ANNUAL COMPREHENSIVE FINANCIAL REPORT

ARLINGTON COUNTY EMPLOYEES' RETIREMENT SYSTEM

A Pension Trust Fund of Arlington County, Virginia

PRESENTED BY THE BOARD OF TRUSTEES

For the Fiscal Year Ended June 30, 2022

**Produced by the
Arlington County Employees' Retirement System Office
2100 Clarendon Boulevard
Suite 504
Arlington, Virginia 22201
(703) 228-3321**

ARLINGTON VIRGINIA

ARLINGTON COUNTY EMPLOYEES' RETIREMENT SYSTEM

Suite 504 2100 Clarendon Blvd. Arlington, VA 22201
TEL 703.228.3900 FAX 703.228.3902 TOLL FREE 800.296.9510 www.arlingtonva.us/retirement

December 1, 2022

To: The County and School Boards of Arlington County

Dear Board Members:

The Board of Trustees of the Arlington County Employees' Retirement System (ACERS) respectfully submits its annual report for the fiscal year ended June 30, 2022 as required in § 21-18, § 35-17 and § 46-18 of the Arlington County Code.

The Board's mission is to protect and preserve the assets of the Trust and provide prudent investment management and oversight. We act primarily in an investment capacity and have no role in setting benefit levels.

Annual investment performance was below expectations this year as the system assets achieved a return of -10.1%; outperforming the portfolio benchmark return of -13.6%. With net position of $2.814 billion at year end, the System remains well positioned to meet its obligations to members.

The financial and actuarial information included in the report show that the Retirement System is financially sound and has a funded ratio of actuarial assets to actuarial liabilities of 108.5%, an increase over fiscal year 2021's funded ratio of 108.4%.

A copy of this report will be available for inspection at the Retirement Board Investment Office, the County Central Library and on the Arlington County web site. A summary of the report will be distributed to each participant in January 2023.

On behalf of the Board of Trustees and the ACERS staff, I would like to express our appreciation for your continued support and leadership.

Respectfully,

Jonathan C. Kinney
President

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ARLINGTON
VIRGINIA

ARLINGTON COUNTY
EMPLOYEES' RETIREMENT SYSTEM
(ACERS)

Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Arlington County Employees' Retirement System
Virginia

For its Annual Comprehensive
Financial Report
For the Fiscal Year Ended

June 30, 2021

Christopher P. Morrill

Executive Director/CEO

ARLINGTON VIRGINIA

ARLINGTON COUNTY EMPLOYEES' RETIREMENT SYSTEM

Suite 504 2100 Clarendon Blvd. Arlington, VA 22201
TEL 703.228-3321 FAX 703.228.0646 TOLL FREE 800.296.9510 www.careers.arlingtonva.us/retirement-investment-office

November 5, 2022

To: The Board of Trustees of the Arlington County Employees' Retirement System

Dear Retirement Board Members:

The annual report of the Arlington County Employees' Retirement System ("the System") for the fiscal year ended June 30, 2022 is enclosed. Responsibility for both the accuracy of the financial information contained herein and for the completeness and fairness of the presentation rests with System management.

The Retirement Board's primary responsibility is the sound management and investment of the System's assets. The Retirement Board has no role in determining the size and type of benefits.

As of June 30, 2022, the fiduciary net position of the System was $2.814 billion, a decrease of $374 million during the fiscal year. The year's -10.0% gross investment return was 3.6% above the portfolio benchmark return of -13.6%. This performance placed the System in the 66th percentile of the TUCS Public Plan universe for the year. The ten-year gross investment return is 8.3% and compares to the portfolio benchmark return of 6.7%. Over the long term, ACERS outperforms its benchmarks and ranks in the top half of public fund peers. The System is financially and actuarially sound with a funded ratio of the actuarial value of assets to actuarial accrued liabilities of 108.5% as of June 30, 2022. Current employer contribution levels from the County are consistent with the funding guidelines provided for in the Arlington County Code.

System History

The System was established as a defined benefit plan, under authority of an act of the General Assembly of Virginia, in Chapter 21 of the County Code (for Uniform and General Employees) as of December 21, 1953 and in Chapter 35 (for School Board Employees) as of January 1, 1969. System provisions were modified such that all County employees hired on or after February 8, 1981 are covered by the provisions of Chapter 46 of the County Code. While different County employees have different benefits depending on their date of hire or type of employment, the System utilizes a single fund for all participants and there is no segregation of assets for individual classes of employees. A formal Trust was adopted for the System as of December 2001 and all assets are now held under the Trust.

Benefit Provisions

The System provides normal and early service retirement benefits for members who attain age and service requirements as specified in the County Code. Coverage for service-connected disability benefits is immediate upon membership in the System. Ordinary, non-service related disability benefits are provided after the attainment of two years of service. Members are vested in the System after five years of service and are then eligible for benefits at their normal retirement age.

Arlington County's Human Resources Department is responsible for benefits administration and provides annual benefit statements to members. Additionally, counseling to all benefit applicants and others requesting it is provided, as are presentations at new employee orientations, various employee group meetings and training sessions. All retirement handbooks and forms are available in the Human Resources office and on the web. Contact information for both the Retirement Board Investment Office and the Retirement Benefits Office is below.

RETIREMENT BOARD INVESTMENT OFFICE
2100 Clarendon Boulevard, Suite 504
Arlington, VA 22201
(703) 228-3321, Fax (703) 228-0646

RETIREMENT BENEFITS OFFICE
2100 Clarendon Boulevard, Suite 511
Arlington, VA 22201
(703) 228-3900, Fax (703) 228-3902

Major Initiatives

From an investment perspective, the Board acted at several points during the year to manage the portfolio's risk/return profile considering developments in the capital markets. Notable activity included the rebalancing the portfolio's risk allocation and commitments to private investments. The *Investment Section* of this report includes details on the year's activity.

Other Post-Employment Benefits

In February 2009, the Retirement Board voted to act as Trustee with investment oversight for two trusts, one for County funds and one for School funds, invested to prefund Other Postemployment Benefits (OPEB) such as post-retirement health care. Authority for a local retirement board to act as Trustee for OPEB assets is provided for in Virginia Code §15.2-1547. Additional funding of $6.5 million and $2.6 million for the County and School trusts, respectively, was made during fiscal year 2022. As of June 30, 2022, the County and School trusts had assets of $201.8 million and $83.7 million, respectively. These trusts are separate and independently managed from Retirement System assets. The OPEB trusts are managed in accordance with an Investment Policy Statement tailored to their risks and objectives.

Accounting and Controls

Accounting. This report has been prepared on the full accrual basis of accounting, which is used to record assets and liabilities and additions and deductions to plan net position.

System management is responsible to protect the system assets and to ensure the financial statements are prepared in conformity with generally accepted accounting principles (GAAP). Internal accounting controls are designed to provide reasonable, but not absolute, assurance regarding the safeguarding of assets against loss from unauthorized use or disposition; and the reliability of financial records for preparing financial statements and maintaining accountability for assets. The concept of reasonable assurance recognizes that the cost of a control should not exceed the benefits likely to be derived. We believe that the System's internal accounting controls adequately safeguard assets and provide reasonable assurance of proper recording of financial transactions.

Generally accepted accounting principles require that management provide a narrative introduction, overview, and analysis to accompany the basic financial statements in the form of Management's Discussion and Analysis (MD&A). This letter of transmittal is designed to complement the MD&A and should be read in conjunction with it. The System's MD&A can be found immediately following the independent auditors' report, in the *Financial Section*.

Budgetary Controls. The budget for the System is presented to, and approved by, the Board of Trustees each year. A report of actual versus budgeted expenses is provided to the Board quarterly.

Funded Status

An actuarial valuation of the System is performed annually to determine funding requirements. The actuarial valuation used for this reporting period was completed with payroll data as of June 30, 2022, the last day of fiscal year 2022.

A retirement system is fully funded when the actuarial value of the assets is adequate to meet the expected obligations to participants, or actuarial liabilities. The System's actual liability and investment experience result in a 108.5% funded ratio as of June 30, 2022, an increase over the June 30, 2021 funded ratio of 108.4%. The *Actuarial Section* of this document provides more details on the actuarial valuation report and the critical assumptions used in its preparation.

Investment Process and Performance

The Board operates with the standard of care required in making investments as directed in the Code of Virginia §51.1-803 which states that "funds...shall be invested with the care, skill, prudence and diligence...that a prudent person acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of like character and with the same aims." The County Code requires that the assets of the System be invested in accordance with a statement of investment policy adopted by the Board. County Code allows for the engagement of professional investment managers.

The Board adopted investment policy establishes investment objectives and a framework that allows sufficient flexibility to pursue investment opportunities while setting reasonable constraints and performance standards. Specifically, the policy establishes key risk parameters intended to minimize the risk of significant principal loss in the pursuit of the System's stated investment return objective. Additionally, the policy requires, with certain limited exceptions, a minimum of 20% of the total fair value of System assets be held in fixed income investments and no more than 15% of assets be invested in illiquid investments. Derivative investments are limited such that no more than 15% of assets are subject to risk due to their use.

Under the policy, the Board allocates System assets and hires investment managers to direct the investments. Each manager is given a mandate, agreeing to specific guidelines pertaining to investment style, expected return, portfolio risk exposure, portfolio turnover and other key metrics. Investment managers have full discretion to direct the assets assigned to them in accordance with the manager's guidelines, constrained only by limitations provided in the County Code, the investment policy and provisions of the manager's contract with the Board.

With assistance from System staff and the investment consultant, the Board reviews total Fund and investment manager performance at least quarterly to ensure compliance with stated objectives and policy. With assistance from the investment consultant, staff continuously monitors performance of the Fund and its investment managers and, when conditions warrant, makes recommendations for change to the Board. Authority to adopt these recommendations rests solely with the Board.

Securities of the System, with certain limited exceptions including those held by pooled vehicles in which it owns an interest or in partnerships, are held by Northern Trust, the System's master custodian or its appointed sub custodians.

For fiscal year 2022, the System's gross investment return was -10.0% compared to a -13.6% benchmark return. The annualized rates of return for the three and five-year periods were 7.3% and 7.4%, respectively. These compared to benchmark returns of 3.9% and 5.3% for the same periods, respectively. The actuarial assumed rate of return is 6.75%. The System's net of fees returns for the one and three-year periods were -10.1% and 7.1%, respectively. More details on the Fund's asset allocation and historic returns can be found in the *Investment Section* of this report.

Professional Services

Professional consultants are appointed by the Board to perform services essential to the effective and efficient operation of the System. Windmark Investment Partners serves as the general investment consultant to the System while Franklin Park serves as the private equity investment consultant. Opinions from the independent public accountants, Cherry Bekaert LLP, and the actuary, Cheiron, are included in this report.

Certificate of Achievement for Excellence in Financial Reporting

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a *Certificate of Achievement for Excellence in Financial Reporting* to the Arlington County Employees' Retirement System (ACERS) for its annual comprehensive financial report for the fiscal year ended June 30, 2021. This is the twenty-third consecutive year that ACERS has achieved this recognition. To be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized annual comprehensive financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. We believe that this current annual comprehensive financial report meets the Certificate of Achievement Program's requirements, and it will be submitted to the GFOA to determine its eligibility for certification.

Acknowledgments

This annual report was prepared by the System's staff under the direction of the Retirement Board of Trustees. The staff of Arlington County provided critical assistance in preparation of the *Statistical Section,* for which we are grateful. I would like to express sincere appreciation to the Board of Trustees for its confidence, guidance and dedication. Finally, I would also like to thank the County Board and the County Manager for their support and commitment to ensure the continued successful operation and funding of the System.

This report is intended to provide complete and reliable information for determining the financial status of the System. It is respectfully submitted to the Retirement Board and to other interested parties.

