,356,224 4,455,909
\$ 8,128, 18,731, 490,	0 0 491 887 308	\$ 151 6,359 2,613	0 1,727 9,856 0 3,083	\$	0 0 0 0 0		0 0 154,637 0 0	\$	0 0 0 0 0 1,352,518		17,333,142 10,213,314 425,791 14,488,347 31,356,224
\$ 8,128, 18,731, 490, 3,631,	0 0 491 887 308 202 519	\$ 151 6,359 2,613	0 1,727 9,856 0 3,083 3,305 7,626	\$	0 0 0 0 0 0		0 0 154,637 0 0 0	\$	0 0 0 0 0 0 1,352,518	\$	17,333,142 10,213,314 425,791 14,488,347 31,356,224 4,455,909 5,810,786



Concentration of Credit Risk

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). Each investment manager retained by the System has its own individualized investment policy regarding the concentration of credit risk. None of the System's investments in any one issuer (other than those issued or guaranteed by the U.S. Government) represented more than 5% of total investments.

Mortgage-Backed Securities

The System invests in mortgage-backed securities (MBSs) which are reported at fair value in the Statement of Fiduciary Net Position. MBSs entitle their holders to receive both principal and interest payments from the payments made by the borrowers of the underlying mortgages over the lives of those loans. An MBS depends on the underlying pool of mortgage loans to provide cash flow to make principal and interest payments on the security. The life of a mortgage that underlies an MBS can be shortened by several economic events, including borrower refinancing. When interest rates decline and remain low, borrowers may refinance their existing loans which causes MBS holders to be repaid more quickly than originally anticipated, and is known as prepayments. Prepayments reduce the weighted average life of the security and are a form of market risk assumed by the holders of MBSs. Alternatively, when interest rates rise, the refinancing of existing mortgages slows. If interest rates remain high for long periods of time fewer borrowers refinance their mortgages. As a result MBS holders are repaid over longer periods of time, which is known as extension risk. Extension risk increases the weighted average life of the security and is another form of market risk assumed by holders of MBSs.

A collateralized mortgage obligation (CMO) is an MBS that is composed of classes of bonds created by prioritizing the cash flows of the underlying mortgage pool. This 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. As of June 30, 2018 the System held approximately \$425,000 of collateralized obligations.

The System invests in MBSs and CMOs for diversification and to enhance fixed income returns. In addition to the risks outlined above, MBSs are subject to credit risk, the risk that the borrower will be unable to meet its obligations.

As of June 30, 2018, the System held approximately \$10.213 million in mortgage-backed securities, none of which were considered as highly sensitive to changes in interest rates.



Asset-Backed Securities

As of June 30, 2018, the System did not have any 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. Similar to the collateralized mortgage obligations described above, 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.

Corporate Bonds

As of June 30, 2018, the System held corporate bonds with a fair value of approximately \$35.32 million. Corporate bonds are a debt security issued by a corporation. The backing for the bond is usually the ability of the company to pay the debt, which is typically based on money to be earned from future operations. In some cases, the company's physical assets may be used as collateral for bonds. Such bonds 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.

Pooled Funds

AJRS has approximately \$40.58 million invested in international pooled funds. AJRS could be indirectly exposed to credit and market risks associated with currency forward contracts to the extent that these pooled funds hold currency forward contracts for purposes of managing exposure to fluctuations in foreign exchange rates.

Derivative Instruments

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. At any given time, AJRS, through its external investment managers, may hold such instruments. The external investment managers may enter into these investments on behalf of AJRS, primarily to enhance the performance and reduce the volatility of its portfolio. The external investment managers may enter into swaps and futures contracts to gain or hedge exposure to certain markets and to manage interest rate risk. AJRS' external investment managers seek to control this risk by evaluating the counterparties before approval, establishing credit limits for each counterparty, and employing procedures for monitoring exposure to credit risk. AJRS' 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.

The external investment manager invests in MBSs, which are reported at fair value in the Statement of



Fiduciary Net Position. Because MBSs are based on the cash flows from interest and principal payments of the underlying mortgages, they are sensitive to prepayments on mortgages in a declining interest rate environment that could reduce the value of the securities. The external investment manager may invest in MBSs to diversify AJRS' portfolio and increase return while minimizing the extent of risk.

As of June 30, 2018, the System had the following mortgage-backed TBA:

Mortgage-Backed TBA	CUSIP	Notional Value	Fair Value	Duration	Credit Rating
FGLMC 3.50% 07/01/2048	02R032679	\$ 395,875	\$ 397,900	5.7	Aaa/AA+
FGLMC 3.00% 07/01/2048	02R030673	499,769	503,292	6.4	Aaa/AA+
FNCL 4.00% 07/01/2048	01F040677	1,230,291	1,233,595	5.1	Aaa/AA+
FNCL 3.50% 07/01/2048	01F032674	832,266	836,052	5.7	Aaa/AA+
G2SF 3.50% 07/20/2048	21H032670	339,575	341,309	5.1	Aaa/AA+
		\$ 3,297,775	\$ 3,312,148	_	

As of June 30, 2018, the System had the following U.S. Treasury futures:

					ι	Inrealized
Future Description	Maturity Date	No	otional Value	Fair Value	G	iain/(Loss)
U.S. 2-year Treasury Note	Sept 2018	\$	1,058,125	1,059,141	\$	1,016
U.S. 10-year Treasury Note	Sept 2018		3,945,656	3,942,047		(3,609)
U.S. Long Bond Treasury	Sept 2018	Sept 2018 (1,710,000)		(1,740,000)		(30,000)
		\$	3,293,781	3,261,188	\$	(32,594)



Fair Value Measurements

AJRS 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 System assessment of the significance of particular inputs to these fair value measurements requires judgment and considers factors specific to each asset or liability. The table(s) on the following pages shows the fair value leveling of the investments for the System.

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

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



Investments and Derivative Instruments A	Measured at Fair Value (as of June 30, 2018)
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	Fair Value	Level 1	Level 2		Level 3
Investments at Fair Value					
U.S. Domestic Equities	\$ 57,070,526	\$ 57,070,526	\$ 0	\$	0
Fixed Income					
U.S. Government Securities	27,546,456	17,333,142	10,213,314		0
Collateralized Obligations	425,791	0	425,791		0
Futures	(32,594)	(32,594)	0		0
Global Corporate Fixed	5,810,786	0	5,810,786		0
Emerging Markets	490,308	0	490,308		0
Corporate Bonds	35,321,825	0	35,321,825		0
Commercial Loans	4,585,316	 0	0		4,585,316
Total Investments at Fair Value	\$ 131,218,415	\$ 74,371,074	\$ 52,262,025	_ \$ _	4,585,316

Investments at the Net Asset Value (NAV)

Defensive Bond Fund	\$ 8,128,491
High Yield Core Fund	6,359,856
Baillie Gifford International Choice Fund	40,582,467
Invesco Core Real Estate Fund	22,772,116
Wellington Diversified Growth Fund	44,207,418
Total Investments at the NAV	\$ 122,050,348

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 AJRS' 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

Totals may not add due to rounding.



partner reports at the end of each reporting period, adjusted by subsequent contributions, distributions, management fees, and changes in values of foreign currency and published market prices for certain securities. Even though the limited partnerships and commingled funds issue annual financial statements audited by independent auditors, the year-end for the State and these entities do not always agree.

There are inherent uncertainties in estimating fair values for these types of investments, and it is possible that the estimates will change in the near-term or the subsequent sale of assets will be different from the reported net asset value. With certain exceptions, mainly the equity and the fixed income funds, these investments cannot be redeemed, or, have certain restrictions regarding redemption. The real estate investments distributions are through the liquidation of the underlying assets or net operating cash flows. Each investment has a different redemption frequency and notice period as noted in the following table.

	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
Defensive Bond Fund	\$ 8,128,491	Income Oriented	N/A	none	daily	T + 1	N/A	N/A
High Yield Core Fund	6,359,856	Active High Yield Fixed Income	N/A	none	daily	T + 1	N/A	N/A
Baillie Gifford International Choice Fund	40,582,467	International Equities	N/A	none	daily	T + 3	N/A	N/A
Invesco Core Real Estate Fund	22,772,116	Core Real Esate	N/A	none	quarterly	T + 45	N/A	N/A
Diversified Growth Fund	44,207,418	U.S. Large Cap Growth stocks	N/A	none	daily	T + 1	N/A	N/A
Total	\$ 122,050,348							

Baillie Gifford International Choice Fund

The Choice Fund aims to deliver good long-term performance to shareholders by investing in a portfolio of 60-90 international growth stocks with up to 15% in emerging markets. The portfolio is built through bottom-up stock selection. It differs from the benchmark and looks for businesses that seek to outperform the market over the long term. Portfolio guidelines ensure a level of diversification across sectors and regions.

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.

Totals may not add due to rounding.



Defensive Bond Arbitrage Fund

The Defensive Bond Arbitrage Fund's investment objective is to exploit different sources of return 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.

High Yield Income 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.

Wellington CIF II Diversified Growth Fund

The investment objective of the Diversified Growth Fund is to provide long-term returns above those of the Russell 1000 Growth Index by investing primarily in large U.S. companies that are projected to grow faster than other large-cap stocks.



Note 5: Net Pension Liability

The components of the net pension liability of the System at June 30, 2018, were as follows:

Total Pension Liability	\$ 279,174,680
Plan Fiduciary Net Position	\$ 256,508,130
Net Pension Liability	\$ 22,666,550
Plan fiduciary net position as a percentage of total pension liability	91.88%

Long-Term Expected Return on Plan Assets

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major 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 target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return were provided by the plan's investment consultant. For each major asset class that is included in the pension plan's target asset allocation as of June 30, 2018 these best estimates, provided by the plan's investment consultant, are summarized in the following table:

		Long-Term
	Target	Expected Real Rate of
Asset Class	Allocation	Return
Broad Domestic Equity	37%	5.97%
International Equity	15	6.07
Real Estate	8	4.59
Cash Equivalents	0	0.02
Domestic Fixed	40	0.83
Total	100%	
Total Real Rate of Return		3.82%
Plus: Price Inflation - Actuary's Assumption		2.50
Less: Admin and Investment Expenses*		0.00
Net Expected Return		6.32%

^{*} This may overstate the investment expense as the investment market assumptions are based upon passive management. Our assumption for investment expense includes the cost of active management.



