Arkansas Judicial Retirement System Annual Comprehensive Financial Report

for Fiscal Year 2023

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Introduction



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 Comprehensive Financial report, which covers the period from July 1, 2022, through June 30, 2023, 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, 2023)

Active Members	s FY2023			FY2022		
	Tier 1	Tier II	Tier 1	Tier II		
Number	6	136	8	137		
Average Age (yrs.)	67.8	57.7	68.6	57.7		
Average Service (yrs.)	31.3	8.8	30.1	9.0		
Average Annual Salary	\$198,195	\$193,678	\$183,824	\$180,938		

Retirees	FY2023	FY2022
Number	8	1
Average Age (yrs.)	70.6	62.0
Average Service (yrs.)	25.3	20
Average Monthly Benefit	\$12,447	\$9,206

All Retired Members	FY2023	FY2022
Number	178	176
Average Age (yrs.)	77.2	77.3
Average Service (yrs.)	NA	NA
Average Monthly Benefit	\$8,478	\$8,115



December 1, 2023

Board of Trustees Arkansas Judicial Retirement System Little Rock, AR 72201

To the Members of the Arkansas Judicial Retirement System (AJRS):

We are pleased to present the *Arkansas Judicial Retirement System Annual Comprehensive Financial Report for the Fiscal Year Ended June 30, 2023.* The report is designed to provide a clear and concise picture of the financial conditions of the Arkansas Judicial Retirement System.

Accounting System

The Fiscal Year 2023 Annual Report has been prepared to conform to the accounting principles generally accepted in the United States.

The accrual basis of accounting is used to record the assets, liabilities, revenues, and expenses of the AJRS 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.

Financial Information

AJRS is responsible for establishing and maintaining adequate internal control over financial reporting. AJRS' internal control over financial reporting is designed to provide reasonable assurance that transactions are executed in accordance with management's general or specific authorization and are recorded as necessary to maintain accountability for assets and to permit the preparation of financial statements in accordance with generally accepted accounting principles.

Funding

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

Investments

The AJRS Board is required to invest the funds in conformity with the authority and limitations found in Arkansas Code Annotated § 24-2-601 et seq., which includes the fiduciary responsibilities under the "prudent investor rule." These laws enable the Board to establish an investment policy based upon certain investment criteria and allows the Board to retain professional investment consultants 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 consultants for AJRS are listed in the schedule of professional services contractors.

Actuarial Analysis

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

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

The actuarial accrued liability and actuarial funding value of assets of AJRS as of June 30, 2023, amounted to \$350 million and \$322 million respectively. On a funding value of assets basis, the funded status of the AJRS trust fund was 92.1% in fiscal year 2023. A detailed discussion of funding and actuarial measures is provided in the Actuarial Section of this report.

Professional Services

AJRS retains independent consultants to perform professional services that are essential to the trust fund's long-term strength and stability. Actuarial services are provided by Gabriel, Roeder, Smith & Company (GRS), investment consulting is provided by Callan, LLC, and the annual financial audit is conducted by Arkansas Legislative Audit in accordance with A.C.A. § 24-2-702.

Acknowledgments

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

Respectfully,

Judge Robert Edwards, Chair Arkansas Judicial Retirement System

Board of Trustees

Amy Fecher, Executive Director Arkansas Judicial Retirement System

Board of Trustees

The Honorable Robert Edwards, Chair

Retired Circuit Judge P.O. Box 42 Searcy, AR 72145

The Honorable Raymond Abramson

Arkansas Court of Appeals Judge 625 Marshall Street Little Rock, AR 72201-1080

The Honorable Herbert Wright

Circuit Judge 401 West Markham, Rm 440 Little Rock, AR 72201

The Honorable Charles Yeargan

Retired Circuit Judge P.O. Box 820 Murfreesboro, AR 71958

The Honorable Marcia Hearnsberger

Retired Circuit Judge 501 Ouachita Avenue, Room 304 Hot Springs, AR 71901

Administrative Staff

Amy Fecher

Executive Director

Carlos Borromeo

Deputy Director of Investments and Finance

Jason Willett

Chief Fiscal Officer

Allison Woods

Deputy Director of Benefits

Ashley Golleher

Deputy Director of Operations

Laura Gilson

General Counsel

Phillip Norton

Director of Information Technology

Jennifer Taylor

Director of Benefits Administration

Jacobia Bates

Director of Public Affairs

Patty Shipp

Assurance Officer

Usha Doolabh

Manager, Investments

Jon Aucoin

Manager, Digital Services

Cheryl Wilburn

Manager, Benefits Operations

Tammy Shadwick

Manager, Human Resources

Shelly George

Manager, Employer Reporting

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

Aristotle Capital Boston Boston, MA 02110

Baillie Gifford

Edinburgh, Scotland

Boston Partners

Boston, MA 02108

Invesco Real Estate

Dallas, TX 75240

MacKay Shields

New York, NY 10105

Mellon Capital

Pittsburgh, PA 15258



Financial



Management's Discussion and Analysis

This discussion and analysis of the Arkansas Judicial Retirement System provides an overview of the system's financial activities for the fiscal year ended June 30, 2023. It is intended to be used in conjunction with the letter from the AJRS Board Chair and Executive Director, and the financial statements and notes, which begin on page 12 of this report...

Using This Financial Report

This Annual Comprehensive Financial Report reflects the activities of the Arkansas Judicial Retirement System as reported in the Statement of Fiduciary Net Position (page 12) and the Statement of Changes in Fiduciary Net Position (page 13). These statements are presented on an accrual basis and reflect all Trust Fund activities as incurred. The Notes to the Financial Statements are an integral part of the financial statements and include additional information essential to understanding the basic financial statements. The Required Supplementary Information following the Notes to the Financial Statements provide historical information and additional details considered useful in evaluating the condition of the plan. Investment data in the Financial section is presented at fair value. See the Actuarial Section of this report for a detailed discussion of the actuarial value of assets and liabilities and the funded ratio.

Financial Highlights

The net position restricted for pension benefits increased by \$11.2 million during FY2023. On June 30, 2023, total plan assets were \$309.2 million. These assets exceeded total liabilities of approximately \$1.1 million, resulting in a net position restricted for pension benefits of \$308.1 million.

- Total additions for the system increased by \$61.6 million in FY2023. The primary reason for this large increase in FY2023 additions was the increase in net investment income of \$62.4 million. AJRS had an excellent year with investments which resulted in an investment return of 6.95% in FY2023.
- Benefit payments for fiscal year 2023 were \$17.4 million, or approximately \$352,000 more than fiscal year 2022.
- Administrative expenses increased slightly in FY2023 due primarily to a five-year actuarial experience study being done.

The Statement of Fiduciary Net Position

The Statement of Fiduciary Net Position (see page 12) reports the pension trust fund's assets, liabilities, and resulting net position such that at the end of the fiscal year

assets - liabilities = net position.

It is a snapshot of the financial position of the pension trust fund at that specific time.

The Statement of Changes in Fiduciary Net Position

The Statement of Changes in Fiduciary Net Position (see page 13e 13) reports the pension trust fund's financial transactions that have occurred during the fiscal year such that

additions - deductions = net change in net position.

It indicates the change that has occurred to the prior year's net position value on the Statement of Fiduciary Net Position.

Notes to the Financial Statements

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

- Note 1 provides a general description of the system, including information regarding membership and employers.
- Note 2 summarizes significant accounting policies, including the basis of accounting, management's use of estimates, and other accounting policies.
- Note 3 describes deposits and investments risk.
- Note 4 provides information regarding legally required reserves.
- Note 5 provides information regarding the system's net pension liability.