Respectfully,

Susie Ardeshir

Executive Director & Chief Investment Officer

ACERS STRUCTURE
JUNE 30, 2022

TRUSTEES

Jonathan C. Kinney, President
Appointed by County Board
Term Expires 1/31/2025

Richard Alt, Vice President
Elected by Retirees
Term Expires 1/31/2023

Michelle Cowan, Treasurer
Appointed by County Manager
Term Expires 1/31/2023

Michael-dharma Irwin, Secretary
Elected by General Employees
Term Expires 1/31/2025

William Ross, Assistant Treasurer
Appointed by County Board
Term Expires 1/31/2025

Barbara Donnellan
Appointed by County Board
Term Expires 1/31/2025

Brian Lynch
Elected by Uniformed Employees
Term Expires 1/31/2023

SUBSTITUTE TRUSTEES

Emily Hughes
Elected by General Employees
Term Expires 1/31/2025

Shaun Lewis
Elected by Uniformed Employees
Term Expires 1/31/2023

Carl Newby
Elected by Retirees
Term Expires 1/31/2023

PROFESSIONAL STAFF

Susie Ardeshir, Executive Director & CIO
Randee Stenroos, Assistant Director
Katrina Milne, Investment Analyst
Stephen Euell, Accountant

LEGAL ADVISOR

Virginia Sadler, County Attorney's Office

INVESTMENT CONSULTANT

Windmark Investment Partners
Franklin Park LLC

CUSTODIAN BANK

The Northern Trust Company

CONSULTING ACTUARY

Cheiron

CERTIFIED PUBLIC ACCOUNTANT

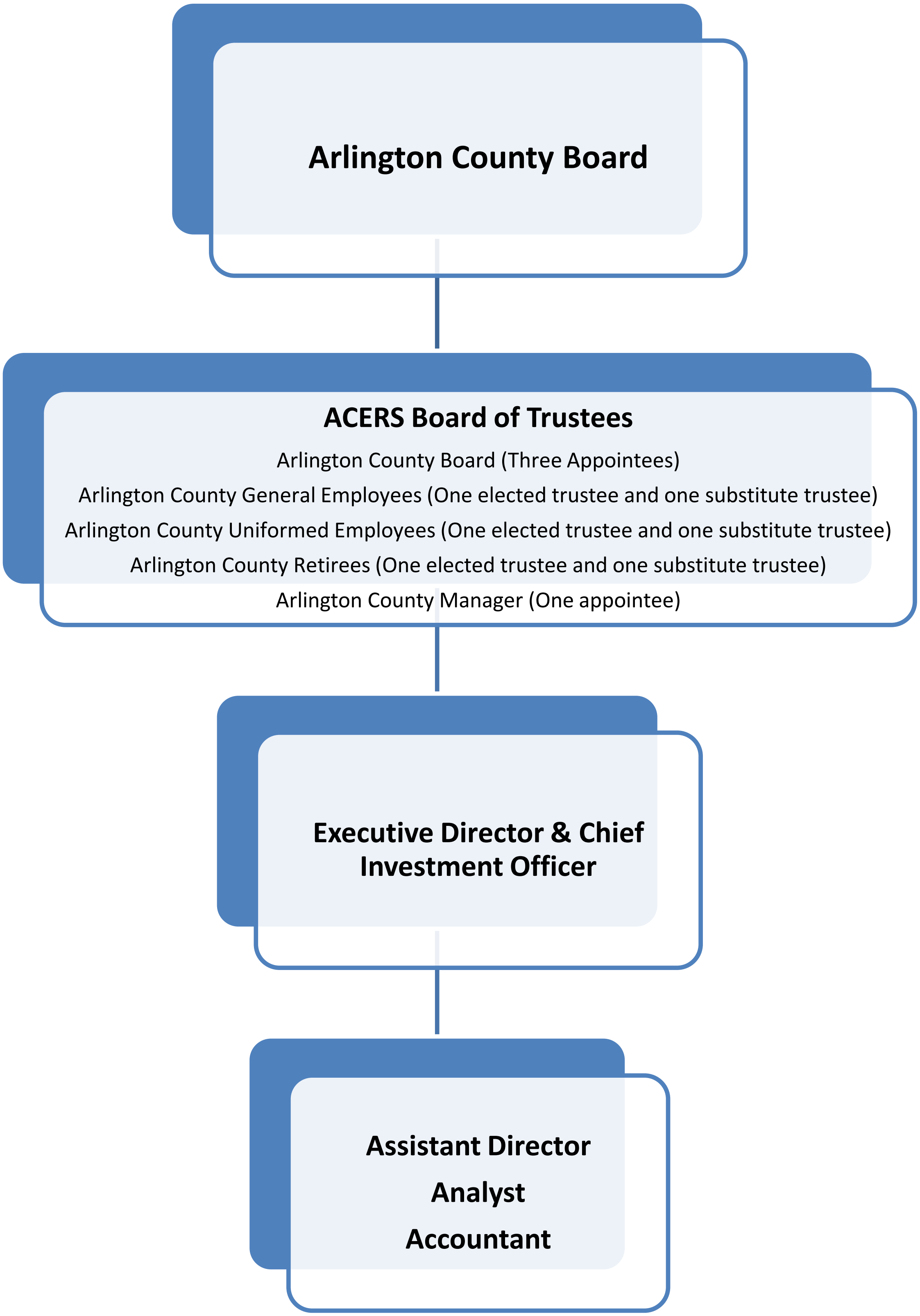
Cherry Bekaert LLP

INVESTMENT MANAGERS(1)

Abbott Capital
Altaris Healthcare Partners
Baillie Gifford
Bison Capital
BV Investment Partners
DoubleLine® Capital
Enlightenment Capital
Franklin Park
Gallant Partners
GQG
Highclere
JFL Equity Investors
Kiltearn Partners
Marcus Partners
Middleground Partners
Northern Trust
Orbis International
Peppertree
Rubicon
T. Rowe Price
The Vanguard Group
Vision Ridge Partners

(1) Investment manager assignments are on Page 50 and a schedule of broker commissions on Page 52

ORGANIZATIONAL CHART



Financial Section

ARLINGTON
VIRGINIA

ARLINGTON COUNTY
EMPLOYEES' RETIREMENT SYSTEM
(ACERS)

Cherry Bekaert LLP
Your Guide Forward

Report of Independent Auditor

To the Board of Trustees
Arlington County Employees' Retirement System
Arlington, Virginia

Report on the Audit of the Financial Statements

Opinion

We have audited the accompanying financial statements of the Employees' Retirement System of Arlington County (the "System"), a pension trust fund of the County of Arlington, Virginia, as of and for the year ended June 30, 2022, and the related notes to the financial statements, which collectively comprise the System's basic financial statements as listed in the table of contents.

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of the System as of June 30, 2022, and the changes in fiduciary net position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of our report. We are required to be independent of the System and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the System's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and, therefore, is not a guarantee that an audit conducted in accordance with generally accepted auditing standards and *Government Auditing Standards* will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

cbh.com

In performing an audit in accordance with generally accepted auditing standards and *Government Auditing Standards*, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the System's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the System's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control related matters that we identified during the audit.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and required supplementary information as listed in the table of contents be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the System's basic financial statements. The accompanying supplemental information as listed in the table of contents, is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the supplemental information is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Other Information

Management is responsible for the other information included in the annual report. The other information comprises the introductory, investment, actuarial, and statistical sections but does not include the basic financial statements and our auditor's report thereon. Our opinions on the basic financial statements do not cover the other information, and we do not express an opinion or any form of assurance thereon.

In connection with our audit of the basic financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated November 4, 2022, on our consideration of the System's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the System's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the System's internal control over financial reporting and compliance.

Cherry Bekaert LLP

Tysons Corner, Virginia
November 4, 2022

MANAGEMENT'S DISCUSSION & ANALYSIS

The discussion and analysis presented in this section provides an overview of the Arlington County Employees' Retirement System's ("the System") financial activities for the fiscal year ended June 30, 2022. Please read this discussion and analysis in conjunction with the basic financial statements, which follow, and the letter from the Executive Director and Chief Investment Officer included in the *Introductory Section* of this Annual Comprehensive Financial Report.

The System provides retirement benefits to Arlington County Uniformed and General employees and to certain School Board employees. Total fiduciary net position held in trust, combined with consistent and significant County contributions, leave the System well positioned to continue to meet its obligations to members.

Financial Highlights

Net Position System net position at June 30, 2022 totaled $2.814 billion, a decrease of $374 million, or 11.7%, from June 30, 2021, due to a decrease in the value of investments.

Additions and Deductions to Net Position Additions to net position include County and member contributions, interest and dividends on the System investments and investment gains/losses; deductions to assets are primarily driven by benefit payments. For fiscal year 2022:

- Contributions increased to $76.1 from $74.5 million in fiscal year 2021.
- Dividends and interest on investments increased to $29.9 million from $22.9 million in fiscal year 2021.
- Payments and refunds to members increased to $126.5 million from $119.9 million in fiscal year 2021.

Investment Gains and Losses Investment losses were $342.0 million in fiscal year 2022, which include realized and unrealized changes in investment portfolio fair value. This was a $1.035 billion decrease from the $693.4 million gains in fiscal year 2021.

- Fund net investment returns, including dividends and interest, of -10.1% for the year outperformed the -13.6% benchmark. The System's investment portfolio is well diversified and strives to balance capital preservation in down markets with generating an adequate risk adjusted return over the long term.

Funded Ratio The funding ratio compares actuarial value of assets to the actuarial liabilities. We also present the fair value funding ratio of 105.3% as of June 30, 2022, which is the current fair value to actuarial liabilities. The fair value of assets is not a good measure on which to base the calculation of contributions to the System as it is subject to significant variability due to the investment market volatility of fair values.

MANAGEMENT'S DISCUSSION & ANALYSIS

SUMMARY OF FIDUCIARY NET POSITION AND CHANGES IN FIDUCIARY NET POSITION
FOR THE YEARS ENDED JUNE 30, 2022 & 2021

Summary of Fiduciary Net Position

Assets	June 30, 2022	Change Year over Year	June 30, 2021
Cash	$ 275,209,632	$ 65,877,253	$ 209,332,379
Receivables	2,760,706	421,314	2,339,392
Investments	2,543,194,264	(435,880,475)	2,979,074,739
Total Assets	**$ 2,821,164,602**	**$ (369,581,908)**	**$ 3,190,746,510**
Liabilities			
Accrued Expense and Other Liabilities	$ 7,264,686	$ 4,415,014	$ 2,849,672
Total Liabilities	**$ 7,264,686**	**$ 4,415,014**	**$ 2,849,672**
Total Fiduciary Net Position	**$ 2,813,899,916**	**$ (373,996,922)**	**$ 3,187,896,838**

Summary of Changes in Fiduciary Net Position

Additions	June 30, 2022	Change Year over Year	June 30, 2021
Employer Contributions	$ 61,248,511	$ 1,590,620	$ 59,657,891
Member Contributions	14,836,453	44,234	14,792,219
Dividends & Interest	29,901,364	6,970,276	22,931,088
Investment Gains (Losses)	(342,037,223)	(1,035,400,196)	693,362,973
Other	217,813	98,527	119,286
Investment Expense	(9,496,497)	(1,219,136)	(8,277,361)
Total Additions	**$ (245,329,579)**	**$ (1,027,915,675)**	**$ 782,586,096**
Deductions			
Retirement Benefits	$ 125,120,746	$ 5,641,077	$ 119,479,669
Refund of Contributions	1,338,300	943,002	395,298
Administrative & Consulting Expense	2,208,297	158,480	2,049,817
Total Deductions	**$ 128,667,343**	**$ 6,742,559**	**$ 121,924,784**
Change in Fiduciary Net Position	**$ (373,996,922)**	**$ (1,034,658,234)**	**$ 660,661,312**

MANAGEMENT'S DISCUSSION & ANALYSIS

Overview of Financial Statements

The System's financial statements, which follow, include:

- Basic financial statements
- Required supplementary information
- Supplementary information

Summarizing the information available in each:

Basic Financial Statements These statements include a statement of fiduciary net position and a statement of changes in fiduciary net position, presented as of and for the year ended June 30, 2022, respectively. These financial statements reflect the resources available to pay benefits to retirees and other beneficiaries as of year-end, as well as changes in those resources during the year.

The financial statement notes provide additional information essential to fully understanding the data provided in the Financial Statements. Specifically:

Note 1 Describes significant accounting policies
Note 2 Provides a description of the System, the funding policy and member contributions and benefits and lists the various actuarial assumptions
Note 3 Discusses System's net pension liability and long term expected rates of return
Note 4 Discusses System's deposits and investments and includes several tables categorizing investments by type while providing disclosure on interest rate, credit quality and currency related risks
Note 5 Provides a description of the System's investments by fair value
Note 6 Explains the System's tax status
Note 7 Describes any subsequent events since the fiscal year end

Required Supplementary Information This information illustrates the System's change in net pension liability and related ratios, schedule of employer contributions and schedule of investment returns.

Supplementary Information Details regarding administrative and investment consultant related expenses are also provided.

Contact Information

The System's financial statements are designed to present users with a general overview of the System's finances and to demonstrate the prudent exercise of the Board's oversight. Please direct any questions or requests for further information to the Arlington County Employees' Retirement System, 2100 Clarendon Boulevard, Suite 504, Arlington, VA 22201. The report may also be accessed at *www.arlingtonva.us/retirement*. A summary report will be issued to plan members in January 2023.