Annual Money-Weighted Rate of Return

For the year ended June 30, 2018, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 7.94%. 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 5.75% 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 5.75%. 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 table presents the net pension liability of the System, calculated using the discount rate of 5.75%, as well as what the System's net pension liability would be if it were calculated using a discount rate of one percentage point lower (4.75%) or one percentage point higher (6.75%) than the current rate.

	1% Decrease	Current Discount Rate	1% Increase
	4.75%	5.75%	6.75%
Net Pension Liability	\$ 56,925,451	\$ 22,666,550	\$ (6,274,212)

The Board engages an independent firm of actuaries to (1) estimate the present value of actuarial accrued liabilities (AALs) and pension benefit obligations so they can then (2) determine the reserves and employer contribution rates that are required to meet the System's obligations to current and terminated participants, retired individuals, and beneficiaries.

AALs are those future periodic payments including lump sum distributions that are attributable to the service employees have rendered to date and the plan provisions of the System. The present value of AALs is calculated based on the entry age actuarial cost method with benefits based on projected salary increases. The actuarial assumed investment rate of return of 5.75% was allocated to appropriate actuarial accrued liabilities.



Actuarial Gains and Losses

Actuarial gains and losses result from the differences between the AAL amount computed by the actuary and those same amounts reflected in the required supplemental schedules as of the date of the actuarial report. The net actuarial gain or loss increases or decreases the unfunded AAL based on the annual actuarial valuation. The 2018 actuarial gains and losses were due to routine adjustments of actuarial assumptions and methodology, as well as normal experience gains and losses. The resulting actuarial gain was \$382,766.

Actuarial Computed Liabilities

The total unfunded actuarial computed liability of the System as adjusted to fair value, based on entry age normal cost method which is the projected benefit method with a supplemental cost, used for determining required contributions as appears in the actuarial valuation, was \$30,078,181 as of June 30, 2018.

ACTUARIAL PRESENT VALUE OF	(1) Total Present Value	(2) Portion Covered By Future Normal Cost Contributions	(3) Actuarial Accrued Liabilities (1)-(2)
Benefits to be paid to current retirees, beneficiaries, and future beneficiaries of current retirees	\$ 162,018,004	\$ 0	\$ 162,018,004
Age and service allowances based on total service likely to be rendered by present active members	161,804,162	49,670,605	112,133,557
Separation benefits (refunds of contributions and deferred allowances) likely to be paid to present active and inactive members	3,906,933	2,520,155	1,386,778
Disability benefits likely to be paid to present active members	1,314,225	1,957,848	(643,623)
Death-in-service benefits likely to be paid on behalf of present active members	7,283,580	3,003,616	4,279,964
Total	\$ 336,326,904	\$ 57,152,224	\$ 279,174,680
Applicable Assets (Funding Value)	249,096,499	0	249,096,499
Liabilities to be covered by future contributions	\$ 87,230,405	\$ 57,152,224	\$ 30,078,181



REQUIRED SUPPLEMENTARY INFORMATION

The historical trend information designed to provide information about the System's progress made in accumulating sufficient assets to pay benefits when due is required supplementary information.

Schedule of Employer Contributions

Annual Required Contribution	d Percent Contributed
\$ 4,466,571	100%
4,667,612	100
5,220,623	100
5,465,079	100
5,672,291	100
6,117,327	100
5,690,381	100
5,561,289	100
8,485,361	100
\$ 8,421,173	100%
	Contribution \$ 4,466,571 4,667,612 5,220,623 5,465,079 5,672,291 6,117,327 5,690,381 5,561,289 8,485,361

Source: actuarial valuations as of 6/30/2018

The percentage contributed amounts are included per Act 922 of 1983, which authorizes an annual transfer from the Constitutional Officers Fund and the State Central Services Fund to provide full actuarial funding for the System. Because of the timing of this annual transfer, the actual percentage contributed in any single fiscal year may vary from the annual required contribution amount.

Schedule of Funding Progress

									Annual	U	AAL* as a	
Actuarial	Act	tuarial Value	<u>ة</u>	Entry Age				(Covered	Per	centage of	:
Valuation		of Assets		(AAL)	UAAL*	Fu	nded Ratio		Payroll	Cove	ered Payro	II
Date		(a)		(b)	(b) - (a)		(a)/(b)		(c)	[([b-a)/(c)]	
6/30/09	\$	167,433	\$	180,166	\$ 12,732		92.9%	\$	18,875		67%	
6/30/10		165,244		182,912	17,668		90.3		18,630		95	
6/30/11		165,377		186,635	21,258		88.6		19,338		110	
6/30/12		167,796		195,455	27,658		85.8		19,202		144	
6/30/13		182,596		203,134	20,537		89.9		19,586		105	
6/30/14		201,792		208,006	6,213		97.0		19,782		31	
6/30/15		215,448		254,714	39,266		84.6		22,308		176	
6/30/16		225,254		260,522	35,268		86.5		22,308		158	
6/30/17		238,956		270,382	31,426		88.4		22,918		137	
6/30/18	\$	249,096	\$	279,175	\$ 30,078		89.2%	\$	23,435		128%	

^{*} UAAL is unfunded actuarial accrued liability. Dollars in thousands



Schedule of Changes in Net Pension Liability and Related Ratios

Year Ended June 30	2018	2017	2016	2015	2014
Total Pension Liability					
Service Cost	\$ 6,927,257	\$ 7,221,153	\$ 7,230,267	\$ 5,342,168	\$ 5,319,836
Interest	15,378,982	16,121,127	15,770,309	14,883,382	14,607,426
Benefit Changes	0	0	0	0	0
Differences Between Expected And Actual Experience	(743,902)	(3,462,751)	(5,184,045)	12,969,853	(5,751,106)
Assumption Changes	0	2,369,244	0	24,290,229	0
Benefit Payments	(12,769,175)	(12,310,422)	(12,007,538)	(10,762,871)	(9,966,020)
Refunds	0	(79,011)	(800)	(14,320)	(18,836)
Net Change In Total Pension Liability	\$ 8,793,162	\$ 9,859,340	\$ 5,808,193	\$ 46,708,441	\$ 4,191,300
Total Pension Liability, Beginning of Year	\$ 270,381,518	\$ 260,522,178	\$ 254,713,985	\$ 208,005,544	203,814,244
Total Pension Liability, End of Year (A)	\$ 279,174,680	\$ 270,381,518	\$ 260,522,178	\$ 254,713,985	\$ 208,005,544
Fiduciary Net Position					
Contributions - Employer	\$ 8,421,173	\$ 8,485,361	\$ 5,561,289	\$ 5,690,381	\$ 6,117,327
Contributions - Member	1,016,180	1,016,646	1,011,372	946,149	925,324
Net Investment Income	19,162,603	28,044,374	(1,744,085)	9,971,823	29,793,113
Benefit Payments	(12,769,175)	(12,310,422)	(12,007,538)	(10,762,871)	(9,966,020)
Other	11	45,832	0	0	0
Refunds	0	(79,011)	(800)	(14,320)	(18,836)
Administrative Expense	(142,311)	(168,701)	(158,420)	(137,951)	(130,529)
Net Change In Fiduciary Net Position	15,688,482	25,034,079	(7,338,182)	5,693,211	26,720,379
Fiduciary Net Position, Beginning of Year	\$ 240,819,648	\$ 215,785,569	\$ 223,123,751	\$ 217,430,540	\$ 190,710,161
Fiduciary Net Position, End of Year (B)	\$ 256,508,130	\$ 240,819,648	\$ 215,785,569	\$ 223,123,751	\$ 217,430,540
Net Pension Liability, End of Year (A) - (B)	\$ 22,666,550	\$ 29,561,870	\$ 44,736,609	\$ 31,590,234	\$ (9,424,996)
Fiduciary Net Position as a Percentage of the Total Pension Liability	91.88%	89.07%	82.83%	87.60%	104.53%
Covered-Employee Payroll	\$ 23,434,639	\$ 22,917,870	\$ 22,308,000	\$ 22,308,000	\$ 19,781,628
Net Pension Liability as a Percentage of Covered-Employee Payroll	96.72%	128.99%	200.54%	141.61%	(47.65)%



Schedule of Net Pension Liabilities

	FY Ending June 30	Total Pension Liability	Plan Net Position	Net Pension Liability	Plan Net Position as a % of Total Pension Liability	Covered Payroll	Net Pension Liability as a % of Covered Payroll
	2014	\$ 208,005,544	\$ 217,430,541	\$ (9,424,997)	104.53%	\$ 19,781,628	(47.65)%
•	2015	\$ 254,713,985	\$ 223,123,751	\$ 31,590,234	87.60%	\$ 22,308,000	141.61%
٠	2016	\$ 260,522,178	\$ 215,785,569	\$ 44,736,609	82.83%	\$ 22,308,000	200.54%
	2017	\$ 270,381,518	\$ 240,819,648	\$ 29,561,870	89.07%	\$ 22,917,870	128.99%
	2018	\$ 279,174,680	\$ 256,508,130	\$ 22,666,550	91.88%	\$ 23,434,705	96.72%

Schedule of Investment Returns

Annual money-weighted rate of return, net of investment expense

2014	15.63%
2015	4.60%
2016	(0.79)%
2017	12.93%
2018	7.94%



NOTES TO REQUIRED SUPPLEMENTARY INFORMATION

Schedule of Administrative Expenses

2018		2017
\$ 2,626	\$	2,025
1,519		1,077
24,700		50,400
5,165		6,899
29,865		57,299
 108,301		108,301
\$ 142,311	\$	168,702
	\$ 2,626 1,519 24,700 5,165	\$ 2,626 \$ 1,519

NOTE: Administrative expenses will change once pension expense amount is adjusted based upon actuarially determined net pension liability.

Schedule of Investment Expenses (as of June 30, 2018)

	2018	2017
Custodian Bank Fees	\$ 10,750	\$ 14,352
Investment Consultant Fee	61,864	59,485
Investment Manager Fees*	1,196,163	1,039,190
Transaction Fees	0	 0
Total Investment Expenses	\$ 1,268,777	\$ 1,113,027

^{*} For fee paid to investment managers, please see the schedule of investment fees shown on pagepage 65.