Basic Financial Statements

The Statement of Fiduciary Net Position (for the years ended June 30)

	2023	2022
ASSETS		
Cash and Cash Equivalents	\$ 3,947,199	\$5,489,227
Receivables:		
Contributions	2,190	184,839
Investment Principal Receivable	972,170	439,946
Accrued Investment Income Receivable	1,077,183	1,102,927
Total Receivables	2,051,543	1,727,712
Investments At Fair Value:		
Government Securities	35,844,828	28,963,913
Corporate Securities	180,091,107	176,870,140
International Securities	57,412,237	50,887,749
Real Estate	29,681,954	33,020,137
Commercial Loans	169,399	840,654
Total Investments	303,199,525	290,582,594
TOTAL ASSETS	309,198,267	297,799,533
LIABILITIES		
Accrued Expenses and Other Liabilities	319,716	331,927
Investment Principal Payable	783,746	612,423
TOTAL LIABILITIES	1,103,462	944,350
NET POSITION RESTRICTED FOR PENSION BENEFITS	\$308,094,805	\$296,855,183

The Statement of Changes in Fiduciary Net Position (for the years ended June 30)

	2023	2022
ADDITIONS		
Contributions:		
Employer	\$ 8,042,547	\$ 8,692,620
Employee	1,267,952	1,300,942
Court Fees	188,083	270,839
Total Contributions	9,498,582	10,264,401
Investment Income:		
Interest	5,879,053	4,583,096
Dividends	2,225,775	2,610,942
Investment Gain	12,332,965	(49,073,138)
Total Investment Income	20,437,792	(41,879,100)
Less: Investment Expense	1,114,047	1,194,707
Net Investment Income	19,323,745	(43,073,807)
Other Additions:		
Miscellaneous Additions	112	14
TOTAL ADDITIONS	28,822,439	(32,809,392)
DEDUCTIONS		
Benefits	17,411,833	17,060,242
Refunds of Contributions	-	0
Administrative Expenses	170,984	164,115
TOTAL DEDUCTIONS	17,582,817	17,224,357
NET INCREASE (DECREASE) NET POSITION RESTRICTED FOR PENSION BENEFITS	11,239,622	(50,033,749)
Beginning of Year	296,855,183	346,888,932
End of Year	\$308,094,805	\$296,855,183
		· · · ·

Notes to the Financial Statements

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

- Note 1 provides a general description of the system, including information regarding membership and employers.
- Note 2 summarizes significant accounting policies, including the basis of accounting, management's use of estimates, and other accounting policies.
- Note 3 describes deposits and investments risk.
- Note 4 provides information regarding legally required reserves.
- Note 5 provides information regarding the system's net pension liability.

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, 2023, and June 30, 2022, AJRS membership was as follows:

Membership	2023	2022
Retirees and Beneficiaries Receiving Benefits	178	176
Terminated Plan Members Entitled to But Not Receiving Benefits	13	10
Active Plan Members	142	145
Total	333	331

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).

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 before 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

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.

Note 3: Deposits and Investments

Deposits are carried at cost and are included in "cash and cash equivalents." Cash and cash equivalents include demand accounts, cash in state treasury, and short-term investment funds. As of June 30, 2023, these totals were \$2,604, \$791, and \$3,943,804 respectively. State Treasury Management Law governs the management of funds held in the State Treasury (cash in state treasury) and it is the responsibility of the Treasurer of State to ensure the funds are adequately insured and collateralized.

Investments

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

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

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

Statement of Invested Assets

(Assets by type at fair value in dollars as of June 30, 2023

())))	•
Government Securities:	
U.S. Government Securities	\$ 7,705,183.95
U.S. Government Agency Securities	28,262,139.33
Futures	(122,495.56)
Corporate Securities:	
Fixed Income Commingled	
High Yield Income Fund	8,871,660.86
Collateralized Obligations	25,791,390.28
Corporate Bonds	38,118,189.38
Common Stock	107,084,388.90
Domestic Equity Commingled	-
Convertible Preferred	225,477.50
Preferred	
International Securities:	
Global Commingled	36,704,688.28
Global Corporate Fixed Income	9,432,483.73
Global Equity	8,653,563.88
Emerging Markets	2,621,501.40
Real Estate	29,681,954.00

\$ 303.199.524.93

Custodial Credit Risk for Investments

Commercial Loans

Total

Custodial credit risk for investments is the risk that, in the event of failure of the counterparty to a transaction, the system will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. Investment securities are exposed to custodial credit risk if the securities are (a) uninsured, (b) not registered in the name of the government, and (c) held by either the counterparty or the counterparty's trust department or agent but not in the system's name. Arkansas Code Annotated § 24-2-606 does address the custodianship of assets, and the investment policy states that "the custodian bank shall, by nominee agreement, hold any and all securities for the beneficial interest of the APERS fund." As of June 30, 2022, 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.

Debt Security Investments and Maturities (as of June 30, 2023)

Category	Market Value	Less than 1 Year	1 - 5 Years	6 - 10 Years	More than 10 Years	Fund - No Maturities
Total Government Securities	\$30,114,822	\$122,496	\$1,769,532	\$2,163,317	\$26,304,469	\$0
Total Corporate Securities	64,135,057	291,676	16,580,900	15,616,510	31,645,972	0
Total International Securities	12,053,985	0	4,732,758	3,752,185	3,569,042	0
Commercial Loans	169,399	0	129,499	39,900	0	0
High Yield Income Fund	8,871,661	0	0	0	0	8,871,661
Municipal Bonds	217,893	0	0	0	217,893	0
Total	\$115,562,817	\$169,180	\$23,212,689	\$21,571,912	\$61,737,376	\$8,871,661

Credit Risk for Investments

Credit risk of investments is the risk that the issuer or other counterparty will not fulfill its obligation to the holder of the investment. Credit risk exposure is dictated by each investment manager's agreement. This credit risk is measured by the credit quality of investment in debt securities as described by nationally recognized statistical rating organizations. Each portfolio is managed

in accordance with investment guidelines that are specific as to permissible credit quality ranges, exposure levels within individual security quality rating tiers, and the average credit quality of the overall portfolio.

The schedule on the following page indicates the system's exposure to credit risk for investments.

The System's Exposure to Credit Risk

(in dollars as of June 30, 2023)

Moody's Quality Ratings

Catagory	AAA	AA	Α.	BBB	ВВ	В	CCC or	Not Rated	Base Market	% of
Catagory	AAA	AA	A	DDD	DD	ь	below	Not Kateu	Value	Total
Total Government Securities	\$ 0	28,329,038	0	0	0	0	0	1,785,784	30,114,822	26.06%
Total Corporate Securities	213,287	1,330,088	9,006,055	25,148,305	8,885,797	2,817,084	280,913	16,453,529	64,135,057	55.50
Total International Securities	0	0	2,001,951	6,372,144	3,038,800	269,751	0	371,340	12,053,985	10.43
Commercial Loans	0	0	0	0	0	129,499	39,900	0	169,399	0.15
High Yield Income Fund	0	0	0	0	0	0	0	8,871,661	8,871,661	7.68
Municipal Bonds	0	217,893	0	0	0	0	00	0	217,893	0.19
Total	\$ 213,287	29,877,019	11,008,007	31,520,449	11,924,597	3,216,333	320,813	27,482,314	115,562,817	100

S&P's Quality Ratings

Catagory	AAA	AA	Α	BBB	ВВ	В	CCC or below	Not Rated	Base Market Value	% of Total
Total Government Securities	\$ 28,329,038	0	0	0	0	0	0	1,785,784	30,114,822	26.06
Total Corporate Securities	3,067,687	1,607,570	9,225,209	26,010,968	5,771,717	1,503,695	196,538	16,751,673	64,135,057	55.50
Total International Securities	0	0	2,526,699	5,498,221	2,186,098	995,314	0	847,654	12,053,985	10.43
Commercial Loans	0	0	0	0	0	129,499	39,900	0	169,399	0.15
High Yield Income Fund	0	0	0	0	0	0	0	8,871,661	8,871,661	7.68
Municipal Bonds	0	217,893	0	0	0	0	0	0	217,893	0.19
Total	\$ 31,396,725	1,825,463	11,751,908	31,509,188	7,957,815	2,628,508	236,438	28,256,772	115,562,817	100

Asset-Backed Securities

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

Mortgage-Backed Securities

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

A collateralized mortgage obligation (CMO) is an MBS that comprises classes of bonds created by prioritizing the cash flows of the underlying mortgage pool. CMOs may be collateralized by whole-loan mortgages, mortgage pass-through securities, or stripped mortgage-backed securities.

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

Corporate Bonds

As of June 30, 2022, the system held corporate bonds with a fair value of approximately \$44 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 \$32 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.