ARLINGTON COUNTY EMPLOYEES' RETIREMENT SYSTEM
(A Pension Trust Fund of Arlington County, Virginia)
STATEMENT OF FIDUCIARY NET POSITION
JUNE 30, 2022

ASSETS		
Cash and Cash Equivalents		$275,209,632
Contributions Receivable:		
Employer		2,186,281
Employee		518,594
Other Receivables:		55,831
Investments, at Fair Value:		
Foreign, Municipal and U.S. Government Obligations	$102,473,146	
Corporate Fixed Income Obligations	149,389,861	
Domestic and Foreign Equities	733,099,247	
Private Equity	203,019,171	
Real Estate Funds	19,288,758	
Pooled Equity	897,341,913	
Pooled Fixed Income	438,582,168	
Total Investments		2,543,194,264
Total Assets		2,821,164,602
LIABILITIES		
Accrued Expenses and Other Liabilities		7,264,686
Total Liabilities		7,264,686
NET POSITION RESTRICTED FOR PENSIONS		$2,813,899,916

See accompanying notes to financial statements

ARLINGTON COUNTY EMPLOYEES' RETIREMENT SYSTEM
(A Pension Trust Fund of Arlington County, Virginia)
STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEAR ENDED JUNE 30, 2022

ADDITIONS	
Contributions	
Employer	$61,248,511
Employee	14,836,453
Total Contributions	$76,084,964
Investment Loss	
Interest and Dividends	29,901,364
Net Depreciation in Fair Value	(342,037,223)
Investment Loss	(312,135,859)
Less: Investment Expense	9,496,497
Net Investment Loss	(321,632,356)
Securities Lending Activity	
Security Lending Income	289,805
Bank Management Fees	71,992
Net Income From Security Lending	217,813
Total Additions	**($245,329,579)**
DEDUCTIONS	
Members' Benefits	$125,120,746
Refund of Members' Contributions	1,338,300
Administrative Expenses	992,955
Other Consulting Expenses	1,215,342
Total Deductions	**$128,667,343**
Net Decrease in Net Position	**($373,996,922)**
Net Position Restricted for Pensions, Beginning of Year	**3,187,896,838**
NET POSITION RESTRICTED FOR PENSIONS, End of Year	**$2,813,899,916**

See accompanying notes to financial statements

NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2022

NOTE 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting

The accompanying financial statements are presented on the accrual basis of accounting with additions to fiduciary net position recognized when added and deductions from fiduciary net position recorded when incurred. Member and employer contributions to Arlington County Employees' Retirement System (the "System") are recognized in the period in which the contributions are due and payable in accordance with the terms of the plan as defined in the Arlington County Code. Benefits and refunds are recognized when due in accordance with the terms of the Plan.

The accounting and reporting policies of the System conform to accounting principles generally accepted in the United States of America. The preparation of financial statements in conformity with Government Accounting Standards Board (GASB) requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of additions and deductions in fiduciary net position during the reporting period. Actual results could differ from those estimates.

Investments

The System's investments are reported at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants on the measurement date. The System utilizes independent pricing vendor services, quotations from market makers and alternative valuation methods when market quotations are either not readily available or not deemed representative of fair value. Investment transactions are recorded as of the trade date. These transactions are not finalized until the settlement date. Unrealized appreciation and depreciation of investments is reflected in the Statement of Changes in Fiduciary Net Position for the year.

NOTE 2. PLAN DESCRIPTION

The System is a pension trust fund of Arlington County, Virginia (the County) financial reporting entity and is included in the County's annual comprehensive financial report. The accompanying financial statements present information on the operations of the System in conformity with GAAP.

The System is a single employer public employee defined benefit pension plan covering substantially all employees of the County.

Plan Administration

On November 16, 2004, amendments to Arlington County Chapters 21, 35 and 46 were made to transfer the System's administrative responsibilities to the County Manager while leaving investment responsibility with the Board of Trustees (the Retirement Board).

NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2022

NOTE 2. PLAN DESCRIPTION

The Retirement Board consists of seven voting and three substitute members as follows:

- Three appointed by the County Board
- One appointed by the County Manager
- One trustee and one substitute elected by general employees
- One trustee and one substitute elected by police officers, firefighters, and deputy sheriffs (uniform)
- One trustee and one substitute elected by retired employees

If no eligible person is nominated for an elected position, the County Manager appoints an eligible person to serve as trustee.

The County Code requires that the trustees elected by active employees be active employees and that the trustees elected by retired employees currently be receiving retirement benefits from the System.

The trustees annually elect a President, Vice-President and Secretary from among their members, and appoint a Treasurer and Assistant Treasurer, who may or may not be a member of the Retirement Board.

The trustees annually approve a Retirement Board Investment Office administrative budget. Administrative expenses are funded from System assets.

Plan Membership
At June 30, 2022, System membership consisted of the following:

	General	Uniformed	School	Total
Active Employees:				
Vested	1,669	517	3	2,189
Non-vested	1,132	363	0	1,495
Total Active Employees	2,801	880	3	3,684
Vested Deferred	606	129	18	753
Retirees and Beneficiaries	2,515	950	785	4,250

Please refer to Chapters 21, 35 and 46 of the County Code for a more detailed description of the System.

Benefits Provided

The System provides retirement benefits as well as survivor and disability benefits. The table on page 21 describes the benefits and how they are calculated.

NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2022

NOTE 2. PLAN DESCRIPTION

All plan members are eligible for disability benefits after two years of service and qualify for Social Security disability retirement. Disability retirement benefits are determined in the same manner as retirement benefits with no reduction for early retirement.

All normal retirement benefits vest after five years of credited service. If an employee leaves covered employment before five years of credited service, accumulated employee contributions plus interest are refunded to the employee or designated beneficiary. A summary of member contribution rates, normal service retirement and average final compensation for the employees covered under the various Chapters of the County Code for the period ending June 30, 2022 is provided on the following page.

Benefit terms provide for annual cost of living adjustments to each member's retirement allowance after the member's retirement date. The annual adjustments are 100% of the CPI-U increase up to a maximum of 3% plus one half of the CPI-U increase for the next 9%. This equates to a maximum of 7.5% increase for a 12% increase in the CPI-U.

The System also provides a DROP (Deferred Retirement Option Plan) for employees eligible for retirement. Retirement benefits are paid into a stable value investment fund for DROP participants.

NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2022

NOTE 2. PLAN DESCRIPTION

Member Contributions and Retirement Benefits

	Participants Covered Under Chapter		
	21	**35**	**46**
Covers Employees Hired:	Before 2/8/81	Before 2/8/81	2/8/81 or After
Contribution Rates:			
General Employees	4%	N/A	4%
School Board Employees (Covered by VRS)	0%	0%	0%
Uniformed Employees:			
- Management	5.62%	N/A	5% through 1/3/09, 7.5% thereafter
- Non-Management	6.62%	N/A	5% through 1/3/09, 7.5% thereafter
Normal Retirement Age:			
General County Employees	60	N/A	62
School Board Employees	60	62	62
Uniformed Employees	50	N/A	52
"Rule of 80" Applies	Yes	No	Yes
Retirement Benefit: Percentage of Average Final Salary (AFS) times years of creditable service subject to a 30 year maximum. AFS is generally the average of the three highest compensation years, including overtime. For Chapter 46 employees retiring on or after 1/4/09, the New AFS definition excludes overtime and most premium pays.	2.5% for each of the first 20 years plus 2% for each of the next 10 years	2.125% reduced by the VRS benefits under Formula A	*Retiring on/prior to 1/3/09* General: 1.5% Uniform: 2.0% until Social Security Eligible then 1.5%, 1.7% & 2.0% for each 10 year increment *Retiring on/after 1/4/09* General: 1.7% New AFS *OR* 1.5% Prior AFS through 1/3/09 plus 1.7% New AFS thereafter Uniform: 2.5% through 1/3/09 plus 2.7% thereafter on New AFS *OR* 2.0% Prior AFS through 1/3/09 plus 2.7% New AFS thereafter until Social Security Eligible then 1.5%, 1.7% & 2.0% for each 10 year increment prior to 1/3/09
Employee contribution refund upon leaving County	Contributions plus interest	N/A	Contributions plus interest

NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2022

NOTE 2. PLAN DESCRIPTION

Contributions

Chapters 21, 35 and 46 of the County Code establish the Plan and provide the basis for determining the contribution rates. The County Board may amend the Plan at any time.

Based on an annual actuarial valuation prepared by an actuary selected by the Retirement Board, a contribution rate is recommended to the County Board for adoption. The actuarially determined rate results in contributions to the Plan which, along with member contributions, are anticipated to be sufficient to fund the value of benefits expected to be earned by plan members during the year, plus an amount to amortize any unfunded actuarial liability.

For the year ended June 30, 2022, the active member contribution rate was 4% of pay for general employees and 7.5% of pay for uniformed employees. The County's blended contribution rate was 21.1% of annual covered payroll.

Rate of Return

For the year ending June 30, 2022, the annual money-weighted (dollar weighted) rate of return on pension plan investments, net of pension plan investment expense, was -10.1%. The rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

NOTE 3. NET PENSION LIABILITY

The components of the net pension liability of the County at June 30, 2022, were as follows:

($ in millions)		
Total Pension Liability	$	2,672.7
Plan Fiduciary Net Position		2,813.9
County's Net Pension Asset	$	(141.2)
percentage of the Total Pension Liability		105.3%

Actuarial Assumptions

The total pension liability was determined by entry age actuarial cost method as of June 30, 2022, using the following actuarial assumptions:

Investment rate of return	6.75%
Assumed inflation rate	3.00%
Projected salary increases	3.00%

Mortality rates were based on the PubG – 2010 Employee projected with scale MP-2018.

NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2022

NOTE 3. <u>NET PENSION LIABILITY</u>

The actuarial assumptions used in the June 30, 2022 valuation were based on the results of an actuarial experience study for the period July 1, 2014 to June 30, 2019. The discount rate of 6.75% was lowered from 7.25% with the June 30, 2016 valuation.

Expected Rate of Return

The long-term expected rate of return on pension plan investments was determined using a building block method in which ranges of expected rates of return are developed for each major asset class. These ranges are combined to produce the long term expected rate of return by weighting the expected rates of return by the current asset allocation percentages. The expected rates of return for each major asset class included are summarized in the following table:

Asset Class	Long Term Expected Real Rate of Return
Domestic Equity	6.8%
International Equity	8.3%
Fixed Income	4.2%
Cash/Short Term	2.2%
Non-Traditional	10.9%

Source: Windmark Investment Partners

Discount Rate

The discount rate used to measure the total pension liability was 6.75%. The discount rate assumes that contributions from plan members will be made at the current contribution rate and that employer contributions will be made at rates actuarially determined by the Retirement Board. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the actuarial assumed rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of the Net Pension Liability/(Asset) to Changes in the Discount Rate

The following presents the net pension asset of the Plan, calculated using the discount rate of 6.75%, as well as what the Plan's net position asset would be if it were calculated using a discount rate that is 1 percentage point lower (5.75%) or 1 percentage point higher (7.75%) than the current rate:

	1% Decrease (5.75%)	Current Discount Rate (6.75%)	1% Increase (7.75%)
($ in millions)			
Plan's net pension liability/(asset)	$239.5	($141.2)	($450.7)

NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2022

NOTE 4. DEPOSITS AND INVESTMENTS

a. Legal Provisions and Investment Policy

The System is authorized by the *Code of Virginia* §51.1-803 to invest funds of the System in accordance with the prudent person rule. County Code §21-23, §35-21, and §46-22 require that assets of the System be invested with care, skill, prudence, and diligence under circumstances then prevailing that a prudent person acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims. County Code §21-24, §35-22, and §46-23 require that investments be diversified to minimize the risk of large losses unless under the circumstances it is clearly not prudent to do so.

The System's written investment policy provides for investment across various assets available in the capital markets in order to diversify and balance total investment program risk. Such sectors include, but are not limited to:

- Convertible securities
- Cash, money market funds and other short-term investment funds
- Public and private investments of U.S. and non-U.S. companies
- Open and closed end alternative investment funds
- Fixed income obligations of the U.S. government and its agencies, mortgage-backed securities, corporate bonds, and asset backed securities. In addition, fixed income obligations of non-U.S. governments, companies and supernational organizations, in other developed and emerging markets.

Since the Fund focused on risk capacity and drawdown ability there is no target allocation approach, the following table shows the Fund's ten year average and fiscal year-end allocation:

Asset Class	Current Allocation	10 Year Average Allocation
Domestic Equity	42%	48%
International Equity	16%	16%
Fixed Income	25%	30%
Cash/Short Term	9%	2%
Non-Traditional	8%	4%
Total	100%	100%

c. Investment Restrictions

The following summarizes the primary investment restrictions included in the System's investment policy statement. Individual investment manager contracts typically include additional guidelines and limitations. Fixed income investments must be at least 20% of the Fund's assets at fair value. The Fund must be rebalanced if the fair value weight of fixed income investments falls below 20%, unless the Board, acting

NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2022

on the recommendation of staff or the investment consultant to defer rebalancing, determines that it would not be consistent with the Board's fiduciary responsibility to rebalance (increase fixed income) at that time.

No new commitment to illiquid investments can be made which causes the allocation to illiquid investments, including existing fair value and commitments, to exceed 25% of the System's fair value.

Unless the Retirement Board grants prior authorization, the investment managers may not:

- Invest more than 10% of the fair value of each portfolio in the securities of any one issuer, with the exception of the U.S. government and its agencies
- Hold more than 5% of the outstanding shares of a single company in each portfolio
- Hold unlisted equity securities that exceed 20% of the portfolio, exclusive of holdings in banks, utilities, and insurance companies
- Use leverage of any sort for any purpose beyond prudent industry standards
- Effect short sales of securities
- Pledge, mortgage or hypothecate securities, except in approved security lending programs

Investment managers are prohibited from:

- Making investments prohibited by county, state or federal law
- Investing in collectibles
- Making loans, including mortgage loans, to individuals

Derivatives are allowed only in cases where their use reduces the cost of a desired transaction and/or improves the risk characteristics of the portfolio. The Retirement Board may, however, approve the use of derivatives to implement investment processes intended to add value in specifically-designated, risk-controlled applications, such as currency management. Any such value-added investment program shall be approved only where:

- The potential exposures have been well defined by the Retirement Board and provide for a downside risk range for the Fund within established limits
- The value of the designated Fund assets subject to risk due to the program does not exceed 15% of the Fund's assets
- In any program where an active overlay strategy combining derivatives with underlying portfolio assets is to be used, the gross amount of any long and short exposures taken on by the overlay shall not exceed the value of the designated Funds assets being overlaid

NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2022

NOTE 4. DEPOSITS AND INVESTMENTS

The System's Investment Policy provides external investment managers with discretion to take actions, within approved guidelines, regarding each portfolio's foreign currency exposures using forward currency contracts. These contracts are agreements to exchange one currency for another currency at an agreed upon price and date. Investment managers use such contracts primarily to settle pending trades at a future date. Key risks include counter party non-performance and currency fluctuations. As of June 30, 2022, the System had $49 in open net forward currency contracts.

d. Cash and Cash Equivalents

At June 30, 2022, the System had cash and cash equivalents of $275,209,632. Cash deposits in bank accounts totaled $478,759. This amount was insured by the Federal Deposit Insurance Corporation up to $250,000. Cash equivalents totaling $274,730,873 is invested in the custodian's Short-Term Investment Fund. This account is uninsured and uncollateralized.

NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2022

NOTE 4. DEPOSITS AND INVESTMENTS

e. Investments and Risk

The System's investments are recorded at fair value as described in Note 5. Fair Value of Investments, on page 33. The following table presents the fair value of investments by type at June 30, 2022:

SYSTEM INVESTMENTS

Investment Type *(in $ 000s)*	**Investment Value**
Foreign, Municipal and U.S. Governments:	
Government and Government Agency Debt	$ 16,478
Government Pooled Fund	85,995
Total Foreign, Municipal, and U.S. Governments	102,473
Non-Government Fixed Income Obligations:	
Residential Mortgaged Backed	67,696
Commercial Mortgage Backed	20,283
Collateralized Mortgage Obligations	30,216
Asset Backed Securities	31,195
Total Non-Governement Fixed Income Obligations	149,390
Domestic and Foreign Equities:	
Common Stock	728,003
REITs	2,915
Preferred Stock	2,183
Total Domestic and Foreign Equities	733,100
Private Equity:	
Private Equity	203,019
Real Estate Funds:	
Real Estate	19,289
Pooled Equity:	
Pooled Equity Funds	897,341
Pooled Fixed Income:	
Pooled Bond Funds	438,582
Total	$ 2,543,194

NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2022

NOTE 4. DEPOSITS AND INVESTMENTS

Interest Rate Risk

Interest rate risk is driven by changes in general interest rate levels. The price of a fixed income security generally moves in the opposite direction of the change in interest rates. Securities with long maturities are highly sensitive to interest rate changes. The System has interest rate exposure on $165.9 million of directly owned fixed income securities and $524.6 million invested in three pooled US fixed income funds. The System's directly owned fixed income investments and maturities at June 30, 2022 are:

INVESTMENT MATURITIES

Investment Type (in $ 000s)	Fair Value	Maturities (years) Under 1	1-5	6-10	Over 10
Asset Backed Securties	$ 31,195	$ -	$ 3,365	$ 3,987	$ 23,843
Commercial Mortgage Backed	20,283	-	-	821	19,462
Government & Government Agencies	16,478	-	1,766	3,333	11,379
Residential Mortgage Backed	67,696	-	-	6,369	61,327
Collateralized Mortgage Obligations	30,216	-	3,475	964	25,777
Total	$ 165,868	$ -	$ 8,606	$ 15,474	$ 141,788

NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2022

NOTE 4. DEPOSITS AND INVESTMENTS

Interest rate sensitivity of a fixed income portfolio is best measured by effective duration which reflects the average percentage change in portfolio value due to a 1% change in interest rates. The effective duration for the System's directly held fixed income portfolio at June 30, 2022 is shown below:

INVESTMENT DURATIONS

Investment Type *(in $ 000s)*	**Fair Value**	**Effective Duration (Yrs)**
Asset Backed Securties	$ 31,195	2.514
Commercial Mortgage Backed	20,283	2.804
Government & Government Agencies	16,478	15.501
Residential Mortgage Backed	67,696	5.743
Collateralized Mortgage Obligations	30,216	3.590
Total	**$165,868**	**6.549**

Custodial Credit Risk

In the event of counter-party failure, the System may not be able to recover the value of its investment or collateral securities that are in the possession of an outside party. Investment securities are exposed to custodial credit risk if the securities held by the counterparty, or counterparty's trust department, are uninsured and are not registered in the name of the System. The System requires that all investments be clearly marked as to ownership, and to the extent possible, be registered in the name of the System.

Concentrations

At June 30, 2022, the System does not hold investments (other than U.S. Government and U.S. Government guaranteed obligations) in any one issuer that represents 5% or more of net position available for benefits. All investment, except for the pooled and mutual funds, short-term investment fund and a short-term collateral investment pool are held by an unaffiliated custodian. There is no custodial credit risk since the custodian's records establish the System's interest in the securities and the custodian provides insurance for all custody assets.

NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2022

NOTE 4. DEPOSITS AND INVESTMENTS

Credit Risk

The System's credit quality distribution for the System's directly held fixed income investments of $165.9 million at June 30, 2022 is shown below:

FIXED INCOME CREDIT QUALITY DISTRIBUTION

Investment Type	**Credit Quality**							
(in $ 000s)	**AAA**	**AA**	**A**	**BBB**	**BB**	**B**	**Below B**	**Unrated**
Asset Backed Securties	$ 5,369	$ -	$ 1,550	$ 2,413	$ -	$ -	$ 14,890	$ 6,973
Commercial Mortgage Backed	7,121	1,782	1,428	1,756	592	157	-	7,447
Government & Government Agencies	16,478	-	-	-	-	-	-	-
Residential Mortgage Backed	67,696	-	-	-	-	-	-	-
Collateralized Mortgage Obligations	-	-	-	1,995	378	-	10,919	16,924
Total	**$ 96,664**	**$ 1,782**	**$ 2,978**	**$ 6,164**	**$ 970**	**$ 157**	**$ 25,809**	**$ 31,344**

Note: Ratings based on S&P and Moody Quality Ratings

NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2022

NOTE 4. DEPOSITS AND INVESTMENTS

Foreign Currency Risk

Foreign investments include equity and cash. The Retirement Board has authorized specific investment managers to invest in non-dollar denominated securities. These managers have the ability to hedge a portion of their portfolio's foreign currency exposure. The System's exposure to foreign currency risk at June 30, 2022 was as follows:

FOREIGN CURRENCY EXPOSURE IN US DOLLARS

Currency *(in $ 000s)*	**Equity**	**Cash**	**Total**
Australian Dollar	$ 1,634	$ -	$ 1,634
Brazilian Real	799	-	799
British pound sterling	4,282	1	4,283
Danish Krone	3,823	-	3,823
Euro	36,114	2	36,116
HK offshore Chinese Yuan Renminbi	5,630	-	5,630
Hong Kong Dollar	28,581	-	28,581
Indonesian Rupiah	4,635	-	4,635
Japanese Yen	5,861	28	5,889
Nigerian Naira	124	308	432
Norwegian Krone	1,063	1	1,064
Philippines Peso	3,878	2	3,880
Singapore Dollar	-	1	1
South African Rand	285	-	285
Swedish Krona	1,282	1	1,283
Swiss Franc	1,917	2	1,919
Total	**$ 99,908**	**$ 346**	**$ 100,254**

NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2022

NOTE 4. DEPOSITS AND INVESTMENTS

f. Securities Lending

Under authorization of the Retirement Board, the System engaged in a securities lending program through its custodian, Northern Trust, for securities held in separate accounts. In accordance with the contract, Northern Trust may lend any securities held in custody. Only obligations issued by the US Government are accepted as collateral. By not accepting cash collateral, the program relies on the demand of the loaned securities as the driver of income and is not subject to collateral reinvestment risk. Minimum collateralization levels for all loans is 102% of the fair value of the borrowed securities or 105% if the borrowed securities are not denominated in dollars. Loans and collateral are marked to market on a daily basis. The collateral is maintained by Northern Trust and all securities on loan are callable at any time. The System does not have the ability to pledge or sell the collateral.

In the event the borrower becomes insolvent and fails to return the securities, Northern Trust indemnifies the System by agreeing to purchase replacement securities, or to remit the collateral held. There were no such failures by any borrower during the fiscal year nor were there any losses during the year resulting from a borrower or lending agent default.

The fair value of securities on loan decreased from $75.0 million at the beginning of the year to $15.1 million at June 30, 2022.

The following table details the net income from securities lending for the fiscal year ended June 30, 2022:

Gross Income from Securities Lending	$	289,805
Less: Bank Management Fees		(71,992)
Net Income from Securities Lending	$	217,813

The following table presents the fair value of underlying securities and the value of the non-cash collateral pledged at June 30, 2022:

Securities Lent		Fair Value of Securities on Loan		Fair Value of Non-cash Collateral
Total	$	15,149,685	$	15,578,365

None of the System's pooled fund investments have material realized or unrealized securities lending related losses.

NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2022

NOTE 5. FAIR VALUE OF INVESTMENTS

The System categorizes its fair value measurements within the fair value hierarchy established by GAAP. The hierarchy is based on the valuation inputs used to measure the fair value of the asset and gives the highest priority to unadjusted quoted prices in active markets for identical assets (Level 1 measurements) and the lowest 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.

For investments that do not have a readily determinable fair value, the System establishes fair value by using the Net Asset Value (NAV) per share (or its equivalent), such as member units or an ownership interest in partners' capital to which a proportionate share of net assets is attributed. These investments 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's assessment of the significance of particular inputs to these fair value measurements requires judgment and considers factors specific to each asset. The table on page 34 shows the fair value leveling on the investments for the System.

Equity securities classified in Level 1 of the fair value hierarchy are valued at the last sale price or official close price as of the close of trading on the applicable exchange where the security principally trades.

Equity and fixed income securities classified in Level 2 of the fair value hierarchy are valued at prices provided by independent pricing vendors. The vendors provide these prices after evaluating observable inputs including, but not limited to: quoted prices for similar securities, the mean between the last reported bid and ask prices (or the last bid price in the absence of an asked price), yield curves, yield spreads, credit ratings, deal terms, tranche level attributes, default rates, cash flows, prepayment speeds, broker/dealer quotations, inflation and reported trades.

NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2022

NOTE 5. FAIR VALUE OF INVESTMENTS

Fixed income securities classified in Level 3 of the fair value hierarchy were valued using a single broker indicative quote.

The System has the following recurring fair value measurements as of June 30, 2022:

Investments Measured at Fair Value
($ in millions)

		Fair Value Measurements Using		
	June 30, 2022	**Quoted Prices in Active Markets for Identical Assets (Level 1)**	**Significant Other Observable Inputs (Level 2)**	**Significant Unobservable Inputs (Level 3)**
Investments by fair value level				
Debt securities				
Foreign, Municipal and U.S. Governments				
Government and Government Agency Debt	$ 16,478,297	$ 16,478,297	$ -	$ -
Corporate Fixed Income Obligations				
Residential Mortgage Backed	70,358,135	-	70,358,135	-
Commericial Mortgage Backed	17,620,317	-	17,620,317	-
Asset Backed	31,195,237	-	31,195,237	-
Non-Government Backed C.M.O.s	30,216,173	-	30,216,173	-
Pooled Fixed Income				
Pooled Bond Funds	77,288,540	77,288,540	-	-
Total debt securities measured at fair value	243,156,698	93,766,837	149,389,861	-
Equity Securities				
Domestic and Foreign Equities				
Common Stock	587,396,833	587,396,833	-	-
Preferred Stock	2,182,639	2,182,639	-	-
Pooled Equity				
Pooled Equity Funds	663,813,828	663,813,828	-	-
Total equity securities measured at fair value	1,253,393,300	1,253,393,300	-	-
Total investments by fair value level	$ 1,496,549,998	$ 1,347,160,137	$ 149,389,861	$ -
Investments measured at the net asset value (NAV)				
Debt securities				
Pooled Fixed Income				
Pooled Bond Funds	447,288,477			
Total debt securities measured at the NAV	447,288,477			
Equity Securities				
Domestic and Foreign Equities				
Pooled Global Equity Fund	253,186,038			
Pooled International Equity Fund	123,861,822			
Total equity securities measured at the NAV	377,047,860			
Alternative Investments				
Private Equity				
Private Equity	203,019,171			
	203,019,171			
Real Estate Funds				
Real Estate	19,288,758			
Total alternative investments measured at the NAV	222,307,929			
Total investments measured at the NAV	1,046,644,266			
Total investments	$ 2,543,194,264			

NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2022

NOTE 5. FAIR VALUE OF INVESTMENTS

	June 30, 2022	Unfunded Commitments (millions)	Redemption Frequency	Redemption Notice Period
Debt Securities				
Pooled Fixed Income	$ 447,288,477	-	Daily	None
Total debt securities	447,288,477	-		
Equity Securities				
Domestic and Foreign Equities	253,186,038	-	Monthly	15 - 45 days
International Pooled Equity	123,861,822	-	Monthly	15 - 45 days
Total equity securities	377,047,860	-		
Alternative Investments				
Private Equity	203,019,171	163	N/A	N/A
Real Estate	19,288,758	40	N/A	N/A
Total alternative investments	222,307,929	203		
Total investments measured at the NAV	$ 1,046,644,266	203		

- *Unfunded Commitments.* Since 2001, the System has committed $463.0 million to alternative investments as of June 30, 2022, contributed $259.7 million, and an unfunded commitment of $163.3 million.
- *Alternative Investments.* Real estate includes two funds, structured as a limited partnership, which invests in land in the United States. Private Equity includes twenty-three funds, structured as limited partnerships, which employ multiple investment strategies including buy-out, venture capital and fund-of-funds. These investments can never be redeemed with the funds. Instead, the nature of the investments of these types is that distributions are received through the liquidation of the underlying assets of the funds. It is expected that the underlying assets of the funds will be liquidated over the next 10 years.
- *Equity.* Pooled Equity includes funds that invest in both U.S. and non-U.S. securities.
- *Fixed Income .* Pooled fixed income includes two funds, one that maintains a portfolio constructed to match or track the components of the Barclays Capital U.S. Aggregate Index as well as a TIPS fund.

NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2022

NOTE 6. TAX STATUS

The System is a tax-exempt governmental plan qualified under Section 401 and exempt under Section 501(a) of the Internal Revenue Code. IRS qualification letters have been received.

NOTE 7. SUBSEQUENT EVENTS

The Plan evaluated subsequent events through November 4, 2022 the date the financial statements were available to be issued. Events or transactions occurring after June 30, 2022, but prior to November 4, 2022 that provided additional evidence about conditions that existed at June 30, 2022, have been recognized in the financial statements for the year ended June 30, 2022. Events or transactions that provided evidence about conditions that did not exist at June 30, 2022 but arose before the financial statements were available to be issued have not been recognized in the financial statements for the year ended June 30, 2022.

SCHEDULES OF REQUIRED SUPPLEMENTARY INFORMATION
June 30, 2022

Schedule of Changes in Net Pension Liability/(Asset) and Related Ratios
($ in millions)

	June 30, 2022	June 30, 2021	June 30, 2020	June 30, 2019	June 30, 2018	June 30, 2017	June 30, 2016	June 30, 2015	June 30, 2014
Total Pension Liability									
Service Cost	$ 62.6	$ 60.8	$ 59.8	$ 59.3	$ 57.8	$ 56.5	$ 53.8	$ 54.8	$ 52.1
Interest	171.6	166.3	161.4	149.5	143.5	139.1	143.6	135.6	131.6
Changes in Benefits	-	-	-	-	3.1	-	-	-	-
Change in Assumptions	-	-	-	112.60	-	-	27.2	-	29.4
Differences between Expected and Actual Experience	24.1	(29.4)	(30.1)	(31.1)	(13.7)	(27.1)	(47.3)	(16.2)	(11.0)
Benefit Payments	(126.5)	(119.9)	(115.5)	(110.8)	(105.0)	(99.7)	(95.3)	(90.8)	(86.3)
Net Change in Total Pension Liability	$ 131.8	$ 77.8	$ 75.6	$ 179.5	$ 85.7	$ 68.8	$ 82.0	$ 83.4	$ 115.8
Total Pension Liability - Beginning	$ 2,540.9	$ 2,463.1	$ 2,387.5	$ 2,208.0	$ 2,122.3	$ 2,053.5	$ 1,971.5	$ 1,888.1	$ 1,772.3
Total Pension Liability - Ending	$ 2,672.7	$ 2,540.9	$ 2,463.1	$ 2,387.5	$ 2,208.0	$ 2,122.3	$ 2,053.5	$ 1,971.5	$ 1,888.1
Plan Fiduciary Net Position									
Contributions - Employer	$ 61.2	$ 59.7	$ 59.9	$ 56.7	$ 54.9	$ 51.8	$ 54.5	$ 58.2	$ 53.7
Contributions - Employee	14.8	14.8	14.7	13.0	12.9	12.7	12.3	12.2	11.9
Net Investment Income	(321.3)	708.1	156.8	152.1	167.3	246.3	(1.3)	37.3	304.2
Benefits Payments	(126.5)	(119.9)	(115.5)	(110.8)	(105.0)	(99.7)	(95.3)	(90.8)	(86.3)
Administravtive Expenses	(2.2)	(2.0)	(2.0)	(0.8)	(0.8)	(0.8)	(1.7)	(1.5)	(0.7)
Net Change in Plan Fiduciary Net Position	$ (374.0)	$ 660.7	$ 113.9	$ 110.2	$ 129.3	$ 210.3	$ (31.5)	$ 15.4	$ 282.8
Plan Fiduciary Net Position - Beginning	$ 3,187.9	$ 2,527.2	$ 2,413.3	$ 2,303.1	$ 2,173.8	$ 1,963.5	$ 1,995.0	$ 1,979.6	$ 1,696.8
Plan Fiduciary Net Position - Ending	$ 2,813.9	$ 3,187.9	$ 2,527.2	$ 2,413.3	$ 2,303.1	$ 2,173.8	$ 1,963.5	$ 1,995.0	$ 1,979.6
Net Pension Liability/(Asset) - Ending	$ (141.2)	$ (647.0)	$ (64.1)	$ (25.8)	$ (95.1)	$ (51.5)	$ 90.0	$ (23.5)	$ (91.5)
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	105.3%	125.5%	102.6%	101.1%	104.3%	102.4%	95.6%	101.2%	104.9%
Covered Payroll	$ 297.1	$ 285.6	$ 285.2	$ 270.0	$ 261.4	$ 236.5	$ 248.9	$ 243.5	$ 252.4
Net Pension Liability/(Asset) as a Percentage of Covered Payroll	(47.5%)	(226.5%)	(22.5%)	(9.6%)	(36.4%)	(21.8%)	36.2%	(9.7%)	(36.3%)

This schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

SCHEDULES OF REQUIRED SUPPLEMENTARY INFORMATION
June 30, 2022
Schedule of Employer Contributions
($ in millions)

Fiscal Year Ended	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Actuarially Determined Contribution	$ 61.2	$ 59.7	$ 59.9	$ 56.7	$ 54.9	$ 51.8	$ 54.5	$ 58.2	$ 53.7	$ 48.0
County Contributions in Relation to the Actuarially Determined Contributions	61.2	59.7	59.9	56.7	54.9	51.8	54.5	58.2	53.7	48.0
Contribution Deficiency/(Excess)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Covered Payroll	$ 297.1	$ 285.6	$ 285.2	$ 270.0	$ 261.4	$ 236.5	$ 248.9	$ 243.5	$ 252.4	$ 231.1
Contributions as a Percentage of Covered Payroll	20.6%	20.9%	21.0%	21.0%	21.0%	21.9%	21.9%	23.9%	21.3%	20.8%

Notes to Schedule:

Valuation Date	June 30, 2020
Timing	Actuarially determined contribution rates are calculated based on the actuarial valuation one year prior to the beginning of the Plan year.

Methods and Assumptions Used to Determine Contribution Rates:

Actuarial Cost Method	Entry Age Normal Cost Method
Asset Valuation Method	Five year, smoothed
Amortization Method	Level Percent Open
Discount Rate	6.75%
Amortization Growth Rate	3.00%
Inflation	3.00%
Salary Increases	3.00% plus merit/senority component which vary by year of service and are compounded annually
Mortality	<u>General and Uniformed</u> RP-2000 Combined Mortality with generational mortality improvements using Scale AA for active employees and non-disabled inactive members; for Uniformed members, 50% of deaths assumed to be service-connected. RP-2000 Disabled Mortality projected with generational mortality improvements using Scale AA for disabled lives. <u>School</u> RP-2000 Employee Mortality with White Collar adjustment with generational improvements using Scale BB for active and non-disabled inactive members; no deaths asumed to be service-connected. RP-2000 Disabled Mortality with generational mortality improvements using Scale AA for disabled lives.

Schedule of Investment Returns

Fiscal Year Ended	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Annual money-weighted rate of return, net of investment expense	-10.1%	28.3%	6.6%	6.8%	7.8%	12.7%	0.0%	1.9%	18.1%	13.5%

SUPPLEMENTAL INFORMATION
JUNE 30, 2022

SCHEDULE OF ADMINISTRATIVE EXPENSES

Personnel Services:		
Staff Salaries	$579,521	
Benefits	220,440	
Total Personnel Services		**$799,961**
Professional Services	107,414	**$107,414**
Office Expense:		
Telephone	$ 2,193	
Postage and Shipping	886	
Printing	1,941	
Total Office Expense		**$ 5,020**
Education:		
Conferences	$ 4,938	
Subscriptions	19,511	
Total Education		**$ 24,449**
Miscellaneous:		
Insurance	$ 59,617	
Supplies & Furniture	12,821	
Bank Fees	14,143	
Other Miscellaneous [1]	(30,470)	
Total Miscellaneous		**$ 56,111**
Total Administrative Expenses		**$992,955**

(1) Consists primarily of OPEB management fees Arlington County and Arlington County Public Schools

SUPPLEMENTAL INFORMATION
JUNE 30, 2022

SCHEDULE OF INVESTMENT & CONSULTANT EXPENSES

Investment Expenses	
Investment Manager Fees	$ 9,278,594
Security Lending Fees	71,992
Custody Fees	217,904
Total Investment Expenses	**$ 9,568,490**
Other Consultant Expenses	
General Consultant	$ 715,342
Alternative Investment Consultant	500,000
Total Other Consultant Expenses	**$ 1,215,342**

Investment Section

ARLINGTON
VIRGINIA

ARLINGTON COUNTY
EMPLOYEES' RETIREMENT SYSTEM

Investment Presentation Basis and Policy

The report and commentary on investment performance and activity was prepared by the System's staff.

Return data for the System was calculated by the custodian, Northern Trust, using time-weighted return methodology. Valuations are based on published national securities exchange prices, when available. Real estate and private equity investments are reported at appraised value which approximates fair value. Valuations are reconciled between the investment managers and the custodian bank.

The primary objective in the investment of public funds is adequate funding of employee retirement benefits at a reasonable and affordable cost. To ensure the long-term health of the System, an appropriate balance must be struck between risks taken and returns sought. The System's adopted investment policy seeks to control downside risk exposure while maximizing the potential for long term asset value appreciation.

Specific investment objectives include:

- Earn an average real rate of return that meets or exceeds the assumed actuarial real rate of return, currently 3.75%, over rolling 5-year periods.
- Manage portfolio risk to limit potential downside fluctuations in the total asset value while providing the opportunity to capture a significant portion of upside opportunity.
- Realize as high a rate of total return as possible consistent with the above.

To achieve these objectives, the following investment policies are employed:

- Maintain a broadly diversified portfolio to minimize the risk of overexposure to any one market sector or investment style. Specific guidelines include:
    - A minimum 20% allocation to fixed income investments
    - Exposure to alternative investments does not exceed 25%
    - A maximum 15% exposure to derivative based strategies
- Evaluate and closely monitor, with the investment consultant, investment manager performance against specific objectives, both absolute and in relation to other managers investing with similar investment objectives and styles.
- Monitor Fund risk exposure, modify target risk as warranted and rebalance the Fund as necessary.

The Fund's policy benchmark is:

	As of 10/1/21	
Equities	*Russell 3000*	*44.0%*
	MSCI ACWI ex-US	*19.0%*
Fixed Income	*Barclays Universal*	*33.5%*
	Barclays TIPS	*1.5%*
Cash	*90 Day T-Bills*	*2.0%*
		100.0%

Investment Performance Summary

(All returns for periods greater than one year are annualized)

Return data for the System is presented based on a time-weighted rate of return methodology as calculated by the custodian, Northern Trust.