Schedule of Payments for Professional Consultants (as of June 30, 2018)

	2	2018	2017
Gabriel, Roeder, Smith & Company	\$ 2	4,700	\$ 50,400

Chief Investment Officer's Report
Investment Consultant's Report
Investment Policy Summary
Asset Allocation
Manager Distribution
Schedule of Comparative Investment
Results by Year
Schedule of Comparative Annualized
Investment Results
Portfolio Characteristics
Ten Largest Holdings
Schedule of Brokerage Commissions





CHIEF INVESTMENT OFFICER'S REPORT

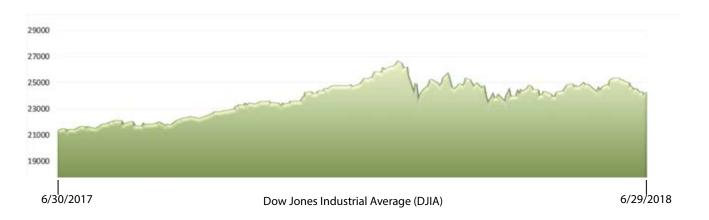
Dear Members,

Oh behalf of the APERS' Investment Department, it is my pleasure to present the Investment Section of the APERS' Annual Financial Report for the fiscal year ended June 30, 2018.

Performance and Stability

For fiscal year 2018, the AJRS investment portfolio closed with total investments of \$256,670,057. The investment return for the fiscal year was 8.23%.

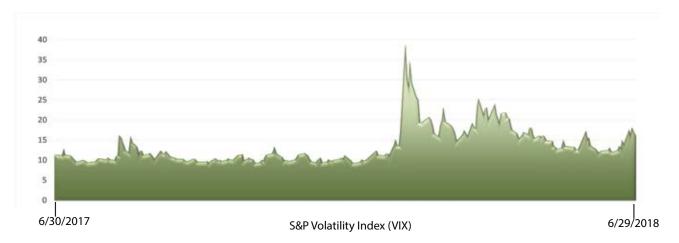
The strength of the return was largely driven by the exposure to domestic equities as you will read in my Financial Market Recap which follows. Domestic Equities as an Asset Class contributed 15.72% to the total performance of the investment fund as the Dow Jones set a new record high in January 2018 of 26,616.



Domestic Fixed Income as an asset class contributed 0.29% to the total performance of the investment fund. Interest rates grinding higher muted fixed income returns.



The S&P VIX Index (a measurement of volatility) not only crept higher during the fiscal year, but it spiked higher in the third guarter of the fiscal year (February 2018).



Fiscal Year 2018 Global Financial Market Recap

The first quarter of fiscal year 2018 (3Q of 2017) saw almost all assets benefit from the proposed Republican tax plan, an increase in crude prices, a very buoyant job market, and continued positive global economic background. The Organization for Economic Cooperation and Development (OECD) announced that all of the 45 countries that it tracks were growing economically in 2017. This was the first instance of simultaneous economic grown since 2007. However weather, geopolitics, and presidential tweets were not as friendly for risk assets. Hurricane Harvey devastated Houston. The Caribbean and Florida also saw devastation due to Hurricanes Irma and Maria. Tensions in the Korean peninsula escalated as North Korean continued to expand and test its nuclear arsenal and fired a missile over Japan which prompted President Trump to threaten "dire consequences."

Despite all the previously mentioned events, U.S. stock market volatility hit record lows. Energy did see a surge in oil prices to end the quarter, the best quarterly gain in over a year. The Federal Reserve announced that it will begin to taper its program which will reduce the Fed's holdings of US Treasuries by \$6 billion a month and agency mortgage-backed securities by \$4 billion a month. The FOMC left rates unchanged in the month of September.

German elections resulted in a surprise uptick in parliamentary seats for the far-right Alternative für Deutschland (AfD) party fueled in part by anti-immigration sentiments. Angela Merkel will remain chancellor and may eclipse Helmut Kohl as the longest-serving chancellor during the post-war period. Japan's Prime Minister Shinzo Abe called a snap election near the end of the quarter. He sought to take advantage of his popularity in the most recent polls.

The second quarter of fiscal year 2018 (4Q 2017) saw continued optimism in the financial markets. U.S. stocks were helped by robust earnings growth as well as richer valuations. President Trump and Congress tried unsuccessfully to repeal the Affordable Care Act. The calendar year was a slow steady progression



of new highs for the S&P 500 with records set 60 times, something which had not been seen in over two decades.

Yields on US Treasuries rose in the front-end of the curve. The 2-year note saw its yield increase 40 basis points, while the 30-year treasury bond actually saw its yield decrease 12 basis points. The FOMC raised rates as expected in December, and Fed Chair Jerome Powell was confirmed by the Senate to replace Janet Yellen.

Mario Draghi of the European Central Bank (ECB) mentioned a "strong pace of economic expansion and a significant improvement in the growth outlook." U.S. 3Q2017 GDP came in at 3.0% following a 3.1% for 2Q2017. Global manufacturing continued to expand. U.S. unemployment hit 4.1% as the U.S. continued to show evidence of steady growth. Outgoing Fed Chairwoman Janet Yellen noted that "the committee expects the labor market to remain strong, with sustained job creation, ample opportunities for workers and rising wages." Rating agencies declared \$60 billion of Venezuelan debt in default after Caracas failed to pay interest on some of its sovereign debt and the country's beleaguered economy, sanctions, and civil strife remain problematic.

The third quarter of fiscal year 2018 (1Q of 2018) began as the previous quarter ended: with strong market gains. The quarter experienced volatile equity markets (particularly in February), outflows in ETFs, potential trade wars and tariffs, and increased borrowing needs by the Federal government due to a tax bill that was passed and a proposed infrastructure program.

Investor concerns over rising inflation and interest rates were blamed for triggering the volatility. I disagreed with that explanation. I have never known the equity markets to predict inflation before the treasury markets. It seemed that a more likely reason was that the increase in hourly earnings could eat into corporate profits.

President Trump announced 25% tariffs on \$60 billion of Chinese imports. This move was not well received by the global equity markets or by the People's Republic of China. China retaliated with a variety of potential trade sanctions against U.S. exports produced in states that supported Trump in the election. The new Chair of the Federal Reserve, Jay Powell, hiked rates to 1.75%.

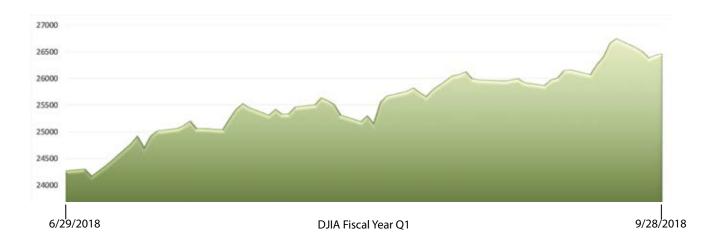
Despite all the background noise, the U.S. economy continued to do well. Unemployment continued to remain extremely low at 4.1%. The trade gap continued to widen which became a focal point of the administration. Elsewhere around the globe, Yi Gang was appointed as the new chief of the PBoC, and the ECB removed its "easing bias" language from its policy statement.

The final quarter of fiscal year 2018 (2Q of 2018) could be called a lot of things, but boring is not one of them. The potential for a trade war between China and the United States heated up as Trump continued to threaten tariffs on a range of imports from China, Mexico, Canada, and Europe. China responded by issuing the same tariffs of the same magnitude on American exports.

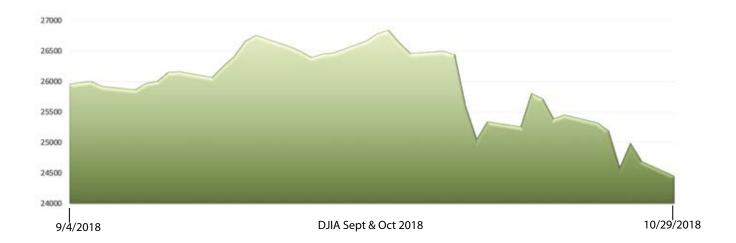
Political elections in Italy along with divisions within Germany's ruling coalition government further rattled

market sentiment as populist anti-establishment, anti-immigrations movements threatened the stability of the Euro. Mexico elected Lopez Obrador in a landslide vote. Turkey saw President Erdogan consolidate power, and the markets braced for authoritarian rule. Domestically, the Federal Reserve raised rates by 25bps again, to 2.00%, and maintained its hawkish stance.

As I write this CIO letter, the first quarter of fiscal year 2019 just closed. It was a strong quarter for domestic equities. The markets continued to receive favorable economic indicators and encouraging corporate earnings reports.



However, towards the end of September there was a new round of reciprocal tariffs. Neither the U.S. or China is ready to flinch, so there's an economic stand-off between the two largest economies in the world. The U.S. imposed an additional \$200 billion in tariffs on Chinese goods and, in return, China imposed \$60 billion in tariffs on U.S. products. The stock market reacted in kind.





Interest rates continue to move higher because of the rising debt load and increasingly pessimistic projections for inflation.



Volatility continues to increase, which is a concern.



With the DJIA within a 9-iron of the all-time high, my opinion of the markets has changed from cautiously optimistic to cautious concern. Did the Federal Reserve hike rates too many times? Does the jawboning about tariffs cease? Do higher interest rates slow down housing? Are stock buy backs the only thing propping up the equity markets? Do emerging market economies improve? Does the U.S. dollar strengthen or not? There are too many unknowns that could tip the scale either way.

I would like to thank each 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 the APERS assets are positioned to provide long-term financial stability for you, the members.

Respectfully yours,

Carlos Borromeo

Chief Investment Officer

INVESTMENT CONSULTANT'S REPORT

Callan

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



September 4, 2018

Dear Trustees:

AJRS' investment program objective is to provide plan participants with retirement benefits. This is accomplished by the implementation of a carefully planned and executed long-term investment program. The Board of Trustees (Board) has exclusive control of all retirement system investments and is responsible for establishing investment objectives, strategies and policies.