Futures Contract	Expiration	Notional Value	Fair Value	Unrealized Gain (Loss)
US 2-year Treasury Note	Sept 2023	\$(7,405,780)	\$(7,320,375)	\$ 85,405
US 5-year Treasury Note	Sept 2023	(646,102)	(642,563)	3,539
US 10-year Treasury Note	Sept 2023	13,517,783	13,359,609	(158,173)
US 10-year Ultra Treasury Note	Sept 2023	8,360,914	8,290,625	(70,289)
US Ultra Bond Treasury	Sept 2023	5,698,206	5,721,188	22,981
US Long Bond Future	Sept 2023	2,290,271	2,284,313	(5,958)
		\$21,815,292	\$21,692,797	\$(122,496)

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 Measured at Fair Value (as of June 30, 2023)

	Fair Value	Level 1	Level 2	Level 3
Investments At Fair Value				
U.S Domestic Equities	\$72,183,040	\$71,957,563	\$ 225,478	
Fixed Income				
U.S. Government Securities	36,995,477	16,371,816	20,623,661	
Collateralized Obligations	35,651,262		35,651,262	
Futures	(122,496)	(122,496)		
Corporate Preferred	9,432,484		9,432,484	
Emerging Markets	2,621,501		2,621,501	
Corporate Bonds	35,678,903		35,678,903	
Commercial Loans	169,399			840,654
Municipal Bonds	217,893		217,893	
Total Investments Measured at Fair Value	\$192,827,464	\$88,206,883	\$104,451,182	\$840,654

Investments Measured at the Net Asset Value (NAV)

Total Investments Measured at the NAV	<u>\$11</u>	0,372,061
BNY Large Cap Growth Fund	4	3,780,390
Invesco Core Real Estate Fund	2	9,681,954
Baillie Gifford International Choice Fund	3	6,704,688
High Yield Core Fund	\$	205,029
Defensive Bond Fund		

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 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.

Investments Measured at the Net Asset Value (in dollars as of June 30, 2023)

	Fair Value	Strategy Type	Fund Life of Non-re- deemable mandates	Unfunded Commitments	Redemption Frequency (if currently eligible)	Redemption Notice Period	Other Redemption Restrictions	Restriction Time Remain- ing
Defensive Bond Fund	\$-	Income Oriented	N/A	none	daily	T + 1	N/A	N/A
High Yield Core Fund	\$205,028.80	Active High Yield Fixed Income	N/A	none	daily	T + 1	N/A	N/A
Baillie Gifford International Choice Fund	\$36,704,688	International Equities	N/A	none	daily	T + 3	N/A	N/A
Invesco Core Real Estate Fund	\$29,681,954	Core Real Esate	N/A	none	quarterly	T + 45	N/A	N/A
BNY Large Cap Growth Fund	\$43,780,390	U.S. Large Cap Growth stocks	N/A	none	daily	T + 1	N/A	N/A
	\$110,372,061							

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.

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.

BNYM Large Cap Growth Fund

the BNYM Mellon DB SL Large Cap Growth Stock Index Fund seeks to match the performance and overall characteristics of the Russell 1000 Growth Index in a risk-controlled, cost-effective manner. The Fund's approach aims to minimize tracking error, manage transaction costs, and utilize a full replication approach.

Note 4: Legally Required Reserves

The reserve accounts and their balances for the years ended June 30, 2022, and June 30, 2023, are described here and shown in the table below.

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.

Legally Required Reserves

Members Deposit Account
Members Deposit Account Interest Reserve
Employer Accumulation Account
Retirement Reserve Account
Deferred Annuity Account
Total

2023	2022
\$13,739,336	\$13,628,180
698	698
80,490,226	76,665,298
208,269,294	202,730,110
5,595,251	3,830,897
\$308.094.805	\$296.855.183

Note 5: Net Pension Liability

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

Total Pension Liability	\$350,007,445
Plan Fiduciary Net Position	\$308,094,805
Net Pension Liability	\$41,912,640
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	88.03%

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, 2023, these best estimates, provided by the plan's investment consultant, are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Broad Domestic Equity	37.0%	6.19%
International Equity	15.0%	6.77%
Real estate	8.0%	4.08%
Cash Equivalents	0.0%	0.26%
Domestic Fixed	40.0%	1.79%
Total	100%	
Total Real Rate of Return		4.35%
Plus: Price Inflation - Actuary's Assumption		2.50%
Less: Admin and Investment Expenses*		0.00%
Net Expected Return		6.85%

^{*}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.

Sensitivity of the Net Pension Liability

The following table presents the net pension liability of the system, calculated using the discount rate of 5.50%, 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 (4.50%) or one percentage point higher (6.50%) than the current rate.

1% Decrease	Current Discount Rate	1% Increase
4.50%	5.50%	6.50%
\$84,138,592	\$41,912,640	\$6,095,878

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 losses increases or decreases the unfunded AAL based on the annual actuarial valuation. The 2023 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 loss was \$(6,530,086). This actuarial loss was due primarily to the FY2023 actual investment return being significantly lower than the assumed rate of return.

Actuarial Computed Liabilities

The total unfunded actuarial computed liability of the system was \$27,611,910 as of June 30, 2023. This amount is shown at fair value and is based on the entry age normal cost method.

	Actuarial Present Value of	(1) Total Present Value	(2) Position Covered By Future Normal Cost Contributions	(3) Actuarial Accrued Liabilities (1)-(2)
	efits to be paid to current retirees, beneficiaries, and future eficiaries of current retirees	\$225,387,715	\$0	\$225,387,715
_	and service allowances based on total service likely to be rendered by sent active members	181,804,691	65,864,076	115,940,615
	aration benefits (refunds of contributions and deferred allowances) ly to be paid to present active and inactive members	10,382,613	5,088,639	5,293,974
Disa	ability benefits likely to be paid to present active members	1,749,644	2,327,102	(577,458)
	th-in-service benefits likely to be paid on behalf of present active nbers	7,677,388	3,714,789	(577,458)
T01	TAL	\$427,002,051	\$73,279,817	\$350,007,445
App	licable Assets (Funding Value)	322,395,535	0	322,395,535
Lial	oilities to be covered by future contributions	\$104,606,516	\$76,994,606	\$27,611,910

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

Year Ended June 30	Annual Required Contribution	Percentage Contributed
2014	6,117,327	100
2015	5,690,381	100
2016	5,561,289	100
2017	8,485,361	100
2018	8,421,173	100
2019	8,233,959	100
2020	8,572,697	100
2021	8,209,893	100
2022	8,963,459	100
2023	\$8,230,629	100%

Schedule of the Net Pension Liability

FY Ending June 30,	Total Pension Pension Lia- bility	Fiduciary Net Position	Net Pension Liability	Fiduciary Net Position as a % of Total Pension Liability	Covered Payroll	Net Pension Liability as a % of Covered Payroll
2014	\$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
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
2019	284,488,459	267,279,487	17,208,972	93.95	23,602,735	72.91
2020	296,653,578	280,837,139	15,816,439	94.67	24,586,078	64.33
2021	309,112,455	346,888,932	(37,776,477)	112.22	25,479,456	(148.26)
2022	334,328,250	296,855,183	37,473,067	88.79%	26,259,112	142.71%
2023	\$350,007,445	\$308,094,805	\$41,912,640	88.03%	\$27,529,347	152.25%

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%
2019	5.72%
2020	6.51%
2021	25.72%
2022	(12.44)%
2023	6.54%

Schedule of Changes in the Net Pension Liability and Related Ratios

Fiscal Year Ending June 30	2023	2022	2021
TOTAL PENSION LIABILITY			
Service Cost	\$8,100,878	\$8,053,242	\$7,197,367
Interest	18,132,003	17,515,015	16,822,916
Changes in Benefit Terms	0	0	0
Differences Between Expected and Actual Experience	6,858,147	(37,166)	3,798,212
Assumption Changes	0	16,744,946	0
Benefit Payments	(17,411,833)	(17,060,242)	(15,310,419)
Refunds	0	0	(49,199)
NET CHANGE IN TOTAL PENSION LIABILITY	15,679,195	25,215,795	12,458,877
TOTAL PENSION LIABILITY, BEGINNING OF YEAR	334,328,250	309,112,455	296,653,578
TOTAL PENSION LIABILITY, END OF YEAR (a)	350,007,445	334,328,250	309,112,455
PLAN FIDUCIARY NET POSITION			
Contributions - Employer	\$8,230,629	0.062.450	0 200 002
• •		8,963,459	8,209,893
Contributions - Employee	1,267,952	1,300,942	1,117,205
Net Investment Income	19,323,746	(43,073,807)	72,229,450
Benefit Payments,	(17,411,833)	(17,060,242)	(15,310,419)
Other	112	14	13
Refunds	-	0	(49,199)
Administrative Expense	(170,984)	(164,115)	(145,150)
NET CHANGE IN PLAN FIDUCIARY NET POSITION	11,239,622	(50,033,749)	66,051,793
PLAN FIDUCIARY NET POSITION, BEGINNING OF YEAR	296,855,183	346,888,932	280,837,139
PLAN FIDUCIARY NET POSITION, END OF YEAR (b)	\$308,094,805	296,855,183	346,888,932
NET PENSION LIABILITY, END OF YEAR (a) - (b)	\$41,912,640	\$37,473,067	\$(37,776,477)
PLAN FIDUCIARY NET POSITION AS A PERCENTAGE OF THE TOTAL PENSION LIABILITY	88.03%	88.79%	112.22%
COVERED-EMPLOYEE PAYROLL	\$27,529,347	\$26,259,112	\$25,479,456
NET PENSION LIABILITY AS A PERCENTAGE OF COVERED - EMPLOYEE PAYROLL	152.25%	142.71%	(148.26%)