				Fiscal Year Ended June 30				
	10 Years	**5 Years**	**3 Years**	**2018**	**2019**	**2020**	**2021**	**2022**
Investment Performance (net of fees)								
Total Fund[1] (Benchmark)	8.1%	7.2%	7.1%	7.8%	6.8%	6.6%	28.3%	-10.1%
Domestic Equities (Russell 3000)	10.8%	10.2%	10.0%	10.2%	11.0%	0.7%	37.1%	-3.7%
Global Equities (MSCI AC World)	11.6%	9.1%	8.2%	18.3%	3.1%	22.7%	55.0%	-33.3%
International Equities (MSCI AC World ex-US)	4.8%	2.3%	4.0%	5.9%	-5.8%	-7.3%	44.3%	-16.0%
Fixed Income (Fixed Income)	2.5%	1.4%	0.1%	0.3%	6.9%	6.0%	1.6%	-6.8%
Benchmark Performance								
Total Fund[2]	6.7%	5.3%	3.9%	7.1%	7.5%	5.5%	23.2%	-13.6%
Russell 3000	12.6%	10.6%	9.8%	14.8%	9.0%	6.5%	44.2%	-13.9%
MSCI AC World	8.8%	7.0%	6.2%	10.7%	5.7%	2.1%	39.3%	-15.8%
MSCI AC World ex-US	4.8%	2.5%	1.4%	7.3%	1.3%	-4.8%	35.7%	-19.4%
Fixed Income[3]	1.8%	1.0%	-0.7%	-0.3%	8.0%	7.9%	1.3%	-10.1%
CPI + 3.75% Annualized[4]	6.3%	7.6%	8.7%	6.6%	5.4%	4.4%	9.1%	12.8%
Actuarial Assumed Rate of Return				6.75%	6.75%	6.75%	6.75%	6.75%

(1) Includes cash and alternative investment performance though returns for these asset classes are not listed separately

(2) 40% RU 3000, 17.5% MSCI AC World ex-US, 39% BC Universal, 1.5% BC TIPS & 2% 90 Day T-Bill

Prior to 10/1/07, 43% RU 3000, 14% EAFE, 38% BC Aggregate & 5% 90 Day T-Bill

(3) Weights fixed income benchmark components to 100%

(4) 3.75% as of 7/1/16, 3.5% prior

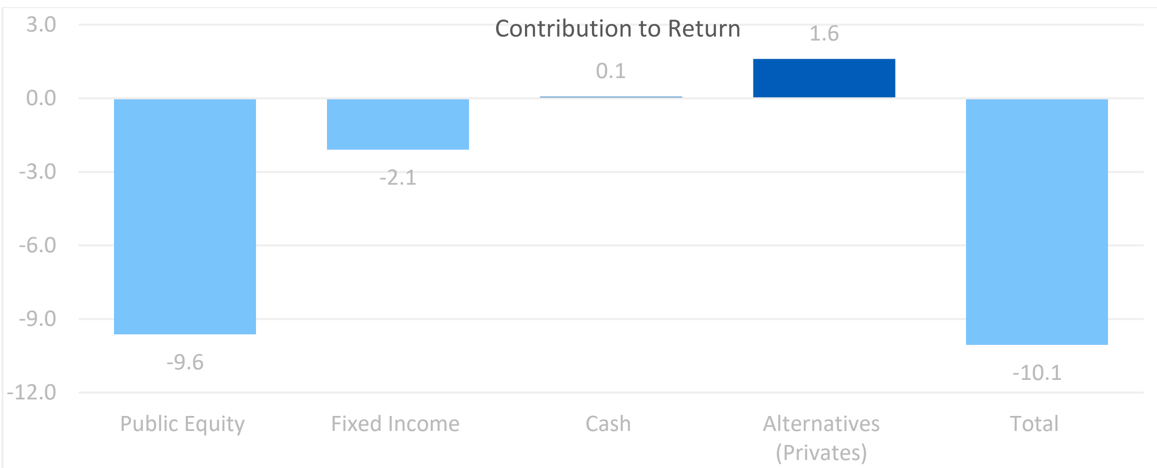
Investment Performance and Activity

Overview

The 2021-22 fiscal year was a volatile year; from economics to geopolitics, there were continued variants of COVID, Taliban takeover of Afghanistan, China, rising inflation, Russia-Ukraine, and tightening of Monetary Policy (globally) which led to losses across all global financial assets (excluding commodities).

For the fiscal year ended June 30, 2022 the System gross return of -10.0% (net return of -10.1%) compared to a benchmark return of -13.6%. This performance is below the -8.4% median return of the TUCS Public Plan Universe, placing the System in the 66th percentile of public plans for the year.

Dragging down returns was fixed income and public equity as these portfolios and underlying strategies posted losses, while cash and non-traditional contributed to overall results.
The table below summarizes key drivers of the System's relative performance.



As of June 30, 2022, the System was in compliance with its investment policy guidelines as follows:

- Fixed income investments and cash equivalents totaled 33.7% of assets.
- The total exposure (funded and unfunded) of non-traditional investments is 13.7% of assets.
- Derivative strategies were not in use.

<u>Investment Activity and Details</u>

Investment activity and portfolio details by asset class are described more fully below.

Equity

As of June 30, 2022, the System had 58.4% of the fund, in publicly traded equity investments invested in three index funds and nine actively managed mandates. Of the nine actively managed mandates two focused on domestic equities, three on international equities, and four on global equities.

In the fourth fiscal quarter of 2022, the Board reduced equity risk and moved proceeds to cash.

For the fiscal year ended June 30, 2022 the domestic equity allocation posted a -3.9% return, the international equity portfolio lost -16.2% , and the global equity mandates returned -32.8%. The total equity allocation net return was -15.3% for the year compared to a blended equity benchmark of -15.5%.

Fixed Income & Cash

As of June 30, 2022, the System held 33.7% of the fund in fixed income securities and cash.

The System uses Northern Trust Short Term Investment Fund or the Vanguard 500 Index Trust as a source of operating funds for the year, withdrawing $40.4 million from these accounts during the fiscal year.

For the fiscal year ended June 30, 2022, the fixed income and cash investments posted a -6.9% return, above the blended benchmark return of -10.1%.

Alternative Investments

The alternative investment category includes real estate, real assets and private equity. The total exposure of these alternative investments totaled 13.7% of assets.

The System met its commitments to alternative investments during the year. At June 30, 2022, 56.1% of the System's total $463.0 million in commitments were funded.

The following table summarizes the alternative investments as of June 30, 2022:

(millons)	Vintage Year	Total Commitment	Funded	Remaining Commitment
Vision Ridge Annex	2022	$ 10.0	$ -	$ 10.0
Rubicon IV	2022	20.0	-	20.0
Peppertree IX	2022	15.0	1.8	13.2
Marcus Capital IV	2022	25.0	-	25.0
Gallant Partners II	2022	20.0	0.0	20.0
Enlightenment IV	2022	20.0	0.0	20.0
Bison Fund VI	2022	25.0	0.0	25.0
Vision Ridge III	2021	15.0	3.7	11.3
Middleground II	2021	25.0	5.8	19.2
Peppertree VIII	2020	15.0	13.9	1.1
Marcus Capital III	2020	25.0	9.8	15.2
JFL Equity Investors V	2020	15.0	11.2	3.8
BVIP Fund X	2020	15.0	7.8	7.2
Gallant Partners I	2018	15.0	11.4	3.6
Altaris Health Partners IV	2018	15.0	14.1	0.9
Franklin Park Venture 2017	2017	15.0	10.1	4.9
BVIP Fund IX	2017	15.0	14.0	1.0
Bison Fund V	2017	15.0	15.0	0.0
JFL Equity Investors IV	2016	15.0	14.6	0.4
Franklin Park Venture 2015	2015	15.0	14.3	0.7
Altaris Health Partners III	2014	15.0	16.3	(1.3)
BVIP Fund VIII	2012	15.0	13.6	1.4
Abbott ACE VI	2008	25.0	24.9	0.1
Abbott ACE V	2005	8.0	7.7	0.3
Abbott ACE IV	2001	50.0	49.7	0.3
Total		$ 463.0	$ 259.7	$ 203.3

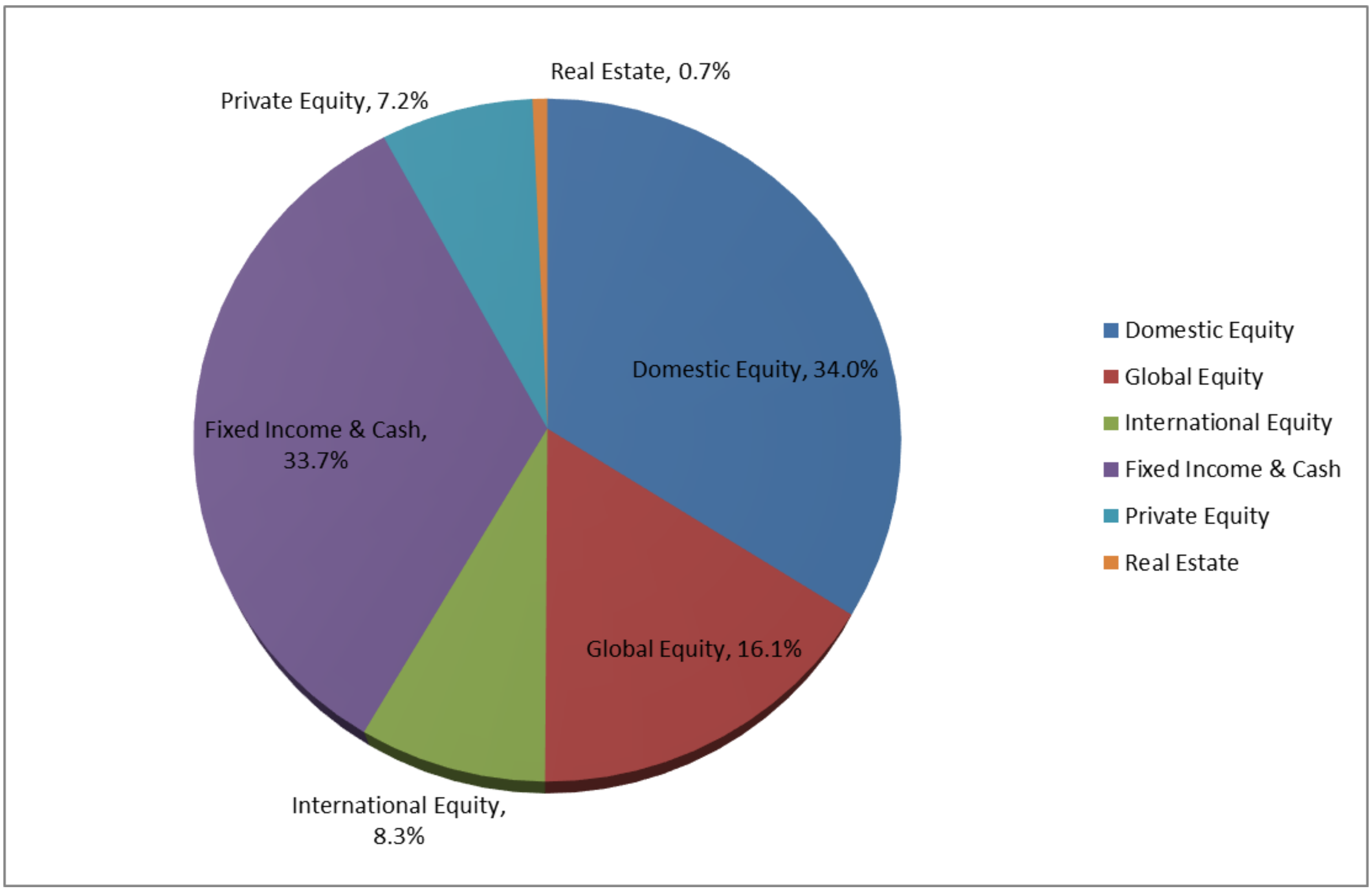
The System's remaining commitments to these alternative investments total $40.2 million for real estate, $14.3 million for real assets, and $148.8 million for private equity. The System made $46.0 million in contributions and received $54.5 million in distributions for a net cash flow of $8.5 million for the fiscal year. The System has sufficient liquid assets to meet funding commitments.

The alternative investments portfolio returned 32.7% for the fiscal year.

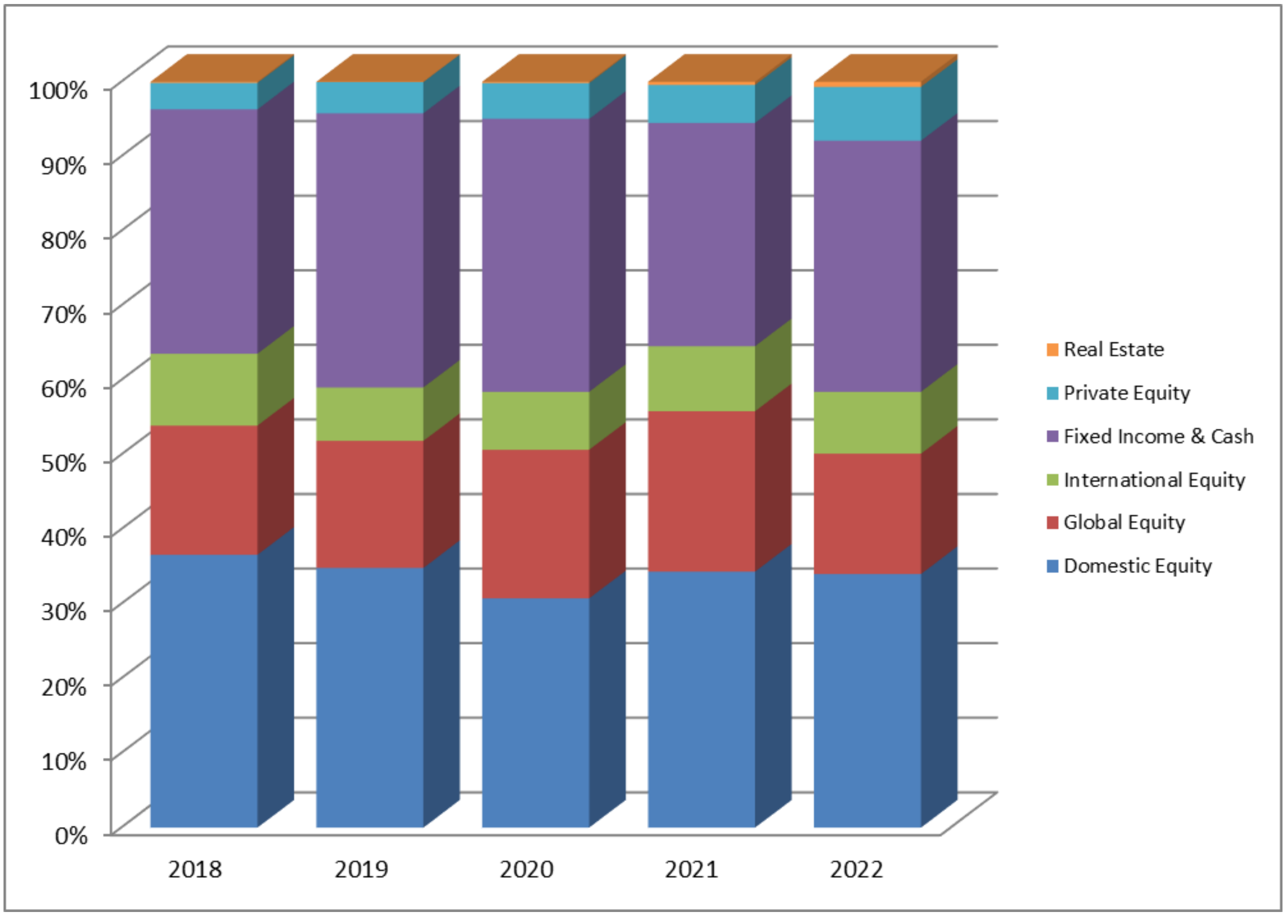
Arlington County Employees' Retirement System
Asset Allocation
(As of June 30, 2022)

To achieve the System's stated investment objectives, funds are invested in a diverse set of asset classes, each with its own risk and return characteristics. The accompanying chart illustrates the portfolio's asset allocation as of June 30, 2022. The chart and table on page 49 show the trends in asset allocation over the past five years.