The Board is charged with the responsibility of investing the Systems' assets to provide for the benefits of the members of the systems. To achieve that goal the Board follows a policy of preserving capital while seeking means of enhancing revenues and protecting against undue losses in any particular investment area. The Board diversifies the investment of the assets among classes of securities to reduce risk while maximizing the long-range return.

Asset Allocation

Based on its analysis of capital and investment market return patterns, both historical and projected, the Board considers the following asset allocation targets to be consistent with the return requirements and risk tolerance of the fund:

Domestic Equity	37%
International Equity	15%
Domestic Fixed Income	40%
Real Estate	8%

The Fund benchmark is the return that would have been achieved if the Fund had been invested: 37% in the Russell 3000 Index, 15% in the Morgan Stanley Capital International Europe, Australia, Far East Index, 40% in the Bloomberg Aggregate Bond Index and 8% in the NCREIF Fund Index - Open End Diversified Core Equity Real Estate Index.

Total Fund Goals

The System's primary funding goal is to achieve and maintain a funded status that provides for the security of retirement income to participants in the Plan.

The Board's investment objective, as per the Investment Policy Statement, shall be to achieve a rate of return on the System's assets of at least two and one-half percent (2.5%) above the rate of inflation and a total return of the actuarially assumed rate of five and three-quarters percent (5.75%).



2

Callan

Total Fund Returns

For the fiscal year 2018 AJRS produced a return of 8.23%. This return outperformed the fund benchmark, as described above, by 1.25%.

The five-year annualized return of 8.33% outperformed the Fund's benchmark return of 7.67%. In the Callan Public Fund Universe, AJRS' total fund performance ranks at the 28th percentile for five years. The five year return exceeded the actuarially assumed interest rate of 5.75%.

The performance calculations presented above were prepared by the Systems' custodial bank using a time-weighted rate of return methodology based upon the market value of assets.

Sincerely,

R. Ryan Ball, CFA Senior Vice President

INVESTMENT POLICY SUMMARY

Introduction

The basic policy of the Board of Trustees of the Arkansas Judicial Retirement System (the Board) shall be to provide all the benefits specified by law to the members of the Arkansas Judicial Retirement System (AJRS or the System) and their beneficiaries.

At all times acting solely in the best interest of the beneficiaries of the System, the Board shall manage the System's funds as provided by Arkansas Code of 1987 Annotated (A.C.A.) §§ 24-2-601 through 24-2-619, operating on the principles of the prudent investor rule. This will include devoting careful consideration to the following factors:

- · both the funded and unfunded AALs,
- the period of time necessary to amortize all unfunded AALs,
- · the anticipated long term return from both equities and bonds,
- · the need for short term liquidity for disbursements to beneficiaries,
- · the general economic conditions,
- · the effects of inflation or deflation, and
- any other material, actuarial, fiscal, or economic factors.

Investment Objectives

The Board's investment objective shall be to achieve a rate of return on the System's assets of at least 2.5% above the rate of inflation which results in an assumed investment return rate for purposes of the actuarial valuation of 5.75%.

In pursuing this objective the Board shall attempt to maximize the total return in both income and capital appreciation but with greater emphasis on capital appreciation. However, the effort to obtain maximum returns must be consistent with prudent risk-taking, and short-term fluctuations in market value should be considered secondary to long-term results. The Board shall review individual investment decisions as follows:

- in the context of the entire trust fund,
- as a part of an overall investment strategy, and
- with reasonable objectives for risk and return.



Asset Allocation

The Board, with advice by investment consultants and investment managers, shall cause the System's funds to be invested primarily in equities and fixed income securities.

The System frequently has cash from dividends, interest, sale of securities, and contributions, and it is invested in very short-term, or overnight, investments. The Board is authorized to delegate its investment functions.

Accordingly, the Board has employed investment managers that invest in both equities and fixed income securities and has employed a custodian bank that makes overnight investments with cash.

The Board, after consultation with investment consultants and investment managers, periodically will determine the allocation to be made with the System's assets. The Board has a targeted allocation of 37% to domestic equity investments, 40% to domestic fixed income securities, 15% to international equities, and 8% to real estate with ranges of plus or minus 5% to be tolerated as transitory occurrences. Thus, the current asset allocation is to be as follows:

Asset Class	Range
Domestic Equities	32% to 42%
International Equities	10% to 20%
Fixed Income	35% to 45%
Real Estate	3% to 13%



Review of Investment Processes

The Board is authorized to directly manage the System's funds or to delegate its investment function. Currently the Board has delegated its investment function to investment managers and has delegated investment discretion to the managers by separate contract. The duties and responsibilities of each of the investment managers hired by the Board shall include the following:

- A. Each must manage the assets it holds in accordance with the policy guidelines and objectives expressed in this statement. If some deviation from this statement is deemed prudent and desirable by both the Board and manager, they may accordingly modify this policy statement in writing.
- B. Each must demonstrate satisfactory performance in investing the System's funds. In evaluating a manager's performance the Board will give consideration to the investment conditions during the evaluation period, to the manager's style of investment, and to these investment guidelines. The Board will determine the length of a reasonable demonstration period, but each manager's performance will be reviewed at least annually. The manager's performance will be compared against a neutral benchmark of 37% Russell 3000 Index and 40% Barclays Aggregate Index, 15% MSCI EAFE Index, and 8% NFI-ODCE Equal Weight net, as well as against a universe of similarly managed funds in the Investment Consultant's database. The Board may also consider how proxies are voted, which stockbrokers the investment manager employs, and what commissions are paid to them.
- C. Managers must keep the Board apprised of their progress in meeting the investment objectives set forth in this statement and must promptly inform the Board of significant changes in any of the following:
 - 1. the manager's investment strategy or portfolio structure,
 - 2. the market value of managed assets, and
 - 3. the ownership, affiliations, organizational structure, financial condition, professional personnel staffing, or clientele of the manager.
- D. Each manager must comply with all of the duties and responsibilities the manager has as a fiduciary. In addition, the System's assets are to be invested with the care, skill, prudence, and diligence that a prudent professional investment manager would use in similar circumstances.

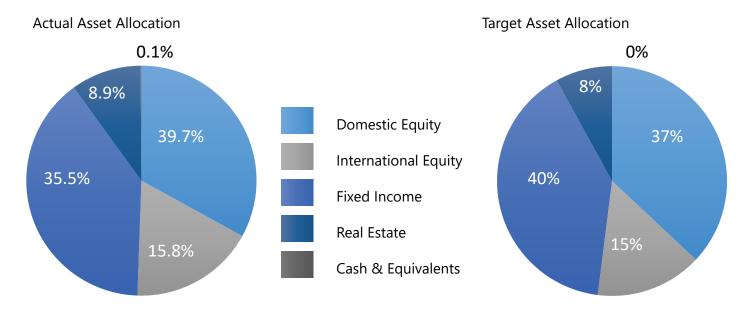


ASSET ALLOCATION

(as of June 30, 2018)

Actual versus Target Asset Allocation

AJRS' actual asset allocation is within the target range set by its investment policy. This target should be confirmed based on AJRS' ongoing asset allocation discussions. The current target allocation is as follows:



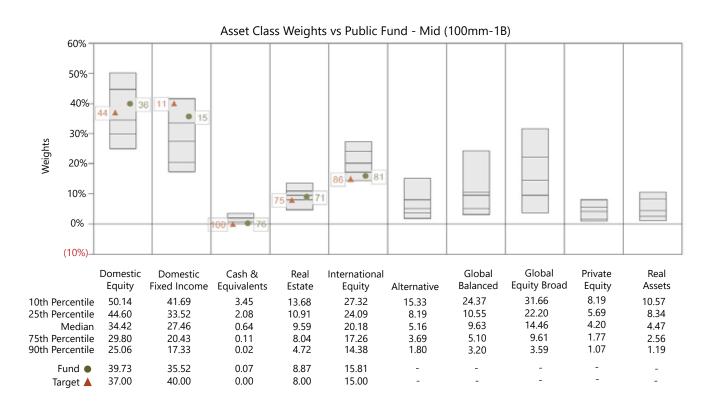
		Percent	Percent	Percent		
Asset Class	Actual*	Actual	Target	Difference	Dif	ference*
Domestic Equity	\$ 101,969	39.7%	37.0%	2.7%	\$	7,001
International Equity	40,582	15.8	15.0	0.8		2,082
Domestic Fixed Income	91,168	35.5	40.0	(4.5)		(11,500)
Real Estate	22,772	8.9	8.0	0.9		2,239
Cash & Equivalents	179	0.1	0.0	0.1		179
Total*	\$ 256,670	100.0%	100.0%			

^{*}Dollars in thousands

Total asset class does not include cash at local bank and non-investment receivables. Totals may not add due to rounding.

Public Plan Sponsor Database

The illustration below shows the average percentage of asset allocations by asset type for the Public Plan Sponsor Database. Because different public funds allocate assets differently, percentages will not equal 100%.