2020	2019	2018	2017	2016	2015	2014
\$7,096,255	\$6,919,400	\$6,927,257	\$7,221,153	\$7,230,267	\$5,342,168	\$5,319,836
16,175,509	15,877,675	15,378,982	16,121,127	15,770,309	14,883,382	14,607,426
0	0	0	0	0	0	0
2,340,115	(4,481,503)	(743,902)	(3,462,751)	(5,184,045)	12,969,853	(5,751,106)
0	0	0	2,369,244	0	24,290,229	0
(13,440,774)	(12,979,769)	(12,769,175)	(12,310,422)	(12,007,538)	(10,762,871)	(9,966,020)
(5,986)	(22,024)	0	(79,011)	(800)	(14,320)	(18,836)
12,165,119	5,313,779	8,793,162	9,859,340	5,808,193	46,708,441	4,191,300
284,488,459	279,174,680	270,381,518	260,522,178	254,713,985	208,005,544	203,814,244
296,653,578	284,488,459	279,174,680	270,381,518	260,522,178	254,713,985	208,005,544
8,572,697	8,233,959	8,421,173	8,485,361	5,561,289	5,690,381	6,117,327
1,138,323	988,612	1,016,180	1,016,646	1,011,372	946,149	925,324
17,434,154	14,655,787	19,162,603	28,044,374	(1,744,085)	9,971,823	29,793,113
(13,440,774)	(12,979,769)	(12,769,175)	(12,310,422)	(12,007,538)	(10,762,871)	(9,966,020)
1,129	41,854	11	45,832	0	0	0
(5,986)	(22,024)	0	(79,011)	(800)	(14,320)	(18,836)
(141,891)	(147,062)	(142,311)	(168,701)	(158,420)	(137,951)	(130,529)
13,557,652	10,771,357	15,688,482	25,034,079	(7,338,182)	5,693,211	26,720,379
267,279,487	256,508,130	240,819,648	215,785,569	223,123,751	217,430,540	190,710,161
280,837,139	267,279,487	256,508,130	240,819,648	215,785,569	223,123,751	217,430,540
\$15,816,439	\$17,208,972	\$22,666,550	\$29,561,870	\$44,736,609	\$31,590,234	\$(9,424,996)
94.67%	93.95%	91.88%	89.07%	82.83%	87.60%	104.53%
\$24,586,078	\$23,602,735	\$23,434,639	\$22,917,870	\$22,308,000	\$22,308,000	\$19,781,628
64.33%	72.91%	96.72%	128.99%	200.54%	141.61%	(47.65%)



Investments



Investment Overview

Investment returns play an important role in the funded ratio of the AJRS trust fund. The Board of Trustees of the Arkansas Public Employees Retirement System (the Board) has adopted an Investment Policy Statement whose purpose is the exclusive benefit of the participants and beneficiaries of the system and whose objective is maximizing the total rate of return on investments within prudent risk parameters. The overall goal is to achieve an annualized rate of return which, when combined with employee and employer contributions, will meet or exceed the benefit and administrative requirements of the system.

The system's investments are managed by professional investment management firms based upon statutory investment authority as well as the investment policies adopted by the Board. The investment staff coordinates and monitors the investment of the trust fund's assets and assists in the formulation and implementation of investment policies and long-term investment strategy.

The net investment portfolio fair values shown in this section, and used for the basis of calculating investment returns, may differ from those shown in other sections of this report. The values shown in this section are the appropriate industry standard basis for investment return calculation.

Asset Allocation and Diversification

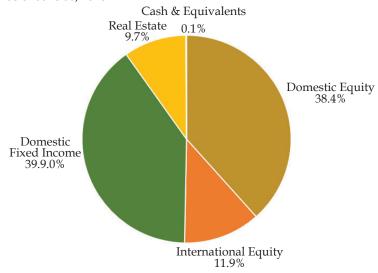
Asset allocation is a process which is designed to construct an optimal long-term asset mix which achieves a specific set of investment objectives. The Investment Policy Statement establishes the system's asset allocation policy as designed to meet those objectives.

The system's asset allocation policy has been adopted to provide diversification. The goal is to maximize the investment return as well as to be consistent with prudent levels of market and economic risks. The most important decision is the determination of asset allocation targets.

The pie chart illustrates the actual asset allocation to each type of investment as of the fiscal year.

Summary of Investments by Asset Class

as of June 30, 2023



Due to rounding, chart may not equal 100%

Risk is further diversified by utilizing active and passive management as well as by retaining multiple investment management firms with varying investment styles.

The system also places restrictions on the investment managers. AJRS has investment guidelines that manage the risk of high concentrations in a particular sector, industry, or security.

Capital Markets Commentary

The system posted a return of 6.95%. Domestic Equity posted a 17.08% return for the fiscal year. International Equity posted a 14.19% return. Fixed Income posted a 0.82% return. Real Estate posted a (9.75%) return.

Third Quarter of 2022

The theme for the third quarter of the year was Ukraine war impacting energy prices, the continued hiking of interest rates, and the markets fearing a recession.

September 2022 (Q1 of FY 2023) lived up to its reputation as the cruelest month with the S&P 500 Index falling by -9.21%. The bond market did not help as the investment grade bond index fell -4.47%.

The financial markets were hammered by a third consecutive 75 basis point rate hike by the Federal Reserve. It was the most aggressive tightening since the 1980s. Fed Chairman Jerome Powell said "we have got to get inflation behind us. I wish there were a painless way to do that. There isn't."

The European Central Bank also raised rates by 75 basis points. Adding fuel to the fire and causing additional market turmoil, Russia illegally annexed four Ukranian territories.

	3Q22
S&P 500	-4.9%
Russell 3000	-4.5%
Russell 2000	-2.2%
MSCI EAFE	-9.4%
MSCI ACWI xUS	-9.9%
Bloomberg Agg	-4.8%

Fourth Quarter of 2022

December is historically one of the strongest months of the year for stock performance. December 2022 was a disappointment. The S&P 500 fell -5.76% in the month of December alone. For the calendar year the index fell -18.11% as the headwinds from inflation continue, as does the war in Ukraine, and a continued fear of a recession. Inflation was +6.5% for the calendar year ending December 2022. The Federal Reserve hiked interest rates another 50 basis points in the middle of December.

A more pessimistic outlook by members of the Federal Open Market Committee was reflected in their Summary of Economic Projections, as well as a more hawkish tone from Federal Reserve Chairman Jerome Powell. The Bloomberg Aggregate fell -13% for the year, the worst year ever. For 4Q2022, value stocks outperformed growth stocks, large cap stocks outperformed small caps, and equities continued to experience higher volatility as the macroeconomic environment (e.g. inflation, a potential recession, continued geopolitical concerns) to influence the markets. On the good side of things, the developed market international stocks performed better than the S&P 500 during the quarter. Internationally smaller rate hikes, lower absolute yield levels, less P/E contraction, and better earnings were the primary catalysts.

	4Q22	2022
S&P 500	7.60%	-18.1%
Russell 3000	7.20%	-19.2%
Russell 2000	6.2%	-20.4%
MSCI EAFE	17.3%	-14.5%
MSCI ACWI xUS	14.28%	-6.0%
Bloomberg Agg	1.9%	-13.0%

First Quarter of 2023

Concerns over petulant inflation and the Fed's choreographed responses to it that were prevalent early in the month of March were turned upside down by a mid-month banking crisis that seemed to appear out of nowhere. I wrote in my CIO report how the banking crisis reminded me of a movie and the market behavior reminded me of the 2008 collapse as 2 of the 4 largest bank failures in the history of the United States occurred in March 2023.

The failures of Silicon Valley Bank and Signature Bank, a run on First Republic Bank (bankrupt in April 2023), as well as the near collapse of Credit Suisse, all in rapid succession, had the financial markets staring into a financial abyss. Rapid and coordinated efforts and responses by the Federal Reserve, the U.S. Treasury Department, the FDIC, five foreign central banks, and a handful of U.S. banking juggernauts all helped circumvent what could have turned into a systemic meltdown of the U.S. financial and banking system.