Note that investments in pooled vehicles are reflected in their respective asset classes and are different than the categories shown on pages 26 through 29 in the *Financial Section*. Further, fund balance data in the *Financial Section* includes operating accruals not reflected in this allocation data. Finally, residual cash held by investment managers is reflected in the total for each asset class.



Arlington County Employees' Retirement System
Five Year Asset Allocation Comparison



	Fiscal Years Ended June 30				
(millions)	2018	2019	2020	2021	2022
Domestic Equity	$841.8	$839.5	$777.0	$1,094.2	$956.7
Global Equity	$398.6	$410.7	$503.5	$685.6	$454.3
International Equity	$221.7	$172.7	$196.2	$277.9	$233.5
Fixed Income & Cash	$753.9	$886.7	$925.2	$954.3	$947.5
Private Equity	$81.5	$100.6	$121.4	$162.4	$203.1
Real Estate	$3.5	$1.1	$4.1	$13.4	$19.3
	$2,301.0	$2,411.4	$2,527.4	$3,187.8	$2,814.4
Domestic Equity	36.6%	34.8%	30.7%	34.3%	34.0%
Global Equity	17.3%	17.0%	19.9%	21.5%	16.1%
International Equity	9.6%	7.2%	7.8%	8.7%	8.3%
Fixed Income & Cash	32.8%	36.8%	36.6%	29.9%	33.7%
Private Equity	3.5%	4.2%	4.8%	5.2%	7.2%
Real Estate	0.2%	0.0%	0.2%	0.4%	0.7%
	100.0%	100.0%	100.0%	100.0%	100.0%

Notes:

Fiduciary Net Position data in the Financial Section includes operating accruals not included in this allocation data.

Residual cash held by investment managers is included in the total for each asset class.

Arlington County Employees' Retirement System
Investment Managers and Strategy Mandate
(As of June 30, 2022)

Manager	Assignment	Fiscal Year Retained
Domestic Equities		
GQG Partners	Large Cap Growth	2021
Northern Trust	Russell 1000 Value Index	2015
The Vanguard Group	Large Cap Core	2009
The Vanguard Group	Small Cap Index	2021
The Vanguard Group	Large Cap Dividend	2011
International and Global Equities		
Baillie Gifford	Global Large Cap	2007
Baillie Gifford	Global Healthcare	2021
Highclere	International Small Cap	2019
Kiltearn	Global Value	2014
Orbis	International Equity	2018
T. Rowe Price	Global Large Cap	2010
T. Rowe Price	International Long Term Growth	2018
Alternatives		
Abbott Capital	Private Equities	2001
Altaris Health Partners	Private Equities	2014
Bison Capital	Private Equities	2017
BV Investment Partners	Private Equities	2015
Enlightenment Capital	Private Equities	2022
Franklin Park	Venture Capital	2015
Gallant Partners	Private Equities	2019
JFL Equity Partners	Private Equities	2016
Marcus Partners	Real Estate	2019
Middleground Partners	Private Equities	2021
Rubicon	Private Equities	2022
Peppertree Partners	Infrastructure	2020
Vision Ridge Partners	Private Equities	2021
Fixed Income and Cash		
DoubleLine®	Total Return Fixed Income	2019
Northern Trust	Cash Equivalents	2014
Northern Trust	Core Bonds	2014
Northern Trust	TIPS	2018
T. Rowe Price	Bank Loans	2011

Arlington County Employees' Retirement System
LARGEST ASSETS DIRECTLY HELD[1] (excludes investments in pooled vehicles)

Equities	Shares	Fair Value ($)	% of Fund
MICROSOFT CORP	91,045	$ 23,383,087	0.83%
EXXON MOBIL	257,067	22,015,218	0.78%
PHILIP MORRIS	213,535	21,084,446	0.75%
OCCIDENTAL PETROLEUM	349,081	20,553,889	0.73%
UNITED HEALTH GROUP	33,233	17,069,466	0.61%
VISA INC	85,659	16,274,731	0.58%
DEVON ENERGY	254,888	14,046,878	0.50%
WALMART	110,707	13,459,757	0.48%
JOHNSON & JOHNSON	74,754	13,269,583	0.47%
LOCKHEED MARTIN	30,783	13,235,459	0.47%
AMAZON	120,940	12,845,037	0.46%
EXELON	283,349	12,841,377	0.46%
ASTRAZENECA	188,789	12,453,468	0.44%
NEWMONT CORP	187,210	11,170,721	0.40%
ALPHABET INC	4,722	10,329,139	0.37%
FIRSTENERGY	262,386	10,072,999	0.36%
PROCTER & GAMBLE	69,861	10,045,313	0.36%
TESLA	14,029	9,447,409	0.34%
ELI LILLY	26,523	8,599,552	0.31%
MEITUAN	345,300	8,545,646	0.30%
MODERNA INC	59,807	8,543,430	0.30%
TENCENT	171,000	7,723,052	0.27%
ASML HOLDINGS	14,031	6,685,722	0.24%
NVIDIA CORP	42,522	6,445,910	0.23%
KERING	11,411	5,846,712	0.21%
Equities Total		**$ 315,988,000**	**11.23%**

Fixed Income	Face Value ($)	Fair Value ($)	% of Fund
FNMA	62,319,046	$ 47,417,122	1.68%
US TREASURY	17,800,000	16,478,297	0.59%
FHLMC	17,138,658	12,966,743	0.46%
GNMA	57,456,283	9,494,840	0.34%
ALTERNATIVE LOAN TR	9,371,960	5,791,040	0.21%
CITIGROUP	4,545,297	3,975,775	0.14%
JP MORGAN	5,349,176	3,518,832	0.13%
SECURITIZED ASSET	9,677,155	3,337,690	0.12%
ACE SECS CORP	7,570,239	3,331,073	0.12%
CHL MORTGAGE PASS THRU	5,118,922	2,810,084	0.10%
CHASEFLEX	7,893,770	2,318,554	0.08%
ARGENT SECS INC	7,080,394	2,182,167	0.08%
WASHINGTON MUTUAL	4,396,999	2,154,848	0.08%
MORGAN STANLEY	7,708,418	2,008,851	0.07%
WELLS FARGO	11,710,717	1,997,038	0.07%
FMC	2,000,000	1,810,368	0.06%
ANGEL OAK MORTGAGE	2,000,000	1,705,397	0.06%
BX COMM MTS	1,687,117	1,554,190	0.06%
PRPM	1,249,201	1,185,276	0.04%
STRUCTURED ASSET	2,252,828	1,053,703	0.04%
HOME PARTNERS	1,202,869	1,019,181	0.04%
VIBRANT	993,523	974,403	0.03%
CPS AUTO	1,000,000	945,886	0.03%
FREDDIE MAC	978,900	918,073	0.03%
VISIO	1,000,000	904,269	0.03%
Fixed Income Total		**$ 131,853,702**	**4.68%**

[1] The System maintains a complete list of portfolio holdings.

Arlington County Employees' Retirement System
Schedule of Broker Commissions

Broker selection is the responsibility of individual investment managers. Transaction and commission costs are monitored by system staff and the investment consultant.

Commissions paid on all trades totaled $208,136 and the average commission rate paid was 0.0 cents per share. The following is a list of brokers who received commission of $5,000 or more during fiscal 2022. A complete schedule of all commissions paid is available from the Retirement office.

Broker	Number of Shares	Total Commission	Commission Per Share ($ per share)
Morgan Stanley	6,182,408	$ 25,455	0.004
Goldman Sachs	612,694	17,917	0.029
Jefferies	3,453,077	15,979	0.005
JP Morgan	276,476	15,274	0.055
MKM Partners	1,095,929	10,959	0.010
Sanford Bernstein	1,711,920	10,116	0.006
Citigroup	1,734,588	10,097	0.006
Bank of America	621,663	9,213	0.015
Pershing Limited	1,072,931	8,949	0.008
BOFA Securities	543,046	6,724	0.012
RBC Capital	14,672,438	5,994	0.000
Cowen and Company	508,200	5,692	0.011
UBS	3,578,629	5,144	0.001

Actuarial Section

ARLINGTON COUNTY
EMPLOYEES' RETIREMENT SYSTEM

Classic Values, Innovative Advice.

Via Electronic Mail

October 21, 2022

Board of Trustees
Arlington County Employees' Retirement System
2100 Clarendon Boulevard, Suite 511
Arlington, Virginia 22201

Re: Actuary's Certification Letter

Dear Trustees:

The purpose of this letter is to provide the certification for the Actuarial Section of the Annual Comprehensive Financial Report for the Employees' Retirement System of the Arlington County Employees' Retirement System (System) with respect to pension benefits.

Actuarial valuations of the Arlington County Employees' Retirement System are performed annually. The results of the latest actuarial valuation of the System, which we have prepared as of June 30, 2022, are summarized in this letter. Please refer to that valuation report for additional information related to the System.

Funding Objective

The current funding objective of the plan is to provide for the current cost of benefits (i.e., normal cost under the Entry Age Normal Method) as a level percent of payroll over time, an amount which amortizes the actuarial liability for benefit changes over a 20-year period, plus an amount which amortizes the unfunded actuarial liability not attributable to benefit changes over a 15-year period. The County is currently contributing 20.8% of pay for the 2022-23 plan year, which meets the funding objective for this fiscal year.

The County's contribution appropriated for the fiscal year ended June 30, 2022 was determined based on the results of the June 30, 2020 valuation. The County's contribution rate was 20.6% of pay, which equated to contributions of $61.2 million.

As of June 30, 2022, the System's actuarial liability was 108.5% funded based on the Actuarial Value of Assets. The actuarial liability was 105.3% funded based on the Fair Value of Assets.

Assumptions

The current actuarial assumptions used for valuation purposes were adopted by the Board of Trustees and were first effective for the June 30, 2019 Actuarial Valuation. The most recent study of the System's experience, used in developing the current actuarial assumptions, was based on a period from July 2014 to June 2019. Assumptions were set by the Board of Trustees on the basis of the recommendations made by Cheiron as a result of the experience study. The experience study is incorporated by reference as the rationale for the assumptions.

Included in the Actuarial Section is a schedule which presents an outline of the actuarial assumptions and methods used to prepare the actuarial valuation results. The assumptions and

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Board of Trustees
Arlington County Employees' Retirement System
October 21, 2022
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methods used for funding purposes were developed in compliance with the actuarial standards of practice as they relate to pension plans. The assumptions reflect our understanding of the likely future experience of the System and the assumptions both individually and as a whole represent our best estimate for the future experience of the System. The results of this report are dependent upon future experience conforming to these assumptions. Future results may differ significantly from the current results due to such factors as the following: plan experience differing from that anticipated by the assumptions; changes in assumptions; and changes in plan provisions or applicable law.

Reliance on Others

In preparing our valuations and schedules for the Annual Comprehensive Financial Report, we relied on information (some oral and some written) supplied by the County. This information includes, but is not limited to, the plan provisions, employee data and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23.

Supporting Schedules

We prepared the following schedules for inclusion in the Actuarial Section of the Annual Comprehensive Financial Report based on the June 30, 2022 actuarial valuation.

- Summary of Actuarial Assumptions and Methods
- Schedule of Active Member Valuation Data
- Schedule of Funded Liabilities by Type
- Retirement Allowances Added to and Removed from Rolls
- Analysis of Financial Experience

All other supporting schedules in the Actuarial Section of the Annual Comprehensive Financial Report were prepared by the System using information in the Actuarial Valuation Report prepared by Cheiron, Inc.

For financial reporting purposes, the Total Pension Liability is based on the June 30, 2022 actuarial valuation. Please refer to the valuation report for additional information related to the financial reporting of the System. We prepared the following schedules for inclusion in the Financial Section of the Annual Comprehensive Financial Report based on the June 30, 2022 valuation report.