MANAGER DISTRIBUTION

(as of June 30, 2018)

Asset Allocation Strategy		Market Value	Percent of Total	
DOMESTIC EQUITY				
QS Batterymarch Financial	Core Equity	\$ 16,062,519	6.26 %	
Boston Partners	Value Equity	41,698,554	16.25	
Wellington Management Co.	Growth Equity	44,207,496	17.22	
		101,968,569		
INTERNATIONAL EQUITY				
Baillie Gifford International Choice Fund	International Equity	40,582,467	15.81	
DOMESTIC FIXED INCOME				
MacKay Shields LLC	Core Plus Fixed Income	91,168,071	35.52	
REAL ESTATE				
Invesco Core Real Estate	Core Real Estate	22,772,116	8.87	
CASH & CASH EQUIVALENTS				
AJRS General Fund	Short Term Investments	178,833	0.07	
TOTAL		\$ 256,670,056	100.00 %	

SCHEDULE OF COMPARATIVE INVESTMENT RESULTS BY YEAR

(fiscal years ended 2014 through 2018)

	2018	2017	2016	2015	2014
Total Fund					
Arkansas Judicial Retirement System	8.23%	13.35%	(0.27)%	5.06%	16.09%
Callan Total Public Fund Median	8.04	12.50	0.34	3.12	16.03
Inflation (Consumer Price Index)	2.87	1.50	0.64	(0.38)	2.04
Equities					
Arkansas Judicial Retirement System	15.72%	19.99%	(1.81)%	9.18%	23.49%
Callan Total Equity Database Median	15.36	18.92	1.01	7.37	24.78
Russell 3000 Index	14.78	18.51	2.14	7.29	25.22
International Equities					
Arkansas Judicial Retirement System	9.12%	25.17%	(12.15)%	(1.41)%	21.28%
Callan Total Non-U.S. Equity Database Median	8.23	20.73	(8.88)	(3.22)	20.83
MSCI - ACWI-ex US Index	7.79	20.27	(10.16)	(4.22)	23.57
Fixed Income					
Arkansas Judicial Retirement System	0.29%	3.90%	3.92%	1.16%	7.55%
Callan Total Fixed Income Database Median	(0.12)	1.09	4.87	1.70	5.10
Bloomberg Aggregate Index	(0.40)	(0.31)	6.00	1.86	4.37

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



SCHEDULE OF COMPARATIVE ANNUALIZED INVESTMENT RESULTS

(for the current fiscal year and the preceding 3-year and 5-year rates of return)

		Annualized	
	2018	3-Year	5-Year
Total Fund			
Arkansas Judicial Retirement System	8.23%	6.96%	8.33%
Callan Total Public Fund Median	8.04	6.80	7.80
Inflation (Consumer Price Index)	2.87	1.83	1.54
Equities			
Arkansas Judicial Retirement System	15.72%	10.88%	12.95%
Callan Total Equity Database Median	15.36	11.41	13.47
Russell 3000 Index	14.78	11.58	13.29
International Equities			
Arkansas Judicial Retirement System	9.12%	6.26%	7.48%
Callan Total Non-U.S. Equity Database Median	8.23	6.14	7.24
MSCI - ACWI-ex US Index	7.79	5.17	6.60
Fixed Income			
Arkansas Judicial Retirement System	0.29%	2.69%	3.33%
Callan Total Fixed Income Database Median	(0.12)	2.05	2.57
Bloomberg Aggregate Index	(0.40)	1.72	2.27

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

PORTFOLIO CHARACTERISTICS

(fiscal years ended June 30, 2017 and 2018)

	2018	2017
Selected Bond Characteristics		
Yield to Maturity (Market)	3.90%	3.18%
Current Yield	2.67%	3.02%
Average Coupon Rate	3.23%	3.23%
Average Maturity	8.74 yrs.	8.60 yrs.
Quality Breakdown		
AAA (Includes Govts. & Agencies)	32.00%	30.10%
AA	1.60%	1.10%
A	13.60%	15.90%
BAA	34.40%	33.50%
Below BAA	16.40%	19.00%
Cash*	2.10%	0.40%
Selected Stock Characteristics		
Average P/E Ratio	23.52x	21.13x
Estimated Earnings Growth Rate (Next 5 Years)	17.17%	13.92%
Current Yield	1.59%	1.62%

^{*} Includes short term investment fund

Source: Callan Associates



TEN LARGEST HOLDINGS (as of June 30, 2018)

Fixed Income Holdings (by market value)

	Par	Market Value	
1	\$ 2,730,000	U.S. Treasury 2.25% 04/30/2021	\$ 2,702,700
2	1,381,949	FHLMC 3.00% 02/01/2047	1,338,929
3	1,285,000	U.S. Treasury 2.50% 08/15/2023	1,269,888
4	1,210,000	FNMA TBA 4.00% 07/01/2048	1,233,595
5	900,000	U.S. Treasury 4.375% 11/15/2039	1,105,380
6	1,090,000	U.S. Treasury 3.000% 02/15/2047	1,093,913
7	1,035,000	U.S. Treasury 3.00% 05/15/2047	1,038,033
8	993,948	GNMA II 3.50% 07/20/2047	998,680
9	912,000	U.S. Treasury 2.75% 11/15/2042	877,298
10	\$ 865,000	U.S. Treasury 2.75% 02/15/2024	863,850
			\$ 12,522,266

Equity Holdings (by market value)

	Shares	Description	Market Value
1	63,681	Bank Of America Corp.	\$ 1,795,167
2	8,674	Berkshire Hathaway Inc.	1,619,002
3	15,465	Jpmorgan Chase & Co.	1,611,453
4	12,657	Johnson & Johnson	1,535,800
5	22,266	Citigroup Inc.	1,490,041
6	31,956	Cisco Systems Inc.	1,375,067
7	23,911	Wells Fargo & Co.	1,325,626
8	9,585	Chevron Corp.	1,211,832
9	29,281	Pfizer Inc.	1,062,315
10	13,389	Royal Dutch Shell PLC	926,920
			\$ 13,953,223

International Equity Holdings (by market value)

	Shares Description		Market Value
1	4,482	Naspers	\$ 1,139,576
2	6,008	Alibaba	1,114,644
3	39,840	Hargreaves Lansdown	1,036,987
4	12,979	Shiseido	1,030,914
5	27,334	TSMC ADR	999,329
6	6,478	Cochlear	958,087
7	15,574	Zalando SE	870,448
8	25,420	Inditex	868,413
9	12,066	Rightmove	845,920
10	87,641	AIA Group	766,327
			\$ 9,630,645

Totals may not add due to rounding.

SCHEDULE OF BROKERAGE COMMISSIONS

(for the fiscal year ended June 30, 2018)

Brokerage Firm	Number of Shares Traded	Total Commission		Commission Per Share	
Goldman Sachs & Co., NY	240,269	\$	3,689	\$ 0.02	
Credit Suisse, NY	112,072		2,698	0.02	
Citigroup Global Mkts/Salomon, NY	10,512		2,661	0.25	
J.P. Morgan Securities Inc., NY	79,116		1,891	0.02	
Barclays Capital, NY	141,509		1,560	0.01	
HSBC Securities Inc., NY	50,161		1,311	0.03	
Jefferies & Co Inc., NY	52,963		1,173	0.02	
Merrill Lynch Pierce Fenner Smith Inc., NY	54,140		1,101	0.02	
Morgan Stanley & Co. Inc., NY	40,238		1,065	0.03	
Goldman Sachs Execution & Clearing, NY	37,862		716	0.02	
Sanford Bernstein & Co., NY	35,664		571	0.02	
UBS Securities LLC, Stamford	20,411		452	0.02	
Deutsche Bank Securities, NY	15,750		388	0.02	
J.P.Morgan Clearing Corporation, NY	29,184		308	0.01	
Instinet Corporation	25,129		251	0.01	
SJ Levinson & Sons LLC, NY	5,175		116	0.02	
Investment Tech Group Inc, NY	6,810		108	0.02	
RBC Capital Markets LLC, NY	7,895		99	0.01	
Oppenheimer & Co. Inc., NY	4,890		98	0.02	
MacQuarie Securities Inc., NY	4,809		97	0.02	
ITG Inc., NY	5,395		51	0.01	
Liquidnet Inc., NY	4,346		43	0.01	
Stifel Nicolaus	1,324		26	0.02	
Pershing LLC Jersey City	1,014		10	0.01	
MacQuarie Capital Inc, NY	406		7	0.02	
Cantor Clearing Services, NY	246		5	0.02	
Instinet Clearing Services Inc., NY	317		3	0.01	
National Financial Services, NY	1,335		3	0.00	
	988,942	\$	20,501		



SCHEDULE OF INVESTMENT FEES

(as of June 30, 2018)

Equities	Market Value	Fee	Basis Points
Batterymarch Financial Management	\$ 16,062,519	\$ 143,067	0.85
Wellington Management Co.	44,207,496	238,908	0.55
Robeco Boston Partners	41,698,554	228,878	0.58
Fixed Income			
MacKay Shields LLC	\$ 91,168,071	\$ 270,420	0.30
Real Estate			
Invesco Core Real Estate (Core)	\$ 22,772,116	\$ 152,105	0.80
International Equities			
Baillie Gifford	\$ 40,582,467	159,219	0.53
Total Investment Manager Fees		\$ 1,192,597	
Other Services			
Bank of New York Mellon (Custodian)		\$ 14,315	
Callan Associates (Consultant)		61,864	
Total Other Services		76,179	
Total Investment Fees		\$1,268,777	

Actuarial

Actuary's Certificate Letter

Summary of Actuarial Assumptions Summary of Actuarial Methods Single-Life Retirement Values Decrement and Pay Increase **Assumptions for Active Members** Probabilities of Retirement for Members Eligible to Retire **Computed Employer Contribution Rates Short Condition Test** Short Condition Test: Ten Year Comparative Statement Retirees and Beneficiaries by Attained Age Active Members by Attained Age and Years of Service - Tier One Active Members by Attained Age and Years of Service - Tier Two Analysis of Experience Analysis of Experience - Gains/(Losses) by Risk Area **Summary of Plan Provisions**





ACTUARY'S CERTIFICATE LETTER



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

November 20, 2018

Board of Trustees Arkansas Judicial Retirement System Little Rock, Arkansas

Dear Board Members:

The basic financial objective of the Arkansas Judicial Retirement System (AJRS) 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 AJRS 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 AJRS as of June 30, 2018. The purpose of the June 30, 2018 annual actuarial valuation was to determine the contribution requirements for the fiscal year ending June 30, 2020 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 30 years. The most recent valuations were completed based upon population data, asset data, and plan provisions as of June 30, 2018. In addition, a separate report was issued (dated November 6, 2018) to provide actuarial information for GASB Statement No. 67 and GASB Statement No. 68.

The AJRS 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 and completeness of the information provided by the administrative staff.

The actuarial valuation report and GASB Statement No. 67 and No. 68 report contain the following supporting schedules for use in the Actuarial and Financial Sections of the Comprehensive Annual Financial Report.

Actuarial Section

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



Board of Trustees Arkansas Judicial Retirement System November 20, 2018 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, 2018 valuation was based upon assumptions that were recommended in connection with a study of experience through the period 2011-2016.

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.

On the basis of the June 30, 2018 actuarial valuation and the benefits and contribution rates then in effect, it is our opinion that the Arkansas Judicial Retirement System is satisfying the general financial objective of level-percent-of-payroll financing.