In March alone, the yield on the 2-year Treasury note fell from 4.82% to 4.03%, which was the largest monthly decline since January of 2008 during the Global Financial Crisis. Investors anticipated that the rates hikes were over, and rate cuts would ensue by the end of summer 2023. For the quarter, "risk on" was rewarded, as low-quality stocks beath high-quality stocks, and high-beta beat low-beta. Growth outperformed value.

	1Q23
S&P 500	7.5%
Russell 3000	7.2%
Russell 2000	2.7%
MSCI EAFE	8.5%
MSCI ACWI xUS	7.3%
Bloomberg Agg	3.0%

Second Quarter 2023

A resilient economy continued to defy recession forecasts, a broadening number of stocks posting positive returns, and progress on the inflation front gave the Federal Reserve latitude to skip raising interest rates for the first time in ten meetings. The S&P posted a +6.61% return for the month of June 2023. Since the low in October 2022, the S&P 500 gained +24.4% from its low. During the quarter, six stocks, dubbed the "Super Six" (Meta, Amazon, NVIDIA, Microsoft, Apple, Tesla) accounted for 60 percent of the S&P 500 return. (The "Magnificent Seven" is the "Super Six" plus Alphabet.) The top 50 stocks of the S&P 500 returned +13.2% for the second quarter, and the next 450 companies only returned +2.75%. F9or the first half of 2023, the top 50 stocks have gained +26.3% versus +5.1% for the next 450 stocks.

Even though they skipped a June rate hike, the Fed did indicate that two more rate hikes were on the way. The rationale for the hawkish stance lies on the inflation front and headline CPI and PCE are falling at an accelerated pace, mostly due to energy prices, but the core measures remain elevated.

	2Q23	FY 2023
S&P 500	8.7%	19.6%
Russell 3000	8.4%	19.0%
Russell 2000	5.2%	12.3%
MSCI EAFE	3.0%	18.8%
MSCI ACWI xUS	6.2%	16.5%
Bloomberg Agg	-0.8%	-0.9%

Investment Portfolio Assets

At the close of FY2023, AJRS' investment portfolio had a fair value of \$308.4 million which was an increase of \$11.4 million from the \$297 million investment value from June 30, 2022.

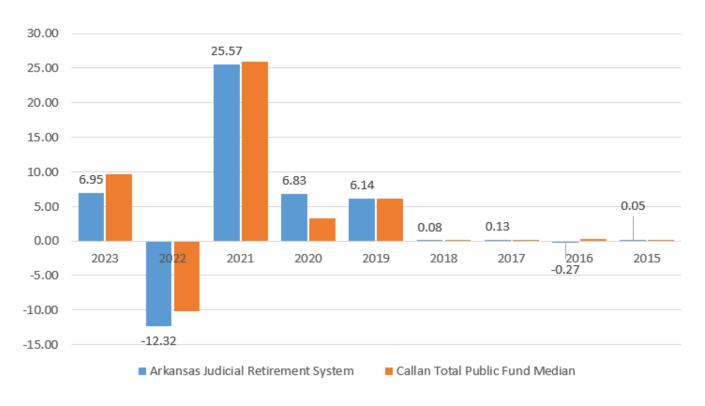
Investment Results

For the fiscal year ending June 30, 2023, AJRS realized a total portfolio investment return of +6.93%. The return underperformed the 7.60% return of AJRS' policy benchmark, a set of market indexes and weightings to those indexes that reflect AJRS' asset class targets. Outperformance was aided by active investment management, especially in the international equity allocation.

AJRS' return did exceed the actuarial assumed rate of return of 5.50%.

The graphs and tables on the following pages provide a historical perspective of AJRS' investment returns and performance over the past few years. AJRS' investment returns are shown for the total portfolio as well as for each asset class over various time periods. The benchmark or target for each asset class is also shown.



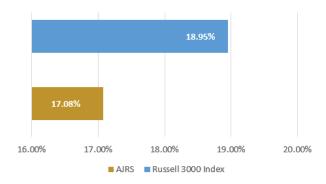


Domestic Equity

As of June 30, 2023, 38.35% of AJRS' portfolio was invested in domestic equities (U.S. stocks). The fair value of the domestic equity portfolio was \$118.27 million.

Results

The domestic equity portfolio returned 17.08% for the fiscal year. AJRS' benchmark, the Russell 3000 Index, returned 18.95%.



Top 10 Holdings - Domestic Fixed Income

Market Value
4,899,521.80
1,934,151.76
1,769,531.75
1,456,978.46
1,036,130.40
815,458.36
733,710.61
721,483.69
707,443.20
669,872.47

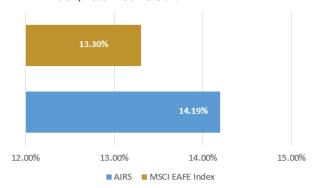
International Equity

As of June 30, 2023, 11.9% of AJRS' portfolio was invested in international equities (Non-U.S. stocks). The fair value of the international equity portfolio was \$36.7 million.

The portfolio takes an active management approach to international markets. DELETE with approximately 77% invested with active investment managers.

Results

The international equity portfolio returned 14.19% for the fiscal year. AJRS' benchmark, the MSCI EAFE Index, returned 13.3%.



Top 10 Holdings - International Equity

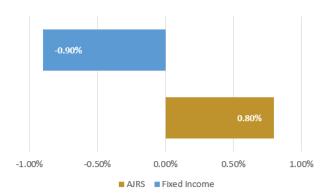
	Market Value
TSMC ADR	13,170,363
ASML	8,847,812
Richemont	8,656,077
Prosus N.V.	7,525,173
United Overseas Bank	7,466,784
HDFC Corp	7,444,420
Atlas Copco B	7,166,273
Shiseido	6,877,769
Mettler-Toledo	6,526,721
LVMH	6,502,229

Fixed Income

As of June 30, 2023, 39.9% of AJRS' portfolio was invested in fixed income securities. The fair value of the international equity portfolio was \$123.2 million.

Results

The fixed income portfolio returned 0.8% for the fiscal year. AJRS' benchmark, the Bloomberg Aggregate Index, returned -0.9%.



Top 10 Holdings - Fixed Income

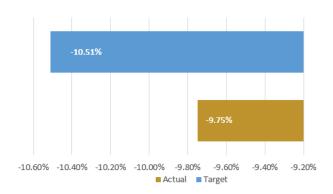
	Market Value
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Atlas Copco B	7,166,273
Shiseido	6,877,769
Mettler-Toledo	6,526,721
LVMH	6,502,229

Real Estate

As of June 30, 2023, 9.7% of AJRS' portfolio was invested in real estate. The fair value of the portfolio was \$29.9 million.

Results

The Real Assets portfolio returned -9.75% for the fiscal year. AJRS' target returned -10.51% which is not a benchmark because a benchmark does not exist.



Asset Allocation: Actual vs Target

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 comparison of the current target allocation with the actual allocation is as follows:

Asset Class	Dollars* Actual	Weight Actual	Target	Percentage Difference	Dollars* Difference
Domestic Equity	\$ 118,276	38.4%	37.0%	1.4%	\$ 4,165
International Equity	36,705	11.9%	15.0%	-3.1%	(9,557)
Domestic Fixed Income	123,198	39.9%	40.0%	-0.1%	(166)
Real Estate	29,908	9.7%	8.0%	1.7%	5,236
Cash & Equivalents	322	0.1%	0.0%	0.1%	\$ 322
Total	\$ 308,409	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.



Manager Distribution

(as of June 30, 2023)

Strategy	Market Value P (\$ Thousands)	ercentage of Total
	,	
Small Cap Equity	\$18,205,223	5.90%
Value Equity	\$56,290,726	18.25%
Growth Equity	\$43,780,390	14.20%
	\$118,276,339	
International Equity	\$36,704,688	11.90%
Core Plus Fixed Income	\$123,197,905	39.95%
Core Real Estate	\$29,908,317	9.70%
Short Term Investments	\$321,687	0.10%
	\$308,408,936	100.00%
	Small Cap Equity Value Equity Growth Equity International Equity Core Plus Fixed Income Core Real Estate	Strategy (\$ Thousands) Small Cap Equity \$18,205,223 Value Equity \$56,290,726 Growth Equity \$43,780,390 \$118,276,339 International Equity \$36,704,688 Core Plus Fixed Income \$123,197,905 Core Real Estate \$29,908,317 Short Term Investments \$321,687

Schedule of Comparative Investment Results by Year

(for the years ended June 30)

(101 1110) 541 5 5114 54 54115 55)									
,	2023	2022	2021	2020	2019	2018	2017	2016	2015
Total Fund									
Arkansas Judicial Retirement System	6.95	(12.32)%	25.57%	6.83%	6.14%	8.23%	13.35%	(0.27)%	5.06%
Callan Total Public Fund Median	9.65	(10.10)	25.99	3.30	6.14	8.04	12.50	0.34	3.12
Equities		, ,							
Arkansas Judicial Retirement System	17.08	(11.77)	46.84	4.92	6.19	15.72	19.99	(1.81)	9.18
Callan Total Equity Database Median	18.38	(13.30)	44.60	3.07	7.74	15.36	18.92	1.01	7.37
Russell 3000 Index	18.95	(13.87)	44.16	6.53	8.98	14.78	18.51	2.14	7.29
International Equities									
Arkansas Judicial Retirement System	14.19	(35.65)	39.46	12.48	0.35	9.12	25.17	(12.15	(1.41)
Callan Total Non-US Equities Database Median	14.63	(19.04)	36.81	(2.48)	0.50	8.23	20.73	(8.88)	(3.22)
MSCI - ACWI-ex US Index	13.33	(19.01)	36.29	(4.39)	1.80	7.79	20.27	(10.16)	(4.22)
Fixed Income									
Arkansas Judicial Retirement System	0.82	(12.08)	5.14	8.20	8.31	0.29	3.90	3.92	1.16
Callan Total Fixed Income Database Median	0.42	(9.26)	1.08	8.37	7.54	(0.12)	1.09	4.87	1.70
Bloomberg Aggregate Index	-0.94	(10.29)%	(0.33)%	8.74%	7.87%	(0.40)%	(0.31)%	6.00%	1.86%

Schedule of Comparative Annualized Investment Results

(for the years ended June 30)

	2023	3 Year Annualized	5 Year Annualized
Total Fund			
Arkansas Judicial Retirement System	6.95%	5.71%	6.02%
Callan Total Public Fund Median	9.65%	7.54%	6.52%
Inflation (Consumer Price Index)			
Equities			
Arkansas Judicial Retirement System	17.08%	14.90%	11.07%
Callan Total Equity Database Median	18.38%	13.97%	10.84%
Russell 3000 Index	18.95%	13.89%	11.39%
International Equities			
Arkansas Judicial Retirement System	14.19%	0.82%	2.95%
Callan Total Non-US Equities Database Median	14.63%	7.59%	4.12%
MSCI - ACWI-ex US Index	13.33%	7.75%	4.01%
Fixed Income			
Arkansas Judicial Retirement System	0.82%	-2.32%	1.78%
Callan Total Fixed Income Database Median	0.42%	-2.91%	1.36%
Bloomberg Aggregate Index	-0.94%	-3.96%	0.77%

Schedule of Brokerage Commisions

(for the fiscal year ended June 30, 2023)

Broker Name	Number of Shares Traded	Total Commission	Commission Per Share
Citigroup Global Markets, Inc., New York	337.00	7,501.66	22.26
J.p. Morgan Securities Llc, New York	111,197.00	3,589.55	0.03
Morgan Stanley And Co., Llc, New York	99,979.00	3,071.70	0.03
Goldman Sachs & Co, Ny	99,086.00	3,028.07	0.03
Rbc Capital Markets Llc, New York	74,505.00	2,294.17	0.03
Merrill Lynch Pierce Fenner Smith Inc Ny	59,567.00	1,754.99	0.03
Wedbush Securities Inc./P3, Los Angeles	55,806.00	1,465.56	0.03
Ubs Securities Llc, Stamford	37,388.00	1,090.69	0.03
Barclays Capital Le, New York	27,565.00	980.70	0.04
Pershing Llc, Jersey City	24,673.00	653.24	0.03
Credit Suisse, New York (Csus)	21,556.00	652.98	0.03
Jefferies & Co Inc, New York	12,795.00	500.46	0.04
Raymond James & Assoc Inc, St Petersburg	6,719.00	233.38	0.03
Keefe Bruyette + Woods Inc, New York	8,286.00	221.35	0.03
Suntrust Capital Markets Inc, New York	5,742.00	209.69	0.04
Stifel Nicolaus	6,851.00	208.49	0.03
Isi Group Inc, New York	5,473.00	165.69	0.03
National Finl Svcs Corp, New York	6,945.00	143.97	0.02
Keybanc Capital Markets Inc, New York	3,527.00	134.96	0.04
Wells Fargo Securities, Llc, New York	11,755.00	123.92	0.01
Others (20 Brokerage Firms)	41,975.00	934.40	
	721,727.00	28,959.62	<u>.</u>

Schedule of Investment Manager Fees

(for the fiscal year ended June 30, 2023)

Investment Manager	Market Value	Fee	Basis Points
Equities			
Aristotle Capital	\$ 18,205,223	139,851	0.80
BNYM Large Cap Growth	43,780,390	17,109	0.04
Robeco Boston Partners	56,290,726	281,483	0.58
Fixed Income			
MacKay Shields LLC	123,197,905	359,785	0.30
Real Estate			
Invesco Real Estate (Core)	29,908,317	98,900	0.80
International Equities			
Baillie Gifford	36,704,688	126,814	0.53
Total Investment Manager Fees		1,023,943	
Other Services			
Bank of New York Mellon (Custodian)		14,878	
Callan Associates (Consultant)		75,226	
Total Other Services		90,104	
Total Investment Fees		1,114,047	_



Actuarial





November 2, 2023

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, 2023. The purpose of the June 30, 2023 annual actuarial valuation was to determine the contribution requirement for the fiscal year ending June 30, 2025 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, 2023. In addition, a separate report was issued (dated October 31, 2023) to provide actuarial information for GASB Statement Nos. 67 and 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 Annual Comprehensive 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

Actuarial

Board of Trustees Arkansas Judicial Retirement System November 2, 2023 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, 2023 valuation was based upon assumptions that were recommended in connection with a study of experience through the period 2016-2021.

On the basis of the June 30, 2023 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.

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



Board of Trustees Arkansas Judicial Retirement System November 2, 2023 Page 3

The signing actuaries are independent of the plan sponsor.

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

Respectfully submitted, Gabriel, Roeder, Smith & Company

Mita D. Drazilov, ASA, FCA, MAAA

Heidi G. Barry, ASA, FCA, MAAA

MDD/HGB:dj



Summary of Actuarial Assumptions*

Economic Assumptions

The investment return rate used in making the valuation was 5.50% per year, compounded annually (net after investment expenses). Adopted 2022.

Pay increase assumptions for 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 2022.

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

The healthy retiree mortality tables, for postretirement mortality, used in evaluating allowances to be paid were the PubG-2010 Above-Median Income Retiree Mortality tables for healthy retirees. The disabled retiree mortality tables, for postretirement mortality, used in evaluating allowances to be paid were the PubG-2010 Disabled Retiree Mortality tables for disabled retirees. The preretirement mortality tables used was 175% of the PubG-2010 Employee Mortality tables for active mortality experience. Mortality rates for a particular calendar year are determined by applying the MP-2021 mortality improvement scale to the above described tables. Related values are shown on pages D-3 (pre-retirement) and D-5 (post-retirement). Adopted 2022.

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

The probabilities of withdrawal from service are shown for sample ages on page D-3. Adopted 2022.

The probabilities of 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 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 and 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).

^{*}The data referenced in this section is taken from the actuary's report, *Arkansas Judicial Retirement System Actuarial Valuation and Experience Gain/(Loss) Analysis June 30, 2022*, 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.

Supplementary Information

he information presented in the required supplementary schedules was determined as part of the ctuarial valuations at the dates indicated. Additional information as of the latest valuation date fol

Valuation Date June 30, 2023

Actuarial Cost Method Entry Age

Amortization Method Level Percent-of-Payroll

Remaining Amortization Period Variable, please refer to page A-3

Asset Valuation Method 4-year smoothed market with 25% corridor

Actuarial Assumptions:

Investment Rate of Return 5.50%
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:

3.0%, Compound.