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,

The Drawlow

Mita D. Drazilov, ASA, FCA, MAAA

David L. Hoffman

MDD/DLH:ah



SUMMARY OF ACTUARIAL ASSUMPTIONS

Economic Assumptions

The investment return rate used in making the valuation was 5.75% per year, compounded annually (net after investment expenses). Adopted 2017.

Pay increase assumptions ffor individual active members are shown on page D-3. Part of the assumption for each age is for a merit and/or seniority increase, and the other 3.25% recognizes wage inflation. This wage inflation assumption consists of 2.50% for price inflation and 0.75% for real wage growth. Adopted 2015 and readopted 2017.

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

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

Non-Economic Assumptions

post-retirement mortality, used in evaluating allowances to be paid were the RP-2014 Healthy Annuitant table for males and females, adjusted for mortality improvement back to the observation period base year of 2006. The disabled retiree mortality tables, for post-retirement mortality, used in evaluating allowances to be paid were the RP-2014 disabled mortality table for males and females, adjusted for mortality improvement back to the observation period base year of 2006. The pre-retirement mortality tables used were the RP-2014 employees mortality table for males and females, adjusted for mortality improvement back to the observation period base year of 2006. It was assumed that 100% of pre-retirement deaths would be non-duty related. Mortality rates for a particular calendar year are determined by applying the MP-2016 improvement scale to the above described tables. Related values are shown on pages D-3 and D-5. Adopted 2017.

The probabilities of retirement for members eligible to retire are shown on page D-4. Adopted 2017.

The probabilities of withdrawal from service, death-in-service, and disability are shown for sample ages on page D-3. Adopted 2017.

Normal cost and the allocation of benefit values between service rendered before and after the valuation date was determined using an individual entry-age actuarial cost method having the following characteristics:

^{*}The data referenced in this section is taken from the actuary's report, Arkansas Public Employees Retirement System Actuarial Valuation and Experience Gain/(Loss) Analysis June 30, 2018, prepared by Gabriel Roeder Smith & Co. Unless otherwise noted, page number citations refer to that report. A PDF copy of the report is available for download at www.apers.org.



- The annual normal cost for each individual active member, payable from the date of employment to the date of retirement, is sufficient to accumulate the value of the member's benefit at the time of retirement: and
- Each annual normal cost is a constant percentage of the member's year-by-year projected covered pay.

The normal cost, the present value of future normal cost, and the present value of benefits are based on the benefit levels available to each member. The accrued liability is the difference between the present value of benefits and the present value of future normal cost.

Funding value of assets (cash & investments) was determined by phasing-in differences between actual market return and the assumed rate of return 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, 2018
Actuarial Cost Method	Entry Age
Amortization Method	Level Percent-of-Payroll
Remaining Amortization Period	Variable*
Asset Valuation Method	4-Year smoothed market with 25% corridor
Actuarial Assumptions:	
Investment Rate of Return	5.75%
Projected Salary Increases	3.25%
Including Price Inflation at	2.50%
Cost-of-Living Adjustments	Pre July 1, 1983 retirees: Increased with increases in active judges pay. Post June 30, 1983 retirees: 3% compound.
Retirees and Beneficiaries Receiving Benefits	147
Terminated Plan Members Entitled to But Not Yet Receiving Benefits	5
Active Plan Members	139
Total	291

^{*}See page A-8 of the actuary's report



SINGLE-LIFE RETIREMENT VALUES

(as of June 30, 2018)

\$1 Montl	hly for Life	Future Life Expectancy (Years)		
Men	Women	Men	Women	
\$ 234.75	\$ 244.92	34.58	37.18	
216.59	227.48	29.83	32.24	
196.08	207.45	25.26	27.47	
173.31	184.97	20.93	22.92	
148.49	159.97	16.85	18.59	
122.10	133.06	13.07	14.55	
\$ 95.55	\$ 105.58	9.70	10.91	
	\$1 Month Increasing Men \$ 234.75 216.59 196.08 173.31 148.49 122.10	\$ 234.75 \$ 244.92 216.59 227.48 196.08 207.45 173.31 184.97 148.49 159.97 122.10 133.06	\$1 Monthly for Life Increasing 3% Annually Expectar Men Women Men \$ 234.75 \$ 244.92 34.58 216.59 227.48 29.83 196.08 207.45 25.26 173.31 184.97 20.93 148.49 159.97 16.85 122.10 133.06 13.07	

Sample		Lives S	of Age 65 till Alive
Attained Ages	\$100 Benefit Increasing 3% Annually	Men	Women
65	\$ 100.00	100%	100%
70	115.93	94	95
75	134.39	85	88
80	155.80	73	78
85	180.61	57	64



DECREMENT AND PAY INCREASE ASSUMPTIONS FOR ACTIVE MEMBERS

(as of June 30, 2018)

		Percentage of Active Members Separating Within the Next Year				•	ease Assump dividual Mem		
		Ma	ale	Fei	male				
Sample Ages	Years Service	Death	Disability	Death	Disability	Withdrawal	Merit & Seniority	Base (Economy)	Increase Next Year
	0					6.00%			
	1					6.00			
	2					6.00			
	3					6.00			
	4					6.00			
30	5+	0.05%	0.04%	0.02%	0.05%	1.00	0.00%	3.25%	3.25%
35		0.06	0.04	0.03	0.05	1.00	0.00	3.25	3.25
40		0.06	0.10	0.04	0.18	1.00	0.00	3.25	3.25
45		0.10	0.13	0.07	0.20	1.00	0.00	3.25	3.25
50		0.16	0.25	0.11	0.28	1.00	0.00	3.25	3.25
55		0.28	0.45	0.17	0.38	1.00	0.00	3.25	3.25
60		0.48	0.71	0.26	0.51	1.00	0.00	3.25	3.25
65		0.86	0.83	0.38	0.62	1.00	0.00	3.25	3.25



PROBABILITIES OF RETIREMENT FOR MEMBERS ELIGIBLE TO RETIRE

(as of June 30, 2018)

Early Retirement

	Percentage of Eligible Active Members				
Retirement Ages	Electing Early Retirement Within Next Year				
62	2%				
63	2%				
64	2%				

Normal Retirement

- 1. For ages under 70, a 4% probability of retirement is used.
- 2. For ages 70 and over
 - a. if the future year of consideration is an odd year, then a 4% probability of retirement is used.
 - b. if the future year of consideration is an even year,
 - i. for members under the age of 76, a 33% probability of retirement is used.
 - ii. for members ages 76 or older, a 100% probability of retirement is used.

For Tier One, a member was assumed eligible to retire at age 50 with 20 years of service or at age 65 with 10 years of service. A member was assumed eligible to retire early at age 62 with 14 years of service.

For Tier Two, a member was assumed eligible to retire at age 50 with 20 years of service or at age 65 with 8 years of service. A member was assumed eligible to retire early at age 62 with 8 years of service.



COMPUTED EMPLOYER CONTRIBUTION RATES

Historical Schedule

Valuation		Active Membe					
Date June 30			Averag	es in Years	UAAL Financing	Computed Employer	
	Number	Average Pay	Age	Service @	Period	Contribution Rate	
2009(a)	138	\$ 136,775	56.2 yrs.	15.0 yrs.	30 yrs.	27.43%	
2010	136	136,984	57.1	15.4	30	29.08	
2011	141	137,149	57.6	15.3	30	29.93	
2012#	140	137,155	58.5	15.8	30	31.46	
2013	140	139,898	58.7	15.9	30	29.12	
2014#	140	141,297	59.7	16.8	29	25.09	
2015#	139	160,489	58.6	16.4	28	37.99	
2016	139	160,489	59.5	17.0	27	37.37	
2017#	140	163,699	59.0	16.1	15/20	35.87	
2018	139	\$ 168,595	60.0 yrs.	16.9 yrs.	—* yrs.	35.90%	

⁽a) After changes in benefit provisions.

Employer contributions are the total of all types of revenue to the System except member contributions by payroll deduction and investment return. Employer contributions include court fees and Act 922 transfers.

[#] Revised actuarial assumptions and/or methods.
@ Includes reciprocal service for Tier One members on and after June 30, 2006 and Tier Two members on and after June 30,

^{*}Unfunded actuarial accrued liabilities are amortized as described on page A-8 of the actuarial report.



SHORT CONDITION TEST

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

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

- member accumulated contributions
- the liabilities for future benefits to present retired lives
- the employer financed portion of liabilities for service already rendered by non-retired 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 present assets. In addition, the liabilities for service already rendered by active members (liability 3) will be partially covered by the remainder of present assets. The larger the funded portion of liability 3, the stronger the condition of the System.



SHORT CONDITION TEST: TEN-YEAR COMPARATIVE STATEMENT

Entry Age Accrued Liability										
Valuation	(1) Active	(2) Retirees	((3) ive Member Employer	D	Portion of Present Values Covered By Present Assets				
Date June 30	Member Contributions	and Beneficiaries		Financed Portion)	Present Assets	(1)	(2)	(3)	Total	Market Value Total
2009(a)	\$ 12,689	\$ 103,249	\$	64,227	\$ 167,433	100%	100%	80%	93%	73%
2010	11,474	102,200		69,238	165,244	100	100	74	90	78
2011	11,822	102,379		72,434	165,377	100	100	71	89	92
2012(a)	12,356	107,413		75,685	167,796	100	100	63	86	87
2013	12,397	114,770		75,967	182,596	100	100	73	90	94
2014(a)	13,310	113,468		81,228	201,792	100	100	92	97	105
2015(a)	12,665	143,898		98,150	215,448	100	100	60	85	88
2016	13,337	142,743		104,441	225,254	100	100	66	86	83
2017(a)	13,261	161,761		95,360	238,956	100	100	67	88	89
2018	\$ 14,196	\$ 162,018	\$	102,961	\$ 249,096	100%	100%	71%	89%	92%

⁽a) After changes in benefit provisions and/or actuarial assumptions and methods. Dollars in thousands



RETIREES AND BENEFICIARIES TABULATED BY ATTAINED AGE

		Retirees	Survivo	r Beneficiaries		Total
Attained		Annual		Annual		Annual
Ages	No.	Allowances	No.	Allowances	No.	Allowances
55	1	\$ 39,267	0	\$ 0	1	\$ 39,267
60	0	0	4	\$ 290,754	4	290,754
62	1	57,480	2	120,074	3	177,554
63	2	187,543	2	151,055	4	338,598
64	1	80,662	0	0	1	80,662
65	2	104,948	0	0	2	104,948
66	2	124,678	1	51,598	3	176,276
67	3	366,848	2	133,771	5	500,619
68	4	368,003	1	68,237	5	436,240
69	5	461,231	2	169,931	7	631,162
70	6	598,994	1	97,785	7	696,779
71	3	281,640	1	76,021	4	357,661
72	7	722,196	0	0	7	722,196
73	6	637,026	3	240,614	9	877,640
74	6	446,711	1	68,208	7	514,919
75	9	734,190	1	71,829	10	806,019
76	4	457,247	2	146,087	6	603,334
77	4	452,395	2	137,892	6	590,287
78	3	134,702	1	96,584	4	231,286
79	5	476,162	0	0	5	476,162
80	3	311,868	0	0	3	311,868
81	5	524,441	1	68,820	6	593,261
82	3	300,869	1	72,720	4	373,589
83	5	581,860	3	211,110	8	792,970
84	3	319,030	2	135,150	5	454,180
85	0	0	1	67,575	1	67,575
86	3	313,399	1	77,881	4	391,280
87	1	104,702	1	67,575	2	172,277
88	2	202,245	1	77,881	3	280,126
89	1	110,326	1	67,575	2	177,901
90	1	100,858	2	135,150	3	236,008
91	0	0	2	137,895	2	137,895
92	1	155,762	1	67,575	2	223,337
93	0	0	1	68,208	1	68,208
95	0	0	1	67,575	1	67,575
Totals	102	\$ 9,757,283	45	\$ 3,243,130	147	\$ 13,000,413



ACTIVE MEMBERS BY ATTAINED AGE AND YEARS OF SERVICE - TIER ONE

			Years of Se	ervice to Va	aluation Da	te			Totals
Attained				-					Valuation
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Payroll
50-54									\$ 0
55-59				2				2	336,192
60									0
61									0
62									0
63									0
64									0
65				1	1			2	336,192
66							1	1	168,096
67					1		1	2	343,016
68				2		2		4	673,959
69				1				1	168,096
70					2	1		3	504,288
71						3		3	504,288
72									0
73							1	1	168,096
75					1			_1_	174,920
Totals				6	5	6	3	20	\$ 3,377,143

			Averages	
Group	No.	Age	Service	Annual Pay
Tier One	20	67.6	25	\$168,857



ACTIVE MEMBERS BY ATTAINED AGE AND YEARS OF SERVICE - TIER TWO

	Years of Service to Valuation Date							1	otals
Attained									Valuation
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Payroll
35-39	3							3	\$ 504,288
40-44	3	1						4	673,959
45-49	6	9	2					17	2,878,104
50-54	4	5	2	1				12	2,018,727
55-59	6	8	1	2	2			19	3,206,948
60	1		1	1				3	504,288
61	1		1	1				3	504,288
62	2	3	2	2	1			10	1,686,737
63	1			2				3	504,288
64			2	6		1		9	1,512,864
65	1	2	1					4	679,208
66	1	3			2			6	1,008,576
67	1	1		2		1		5	842,055
68		1	1			1		3	504,288
69	1	1		2		1		5	840,480
70			1			1		2	336,192
71	1	1		4				6	1,010,151
72				1				1	168,096
73	1	2	1					4	673,959
Totals	33	37	15	24	5	5	0	119	\$ 20,057,496

			Averages	
Group	No.	Age	Service	Annual Pay
Tier Two	119	58.8	10.1	\$ 168,550



ANALYSIS OF EXPERIENCE

Actual experience will not (except by coincidence) coincide exactly with 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.

	2018	2017
1) UAAL* at Start of Year	\$ 31,426,009	\$ 35,267,807
2) Normal Cost from Last Valuation	5,726,585	6,431,333
3) Employer Contributions	8,421,173	8,485,361
4) Interest Accrual: (1) x .0575 + [(2) - (3)] x .02875	1,729,526	2,140,050
5) Expected UAAL Before Changes: (1) + (2) - (3) + (4)	30,460,947	35,353,829
6) Changes in Benefits/Assumptions/Methods	0	2,369,244
7) Expected UAAL After Changes: (5) + (6)	30,460,947	37,723,073
8) Actual UAAL at End of Year	30,078,181	31,426,009
9) Gain(Loss): (7) - (8)	\$ 382,766	\$ 6,297,064
 Gain(Loss) as Percent of Actuarial Accrued Liabilities at Start of Year: \$270,381,518 	0.1%	2.4%
Last Year's Accrued Liability	\$ 270,381,518	\$ 260,522,178

^{*}Unfunded actuarial accrued liability.



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

(during the period July 1, 2017 to June 30, 2018)

	Gain (Loss) D	Ouring Year
Type of Risk Area	(\$ in Millions)	Percent of Liabilities
Economic Risk Areas		
Pay Increases If there are smaller pay increases than assumed, there is a gain, if greater increases, a (loss).	\$ 0.0	0.0 %
Investment Return If there is greater 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 with higher average pays, a (loss).	0.0	0.0
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).	(0.1)	0.0
Withdrawal If more liabilities are released by other separations than assumed, there is a gain, if fewer are released, a (loss).	(0.2)	(0.1)
Retiree Mortality / COLAs If there are fewer deaths than assumed, there is a (loss), if more, a gain. This includes gains and losses related to Tier I pre-July 1, 1983 retired member increases.	(0.4)	0.1
Other Gains and losses resulting from group size change, data adjustments, timing of financial transactions, additional contributions and miscellaneous unidentified sources.	0.2	0.1
Experience Gains/(Losses)	\$ 0.4	0.1 %



SUMMARY OF PLAN PROVISIONS

Tier One Tier Two

Description

Elected or appointed prior to the effective date of Act 399 of 1999 and who do not elect to participate in Tier Two.

Elected or appointed after the effective date of Act 399 of 1999 or elected to participate in Tier Two.

Regular Retirement

An active member may retire at age 65 with 10 or more years of credited service, or after 20 years of credited service regardless of age. Persons who become members after June 30, 1983 must also have at least 8 years of actual service as a justice of the Supreme Court, or as a judge of the Circuit or Chancery Courts or the Court of Appeals.

An active member or former member may retire at age 65 with 8 or more years of credited service, or after 20 years of credited service regardless of age.

Compulsory Retirement

Any judge or justice who attains 70 years of age during a term of office to which he has been elected may complete the term without forfeiting rights to retirement benefits. Any judge or justice who is not eligible to retire at age 70 may continue to serve as judge until completion of the term in which there has accrued sufficient credited service to retire. Otherwise, judges or justices must retire by their 70th birthday or lose their retirement benefits.

Any judge or justice who attains 70 years of age during a term of office to which he has been elected may complete the term without forfeiting rights to retirement benefits. Any judge or justice who is not eligible to retire at age 70 may continue to serve as judge until completion of the term in which there has accrued sufficient credited service to retire. Otherwise, judges or justices must retire by their 70th birthday or lose their retirement benefits.

Final Salary

The annual salary for the last judicial office held.

The annual salary for the last judicial office held.



Tier One Tier Two

Age and Service Annuity

60% of the judge's final salary, for life.

Each year of additional service after twenty (20) years of judicial service, the benefit shall be increased by two and one-half percent (2.5%) with a maximum benefit payable of seventy-five percent (75%) of the judge's final salary.

3.2% of the salary of the last judicial office held multiplied by the number of years of service not to exceed 80% of the salary of the last judicial office held.

Deferred Retirement

An inactive member who has 14 or more years of credited service and left judicial service before attaining age 65 will be entitled to an age and service annuity beginning at age 65. Persons who become members after June 30, 1983 must also have at least 8 years of actual service as a justice of the Supreme Court, or as a judge of the Circuit or the Chancery Courts or the Court of Appeals.

An inactive member who has 8 or more years of credited service and left judicial service before attaining age 65 will be entitled to an age and service annuity beginning at age 65.

Disability Retirement

An active member with 3 or more consecutive years of credited service who becomes totally and permanently disabled may be retired and receive a disability annuity computed in the same manner as an age and service annuity. The 3 years of service is not required for persons who were members before July 1, 1983.

An active member with 3 or more consecutive years of credited service who becomes totally and permanently disabled may be retired and receive a disability annuity computed in the same manner as an age and service annuity, except that the benefit shall not be less than 25.6% of final salary.



Tier One Tier Two

Early Retirement

A member who became a member before July 1, 1983 and who has 18 but less than 20 years credited service may retire, regardless of age, and receive an immediate annuity. The amount is the full age and service amount reduced proportionately for service less than 20 years.

A member with 14 years of credited service may retire between ages 62 and 65 and receive an immediate annuity. The amount is the full age and service amount reduced 1/2 of 1% for each month that retirement age is younger than age 65. Persons who become members after June 30, 1983 must also have at least 8 years of actual service as a justice of the Supreme Court, or as a judge of the Circuit Court or Chancery Courts or the Court of Appeals.

A member with 8 years of credited service may retire between ages 62 and 65 and receive an immediate annuity. The amount is the full age and service amount reduced 1/2 of 1% for each month retirement age is younger than age 65.

Survivor Benefits

Upon the death of a member with 3 or more years of service, before or after retirement, an annuity of 67% of the judge's benefit is payable to the following survivors (shared if there is more than one eligible survivor):

- A surviving spouse married to the judge more than 1 year at the time of death.
- · A minor child of the judge.

The 3-year service requirement is not required of those who became members prior to July 1, 1983.

Upon the death of a member with 3 or more years of service, before or after retirement, an annuity of 67% of the judge's benefit, but not less than 17.152% of final salary, is payable to the following survivors (shared if there is more than one eligible survivor):

- A surviving spouse married to the judge more than 1 year at the time of death.
- A minor child of the judge.

The 3-year service requirement is not required of those who became members prior to July 1, 1983.



Tier One Tier Two

Increases after Retirement

For any person who was a member on or before June 30, 1983, the retirement benefits are increased or decreased from time to time as the salary for the particular judicial office is increased or decreased. For all judges or justices first elected after June 30, 1983, and who have received retirement benefits from the System for at least 12 full calendar months, the retirement benefits are increased each July 1st by 3%.