Retirees and beneficiaries receiving benefits

178

Terminated plan members entitled to but not yet receiving benefits

Active plan members

122

Total

333

Actuarial Data

Single Life Retirement Values

Attained Age in		t Dying Year	\$1 Mont	t Value of hly for Life 3% Annually	Future Life Expectancy (Years)		
2023	Men	Women	Men	Women	Men	Women	
50	0.2516%	0.1928%	\$251.81	\$261.34	36.27	38.69	
55	0.3683%	0.2706%	232.44	243.27	31.35	33.71	
60	0.5648%	0.3837%	210.32	222.19	26.59	28.82	
65	0.8244%	0.5660%	185.61	198.03	22.03	24.08	
70	1.2745%	0.9003%	158.42	170.96	17.70	19.54	
75	2.1527%	1.5953%	129.62	141.67	13.69	15.27	
80	3.9079%	2.9605%	100.83	111.78	10.13	11.42	

Probabilities of death are for calendar year 2023.

Sample Attained	\$100 Benefit	Portion of Age 65 Lives in 2023 Still Alive			
Ages	Increasing 3% Annually	Men	Women		
65	\$100.00	100%	100%		
70	115.93	95%	97%		
75	134.39	88%	92%		
80	155.80	78%	83%		
85	180.61	62%	71%		

Decrement and Pay Increase Assumptions for Active Members

2023		Percent of Active Members Separating Within the Next Year						Pay Increase Assumptions for Individual Member			
Sample	Years of	IV	lale	Fei	male		Merit &	Base	Increase		
Ages Service	Service	Death	Disability	Death	Disability	Withdrawal	Seniority	(Economic)	Next Year		
	0				15 3	15.00%			O.		
	1					15.00%					
						15.00%					
	3					10.00%					
	4					10.00%					
30	5+	0.09%	0.04%	0.04%	0.05%	1.00%	0.00%	3.25%	3.25%		
35	550700	0.13%	0.04%	0.06%	0.05%	1.00%	0.00%	3.25%	3.25%		
40		0.16%	0.10%	0.08%	0.18%	1.00%	0.00%	3.25%	3.25%		
45		0.19%	0.13%	0.10%	0.20%	1.00%	0.00%	3.25%	3.25%		
50		0.25%	0.25%	0.13%	0.28%	1.00%	0.00%	3.25%	3.25%		
55		0.36%	0.45%	0.21%	0.38%	1.00%	0.00%	3.25%	3.25%		
60		0.57%	0.71%	0.34%	0.51%	1.00%	0.00%	3.25%	3.25%		
65		0.82%	0.83%	0.49%	0.62%	1.00%	0.00%	3.25%	3.25%		

The pay increase assumptions are age based only, and not service based. Probabilities of death are for calendar year 2023.

Probabilities of Retirement for Members Eligible to Retire

Early Retirement

Retirement Ages	Percent of Eligible Active Members 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

Valuat	ion	Active Membe	ers in Valua	ation	UAAL	Computed
Date	•	Average	Averag	es in Years	Financing	Employer
June 3	30 Number	Pay	Age	Service [®]	Period	Contribution Rate
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	16.9	&	35.90%
2019	140	168,591	60.5	17.8	&	34.85%
2020	142	173,141	60.9	17.9	&	34.34%
2021	145	175,720	57.3	12.9	&	31.86%
2022#	145	181,097	58.3	13.7	&	36.15%
2023	142	193,869	58.1	15.1	&	37.54%

⁽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.

^{*} Retirement System was fully funded.

[@] Includes reciprocal service for Tier One members on and after June 30, 2006 and Tier Two members on and after June 30, 2009.

[&]amp; Unfunded actuarial accrued liabilities are amortized as described on page A-3.

Retirees and Beneficiaries by Attained Age (as of June 30, 2023)

		Retirees	В	Survivor eneficiaries		Total		
Attained	3	Annual		Annual	ş	Annual		
Age	No.	Allowances	No.	Allowances	No.	Allowances		
Under 50		\$ -		\$ -		\$		
54		āli .	1	54,732	1	54,73		
59			1	89,568	1	89,56		
60	2	59,688		6	2	59,68		
62	1	158,076			1	158,07		
63	2	185,028	1	54,572	3	239,60		
64	276527	10 to 2010 to 40 10 to 1	1	42,660	1	42,66		
65			4	344,520	4	344,52		
67	3	288,492	2	139,188		427,68		
68	4	526,668	1	65,232	5 5	591,90		
69	3	343,608	-	05,252	3	343,60		
70	7	589,536	1	8,592	8	598,12		
71	5	466,164	-	0,552	5	466,16		
72	7	888,204	4	327,180	11	1,215,38		
73	8	908,820	4	79,104	9	987,92		
74	10	1,089,708	2	196,200	12	1,285,90		
75	11	1,285,176	2	199,032	13	1,484,20		
76	5	605,664	3	277,884	8	883,54		
77	8	965,460		277,00	8	965,46		
78	6	650,988	6	511,572	12	1,162,56		
79	6	567,072	2	137,772	8	704,84		
80	9	850,440	1	83,268	10	933,70		
81	4	530,040	2	169,344	6	699,38		
82	4	524,424	2	157,140	6	681,56		
83	2	143,676	2	189,504	4	333,18		
84	4	434,856	2	173,736	6	608,59		
85	2	298,116	1	80,640	3	378,75		
86	4	441,228	1	79,776		521,00		
87	3	346,416	2	170,784	5 5	517,20		
88	2	237,912	1	88,056	3	325,96		
89	ESSE	180.0 O 400000000	1	77,544	1	77,54		
91	1	122,856		VOLUME FOR SUCCESSION		122,85		
93	1	114,588			1 1	114,58		
94			1	77,544	1	77,54		
95	1	115,740	1	77,544	2	193,28		
96	System .	eareareocuseliffiqit	1	81,852	1	81,85		
97	1	180,564	1	77,544	2	258,10		
98	191 0 00	(ದರ್ವಾಗವರೆಯ)	1	79,428	1	79,42		
100 and Over				ÅS.				
TOTALS	126	\$ 13,919,208	52	\$ 4,191,512	178	\$ 18,110,72		

Active Tier One Members by Attained Age and Years of Service (as of June 30, 2023)

	8 0	Years o	f Benefit	Service to	Valuation	on Date	80		Totals		
Attained Age	0-4	0-4 5-9 10-14	15-19 20-24	25-29	30 Plus	No.	Valuation Payroll				
60 61 62 63					1		1	1	\$	192,918 192,918	
64											
65											
66											
67											
68											
69											
70						1		1		192,91	
71							1	1		192,91	
72							1	1		219,90	
73							1	1		197,59	
74											
Totals	4 3		15	2	1	1	4	6	\$	1,189,17	

C		-	Averages					
	Ne		Benefit	Eligibility	A			
Group	No.	Age	Service	Service	Annual Pay			
Tier One	6	67.8	31.3	32.9	\$198,195			

Active Tier Two Members by Attained Age and Years of Service (as of June 30, 2023

		Years		Totals					
Attained Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
35-39	3							3	\$ 578,75
40-44	5	3		1				9	1,736,26
45-49	6	1	1	2	1			11	2,129,79
50-54	9	3	5	4	5			26	5,062,02
55-59	9		8		3	6	1	27	5,213,46
60	3	1	1		1	1	1	8	1,554,05
61			4			1		5	964,59
62	1	1		1				3	578,75
63		1	1	1		1	2	6	1,166,86
64		1						1	197,59
65		1			1		1	3	578,75
66	3				2			5	975,29
67	1	1	2		2		2	8	1,552,70
68				1		1		2	385,83
69					3	2	1	6	1,157,50
70	2	1						3	578,75
71	5985	1	3					4	771,67
72					2			2	385,83
73	1		1					2	385,83
74				1				1	192,91
75									
76						1		1	192,91
77									
Totals	43	15	26	11	20	13	8	136	\$ 26,340,17

Group			Averages					
	No.	Age	Benefit Service	Eligibility Service	Annual Pay			
	136	57.7	8.8	14.3	\$193,678			

Actuarial Analysis

Short Condition Test

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 Accrue	ed Liability						
Valuation Act	(1) Active	(2) Retirees	(3) Active Member (Employer		Po Va	(-1	Market		
Date	Members	and	Financed	Present		Present		Total	Value
June 30	Contr.	Benef. (\$ in 1	Portion) Thousands)	Assets	(1)	(2)	(3)	Total	Total
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%
2019	14,957	160,858	108,673	260,671	100%	100%	78%	92%	94%
2020	15,745	163,177	117,732	277,318	100%	100%	84%	93%	95%
2021	12,464	209,486	87,162	303,155	100%	100%	93%	98%	112%
2022 (a)	13,628	213,524	107,176	313,217	100%	100%	80%	94%	89%
2023	13,739	225,388	110,880	322,396	100%	100%	75%	92%	88%

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

Analysis of Experience: Changes in Unfunded Actuarial Accrued Liabilities

Actual experience will not (except by coincidence) coincide exactly with assumed experience. Gains andlosses 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:

	2023	2022
1) UAAL* at start of year	\$ 21,111,609	\$ 5,957,057
2) Employer normal cost from last valuation	7,071,579	6,714,626
3) Employer contributions	8,230,629	8,963,459
4) Interest accrual: (1) * .055 + [(2)-(3)]*.0275	1,129,265	277,877
5) Expected UAAL before changes: (1)+(2)-(3)+(4)	21,081,824	3,986,101
6) Change in benefits/assumptions/methods	0	16,744,946
7) Expected UAAL after changes: (5) + (6)	21,081,824	20,731,047
8) Actual UAAL at end of year	27,611,910	21,111,609
9) Gain(loss): (7) - (8)	\$(6,530,086)	\$(380,562)
10) Actuarial accrued liability at start of year	\$334,328,250	\$309,112,455
11) Gain(loss) as percent of actuarial accrued liabilitie at start of year: (9) / (10)	(2.0)%	(0.1)%

^{*} Unfunded actuarial accrued liability.

Analysis of Experience: Gains/Losses by Risk Area (for the fiscal year ended June 30, 2023)

	Gain (Loss) During Year*		
	121	Percent of	
Type of Risk Area	\$ in Millions	Liabilities	
ECONOMIC RISK AREAS			
Pay Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a			
(loss).	\$(5.6)	(1.7)%	
Investment Return. If there is greater investment return than assumed, there is a gain. If less return,			
a (loss).	0.3	0.1 %	
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 younger ages or higher average			
pays, a (loss).	(1.5)	(0.4)%	
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 more liabilities are			
released by deaths-in-service than assumed, there is a gain. If less, a (loss).	0.1	0.0 %	
Withdrawal. If more liabilities are released by			
other separations than assumed, there is a gain.			
If smaller releases, a (loss).	(0.6)	(0.2)%	
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.	2.5	0.7 %	
Other. Gains and losses resulting from group size			
change, data adjustments, timing of financial			
transactions, additional contributions			
and miscellaneous unidentified sources.	(1.8)	(0.5)%	
Experience Gain/(Loss)	\$(6.5)	(2.0)%	

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

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.

Age & 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.

Tier One Tier Two

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 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.

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.

Tier One Tier Two

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.

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



The System

Schedule of Revenues by Source

Year Ending June 30	Employee Contributions	Employer & Other Entity Contributions	Court Fees	Misc.	Investment Income	Total
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
2019	1,030,430	7,722,374	511,585	16	15,931,915	25,196,320
2020	1,138,323	8,177,723	394,974	1,096	18,489,171	28,201,287
2021	1,117,205	8,038,373	171,520	13	73,378,507	82,705,618
2022	1,300,942	8,692,620	270,839	14	(41,879,100)	(31,614,685)
2023	\$ 1,267,952	\$ 8,042,547	\$ 188,083	\$ 112	\$ 20,437,792	\$ 29,936,486

Chart of Revenues by Source

(shown in millions of dollars; for fiscal years ended June 30)

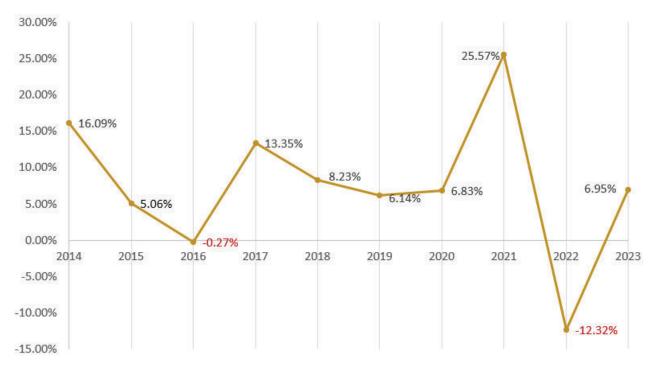


Schedule of Investment Rate of Return

Year Ending June 30	Rate of Return
2014	16.09%
2015	5.06%
2016	-0.27%
2017	13.35%
2018	8.23%
2019	6.14%
2020	6.83%
2021	25.57%
2022	-12.32%
2023	6.95%

Chart of Investment Rate of Return

(for fiscal years ended June 30)



Schedule of Expenses by Type

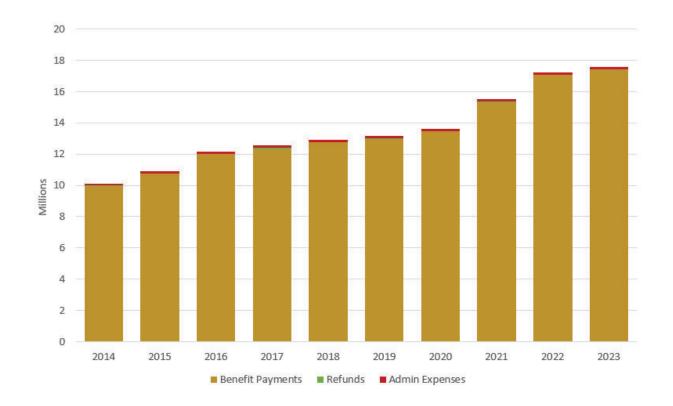
Year Ending June 30	Benefit Payments	Refunds	Administrative Expenses	Total
2014	9,966,020	18,836	130,529	10,115,385
2015	10,762,871	14,320	137,951	10,915,142
2016	12,007,537	800	158,420	12,166,757
2017	12,310,422	79,011	168,702	12,558,134
2018	12,769,175	0	142,311	12,911,485
2019	12,979,769	22,024	147,062	13,148,855
2020	13,440,774	5,986	141,891	13,588,651
2021	15,310,419	49,199	145,150	15,504,768
2022	17,060,242	0	164,115	17,224,357
2023	\$ 17,411,833	\$ 0	\$ 170,984	\$ 17,582,817

^{*} 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.

Chart of Expenses by Type

(shown in millions of dollars; for fiscal years ended June 30)



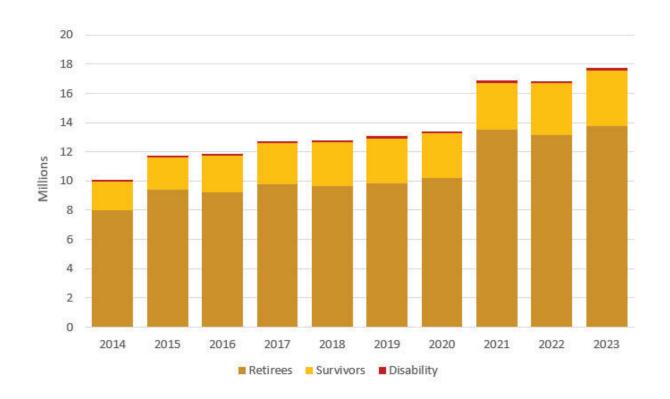
Schedule of Benefit Expenses by Type*

Year Ended June 30	Age and Service Retirees	Survivors	Disability Retirees
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
2019	9,823,260	3,095,064	140,376
2020	10,221,672	3,040,596	144,600
2021	13,538,832	3,165,576	148,932
2022	13,127,940	3,538,872	153,408
2023	\$ 13,761,204	\$ 3,807,540	\$ 158,004

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

Chart of Benefit Expenses by Type

(shown in millions of dollars; for fiscal years ended June 30)



Membership

Schedule of Retired Members by Type of Benefit

(for the fiscal year ended June 30, 2023)

Type of Annuity	Number	Annual Annuities	Annuity Liabilities
Age & Service Retirees			
Life	18	\$ 1,597,560	\$ 18,788,799
Life Continuing to Survivor	106	12,163,644	160,491,902
Totals	124	13,761,204	179,280,701
Beneficiaries of Age & Service Retirees	46	3,807,540	38,786,031
Total Age & Service Retirees & Beneficiaries	170	17,568,744	218,066,732
Disability Retirees			
Life	1	106,788	827,175
Life Continuing to Survivor	1	51,216	669,897
Totals	2	158,004	1,497,072
Beneficiaries of Disability Retirees	0	0	0
Total Disability Retirees & Beneficiaries	2	158,004	1,497,072
Death-in-Service Beneficiaries	6	383,972	5,823,911
Total Retirees & Beneficiaries	178	\$ 18,110,720	\$ 225,387,715

Retired Members by Type of Benefit