For all judges or justices who have received retirement benefits from the System for at least 12 full calendar months, the retirement benefits are increased each July 1st by 3%.

Member Contributions

Active members contribute 6% of their salaries. Members with 20 or more years of service and members age 65 or older with 10 or more years of service do not contribute to the Retirement System. At any time a member is accruing the additional 2.5% of final salary benefit, member contributions would be required. If a member leaves service before becoming eligible to retire, accumulated contributions may be refunded.

Active members contribute 5% of their salaries. Members with 25 or more years of service do not contribute to the Retirement System. If a member leaves service before becoming eligible to retire, accumulated contributions may be refunded.

Statistical

Schedule of Revenue by Source Schedule of Expenses by Type Schedule of Benefit Expense by Type Schedule of Retired Members by Type of Benefit Statistical Graphs



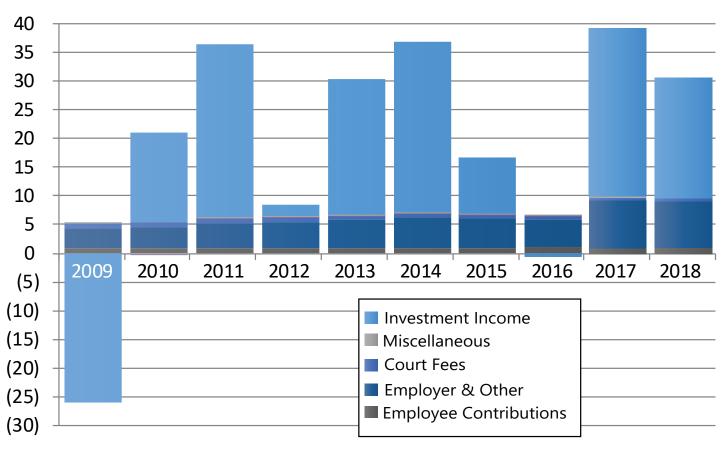
SCHEDULE OF REVENUE BY SOURCE

(for fiscal years ended June 30, 2009 through June 30, 2018)

Year		Employer &				
Ending	Employee	Other Entity			Investment	
June 30	Contributions	Contributions	Court Fees	Misc.	Income	Total
2009	\$ 816,348	\$ 3,500,600	\$ 902,797	\$ 68,631	\$ (25,971,792)	\$ (20,683,416)
2010	871,330	3,753,808	902,797	(1,193)	15,439,110	20,965,852
2011	860,565	4,303,921	902,797	13,905	30,449,948	36,531,135
2012	879,762	4,640,182	814,993	9,904	2,148,975	8,493,816
2013	886,685	4,931,998	740,293	40,696	23,706,205	30,305,877
2014	925,324	5,345,572	764,883	6,873	29,793,113	36,835,765
2015	946,149	5,078,901	609,388	2,092	9,971,824	16,608,354
2016	1,011,372	4,962,144	586,818	12,328	(581,835)	5,990,826
2017	1,016,646	7,898,543	586,818	45,833	29,157,400	38,705,240
2018	\$ 1,016,180	\$ 7,834,355	\$ 586,818	\$ 12	\$ 20,431,379	\$ 29,868,745

Revenues by Source

(In Millions)



Statistical

SCHEDULE OF EXPENSES BY TYPE*

(for the fiscal year ended June 30, 2018)

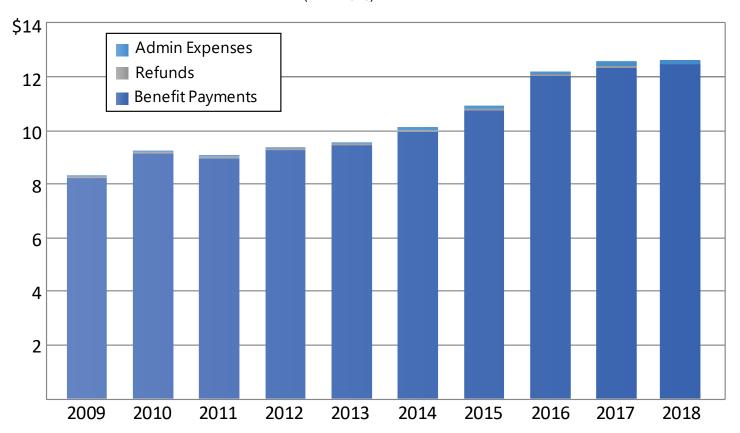
Year Ending	Benefit	Administrative					
June 30	Payments		Refunds		Expenses		Total
2009	\$ 8,235,694	\$	20,505	\$	59,194	\$	8,315,393
2010	9,125,873		22,782		49,021		9,197,676
2011	8,983,419		15,823		48,919		9,048,161
2012	9,280,100		7,014		67,798		9,354,912
2013	9,448,550		27,593		55,591		9,531,734
2014	9,966,020		18,836		130,529		10,115,385
2015	10,762,871		14,320		137,951		10,915,142
2016	12,007,537		800		158,420		12,166,757
2017	12,310,422		79,011		168,702		12,558,134
2018	\$ 12,769,175	\$	0	\$	142,311	\$	12,911,485

^{*} Expenses are annualized based on June 30 benefit amounts.

NOTE: Administrative expenses will change once the pension expense amount is adjusted based upon actuarially determined net pension liability.

Expense by Type

(In Millions)



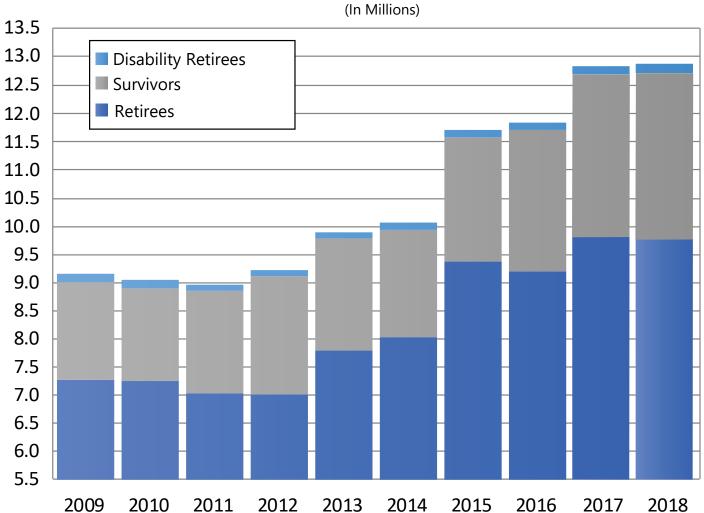
SCHEDULE OF BENEFIT EXPENSES BY TYPE *

(for the fiscal year ended June 30, 2018)

Year Ended	Age an	d Sei	Disability	
June 30	Retirees		Survivors	Retirees
2009	\$ 7,266,337	\$	1,742,101	\$ 157,724
2010	7,254,889		1,642,645	159,842
2011	7,032,265		1,824,181	110,829
2012	7,010,699		2,096,331	114,154
2013	7,783,179		1,992,752	117,579
2014	8,020,300		1,916,865	121,106
2015	9,377,001		2,206,257	124,740
2016	9,194,076		2,516,580	128,482
2017	9,746,437		2,856,225	132,336
2018	\$ 9,620,977	\$	3,014,896	\$ 136,306

^{*} Expenses are annualized based on June 30 benefit amounts.

Benefit Expense by Type



Statistical

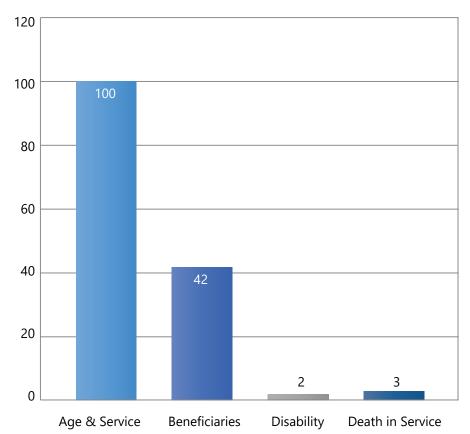
SCHEDULE OF RETIRED MEMBERS BY TYPE OF BENEFIT

(as of June 30, 2018)

	Number	Annual Annuities	Annuity Liabilities
Age and Service Retirees			
Life	10	\$ 863,495	\$ 9,051,205
Life Continuing to Survivor	90	8,757,482	116,729,894
Totals	100	9,620,977	125,781,099
Beneficiaries of Age & Service Retirees	42	3,014,896	30,981,276
Total Age & Service Retirees & Beneficiaries	142	12,635,873	156,762,375
Disability Retirees			
Life	1	92,119	804,173
Life Continuing to Survivor	1	44,187	637,056
Totals	2	136,306	1,441,229
Beneficiaries of Disability Retirees	0	0	0
Total Disability Retirees & Beneficiaries	2	136,306	1,441,229
Death-in-Service Beneficiaries	3	228,234	3,814,400
Total Retirees & Beneficiaries	147	\$ 13,000,413	\$ 162,018,004

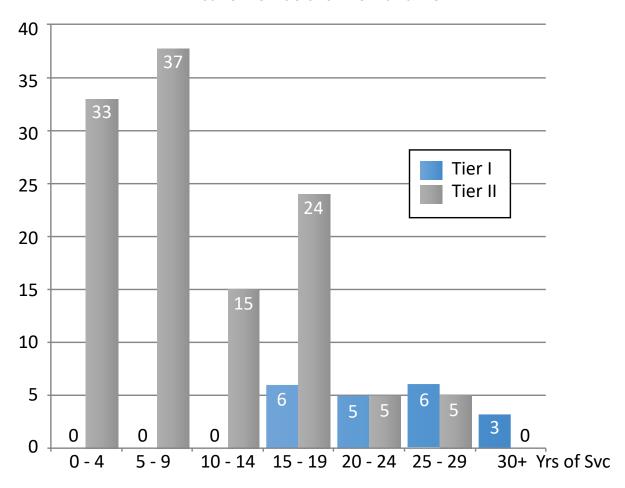
Totals may not add due to rounding.

Retiree by Type of Annuity



STATISTICAL GRAPHS

Active Members for Tier I and Tier II



Projected Separation of Current Membership