- Schedule of Changes in Net Pension Liability and Related Ratios
- Sensitivity of Net Pension Liability to Changes in Discount Rate
- Notes to the Schedule of Employer Contributions

Compliance with Code of Virginia §51.1-800

Code of Virginia §51.1-800 requires that the benefits provided to a retiree at age 65 from a local retirement system equal or exceed two-thirds of the allowance to which the employee would be entitled under the provisions of the Virginia Retirement System (VRS). The Board of Trustees of

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the VRS is to determine whether a local system satisfies this condition, taking into account differences in member contributions between the local system and the VRS.

Although there is no formal procedure for making this comparison, we compared the least valuable rate under the Employees' System to the most valuable accrual rate under the VRS, making adjustments for the fact that employee contributions are different from the VRS 5% rate. The employer provided accrual rates do exceed two-thirds of the employer provided accrual rates under the VRS plan.

We certify that, to the best of my knowledge and understanding, the Arlington County Employees' Retirement System satisfies the requirements of the Code of Virginia §51.1-800.

Certification

We hereby certify that this certification letter and its contents, including the assumptions and methods, have been prepared in accordance with generally recognized and accepted actuarial principles and practices and our understanding of the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board as well as applicable laws and regulations. The schedules provided for financial reporting purposes have been prepared in accordance with our understanding of generally accepted actuarial principles as promulgated by the GASB. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this letter. This letter does not address any contractual or legal issues. We are not attorneys and our firm does not provide any legal services or advice.

This letter was prepared for the Arlington County Employees' Retirement System for the purposes described herein and for the use by the plan auditor in completing an audit related to the matters herein. Other users of this letter are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to any such other users.

Respectfully submitted,
Cheiron

Kevin J. Woodrich, FSA, EA, MAAA
Principal Consulting Actuary

Gene Kalwarski
Principal Consulting Actuary

Patrick T. Nelson, FSA, EA, MAAA
Consulting Actuary

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Actuarial Assumptions, Methods and Summary of Valuation Results

Valuation Method and Asset Value

An actuarial valuation is performed annually. At June 30, 2022, the date of the actuarial valuation used for fiscal year 2022 reporting, the market value of System assets was $2,813.9 million compared to $3,187.9 million in assets at June 30, 2021.

As asset market value represents the realizable value of assets on a particular day it can be subject to significant variability due to market volatility. Thus, market value is not a good measure on which to base the calculations of future contributions to the System as they too would be subject to significant variability owing to financial market fluctuations.

To produce more consistent contribution rates, actual asset market values are adjusted to remove, or dampen, a degree of the variability associated with market movements. For the June 30, 2022 valuation, the specific technique adopted projects the market asset value for each of the prior four years forward to the valuation date using actual cash flows (contributions less benefit payments and expenses) and assuming the actuarial investment assumption in effect at such time. The average of these four projected asset values and the actual June 30, 2022 asset market value determines the actuarial value of assets, subject to corridor limits of 80% (minimum) and 120% (maximum) of market value.

Using the method described above, the actuarial value of assets at June 30, 2022 was $2,898.7 million, which is 103.0% of market value.

The ten-year projection of System assets indicates contributions will be less than benefits for the entire period. This should not be cause for alarm and, in fact, is expected in a mature, well-funded system. It does, however, impact investment decisions because some investment income will be needed to pay benefits.

Funding Method and System Liabilities

A fundamental principle in financing the liabilities of a retirement program is that the cost of benefits should be related to the period in which benefits are earned, rather than to the period of benefits distribution. Several actuarial methods are acceptable for accomplishing this.

The entry age normal funding method employed in this valuation is a common method for valuing public sector plans. Under this method, the employer contribution is comprised of three components: the Normal Cost, the payment (or credit) toward the Unfunded Actuarial Liability (UAL) and the allowance for expenses. Each component is expressed as a percentage of covered payroll.

The employer Normal Cost rate is the percentage of pay which, along with member contributions, would be sufficient to fund the plan benefits if it were paid from each member's entry into the System until termination or retirement. Separate rates are developed for general versus uniformed employees.

The Actuarial Liability is that portion of the present value of projected retirement benefits, including future pay increases, not covered by future employer normal costs or member contributions.

The Unfunded Actuarial Liability is the excess, if any, of the Actuarial Liability over the actuarial value of assets. The Unfunded Actuarial Liability was ($226.0) million as of June 30, 2022 due to actuarial value of assets being more than the Actuarial Liability.

The table below summarizes, at June 30, 2022, the actuarial liabilities, both funded and unfunded, by employee type and for the total System.

	Liabilities (in millions of $)			
	General	**School**	**Uniformed**	**Total**
Present Value of Future Benefits				
Active Members	$863.6	$1.0	$731.3	$1,595.9
Retired Members and Beneficiaries	711.5	65.2	574.6	1,351.3
Disabled Members	29.3	0.6	126.8	156.7
Vested Deferred Members	51.2	0.3	19.4	70.9
DROP Members	51.5	0.3	89.7	141.5
Total	$1,707.1	$67.4	$1,541.8	$3,116.3
Normal Cost Rate	12.2%	0.0%	33.5%	N/A
Present Value of Future Payroll	$1,954.7	$0.0	$777.8	$2,732.5
Present Value of Future Employer Costs	$238.5	$0.0	$260.6	$499.1
Present Value of Future Member Contributions	$79.8	$0.0	$64.7	$144.5
Actuarial Liability	$1,388.8	$67.4	$1,216.5	$2,672.7
Actuarial Value of Assets	$1,507.6	$67.4	$1,323.7	$2,898.7
Unfunded Actuarial Liability	($118.8)	$0.0	($107.2)	($226.0)

Source: June 30, 2022 Actuarial Report- Table IV-1

System Contributions

Under the County's prior funding method, the County contribution rate dropped dramatically when the System became fully funded. However, the County was also subject to significant fluctuations in future contribution rates should investment returns deviate from the actuarial assumption. In light of concern over significant fluctuations and a desire to smooth contribution levels, the Retirement Board recommended a funding formula for employer contributions to the County Board to achieve full normal cost funding over a multi-year transition period. The County Board accepted the recommendation and codified the formula in §46-33 of the County Code in fiscal year 2005. As a result, employer contributions as a percent of covered payroll became more predictable.

In October of 2008, the County adopted several retirement plan benefit changes effective January 4, 2009, contributing to an increase in the contribution rate to 19.9% for fiscal year 2010. This new contribution rate was applied to a lower total payroll based on a narrower definition of creditable compensation included as part of the plan changes.

The June 30, 2022 Actuarial Valuation reflects the County's contribution rate of 21.1% for fiscal year 2024. This contribution rate is comprised of a normal cost rate, including administrative expenses, of 18.1% and a 20-year amortization of the increase in liabilities associated with the benefit changes of 3.0%. The County's funding policy limits the change in the contribution rate from the previous year by 2%; however, this limit does not impact the fiscal year 2024 contribution. Further explanation of the funding approach is available in the current actuarial valuation report.

The table below details of the derivation of County normal cost contribution rates for fiscal year 2024:

	Employer Contribution Rate as a Percentage of Payroll	
	General	Uniformed
Normal Cost	16.2%	41.0%
Member Contribution Rate	4.0%	7.5%
Employer Normal Cost	12.2%	33.5%
Expense Loading as Percentage of Payroll	0.7%	0.7%
County Normal Cost Plus Expenses	12.9%	34.2%

Source: June 30, 2022 Actuarial Report- Table V-1 and Table V-2

The School Board withdrew active teachers from Chapter 46 in fiscal year 2002. Any unfunded liabilities and additional benefits accruals (in excess of member contributions) are being paid through the County's statutory contribution rate made on behalf of those School Board active employees currently participating in Chapters 21 and 46. There are no contributions required for the remaining School Board active employees participating in Chapter 35.

Plan Membership

The total active membership in the System at June 30, 2022, the date of the actuarial valuation, was 3,684, a 4.8% increase from 3,516 at June 30, 2021.

Tables showing distribution of employees among the plans and statistics on non-active members at year end are contained in the *Statistical Section*.

Tables showing Retirees and Beneficiaries added to and removed from the rolls are contained later in this *Actuarial Section*.

Analysis of Financial Experience

Actual financial experience will not coincide exactly with assumed financial experience because the future cannot be predicted with certainty. The System, by policy of the Retirement Board, completes an actuarial experience study once every four or five years to compare assumed and actual experience. Copies of the experience study reports are available in the Retirement Office. The most recent experience study was completed concurrent with the June 30, 2019 valuation. Based on this analysis, the Board adopted changes to the demographic assumptions (retirement rates, mortality rates, disability rates and merit/longevity salary changes) to be first used with the June 30, 2019 valuation.

During the fiscal year 2022, the financial markets performed worse than the expectation. The actual net investment return, on a market value basis, was approximately -10.1% which is lower than the actuarial rate of return assumption of 6.75%. The market value of System assets decreased $374.0 million in 2022. However, on an actuarial basis, System assets increased $144.3 million due to asset smoothing of prior investment gains and losses, including the 28.3% return from the prior fiscal year.

On the liability side, the System had a $131.8 million increase in actuarial liabilities. The liabilities increased by $107.7 million due to normal annual liability growth and an additional actuarial loss of $24.1 million due to the System’s actual experience loss.

Actuarial Assumptions

Assumptions were set by the Board of Trustees on the basis of the recommendations made by Cheiron as a result of an experience study performed concurrently with the June 30, 2019 actuarial valuation. The experience study is incorporated by reference as the rationale to the assumptions below. The assumptions were set in compliance with applicable Actuarial Standards of Practice.

1. Economic Assumptions

1. Annual Rate of Investment Return	6.75%
2. Annual Rate of Cost of Living Adjustment	3.00%
3. Annual Rate of General Wage Increase	3.00%
4. Annual Rate of Increase in Consumer Price Index	3.00%
5. Annual Rate of Growth in Covered Payroll	3.00%
6. Administrative Expenses as a Percent of Payroll	0.70%

7. Annual Rate of Merit/Seniority Salary Increase (in addition to 3, applied on a multiplicative case)

Service	General	Uniformed	School
0	3.75%	7.00%	5.75%
5	2.50	5.75	4.65
10	1.50	4.50	3.55
15	1.50	3.50	2.45
20	1.50	3.00	1.35
25	1.50	3.00	1.35
30	1.50	3.00	1.35
35	1.50	3.00	1.35

Wage adjustments for FYE 2023 were based on information provided by the County

8. Changes in Economic Assumptions since Last Valuation

None.

2. Demographic Assumptions – General Members

1. Death Rates

a. Active Members – 100% of the Pub-2010 General Employee mortality table [*PubG-2010 Employee*] for males (110% for females) projected with generational mortality improvements from 2010 using Scale MP-2018.

b. Healthy Retirees and Beneficiaries – 100% of the Pub-2010 General Retiree mortality table [*PubG-2010 Healthy Retiree*] for males (110% for females) projected with generational mortality improvements from 2010 using Scale MP-2018.

c. Disabled Retirees – 100% of the Pub-2010 Non-Safety Disabled Retiree mortality table [*PubNS-2010 Disabled Retiree*] for males (110% for females) projected with generational mortality improvements from 2010 using Scale MP-2018.

2. Disability Rates

	Chapter 21		Chapter 46	
Age	Male	Female	Male	Female
22	.00108	.00010	.00037	.00014
27	.00108	.00013	.00043	.00018
32	.00157	.00018	.00051	.00025
37	.00241	.00023	.00077	.00033
42	.00389	.00030	.00116	.00043
47	.00641	.00045	.00184	.00065
52	.01041	.00083	.00318	.00119
57	.01500	.00170	.00470	.00209
62	.01500	.00483	.00200	.00488

45% (Chapter 21) or 30% (Chapter 46) of disablements assumed to be service-connected; of these, benefits for future disableds are assumed to be reduced by 0.6% for Workers' Compensation.

3. Termination Rates

Years of Service	Male	Female
0	.1750	.1750
1	.1150	.1350
2	.1100	.1250
3	.1050	.1150
4	.1000	.1100
5	.1000	.1050
6	.1000	.0950
7	.0600	.0750
8	.0400	.0650
9	.0400	.0600
10	.0400	.0400
11	.0200	.0300
12	.0200	.0300
13	.0200	.0300
14	.0200	.0300
15	.0200	.0200
16	.0200	.0200
17	.0200	.0200
18	.0200	.0200
19	.0200	.0200
20	.0200	.0200
21+	.0100	.0100

Members who terminate prior to the earlier of age 40, five years of service, and Rule of 55 (sum of age and service equals 55) are assumed to elect a refund of contributions in lieu of a deferred vested benefit. No termination is assumed once a participant is eligible for early or normal retirement.

4. **Retirement Rates (including entry into DROP)**

Chapter 21 Actives

Age	Male Early	Male Unreduced	Female Early	Female Unreduced
50	.020	.360	.020	.275
51	.020	.360	.020	.275
52	.050	.360	.050	.275
53	.050	.360	.050	.275
54	.100	.360	.100	.275
55	.150	.360	.150	.275
56	.150	.360	.150	.275
57	.250	.360	.150	.275
58	.250	.360	.150	.275
59	.250	.360	.150	.275
60	N/A	.360	N/A	.275
61	N/A	.360	N/A	.275
62	N/A	.360	N/A	.275
63	N/A	.360	N/A	.275
64	N/A	.360	N/A	.275
65	N/A	.360	N/A	.275
66	N/A	.360	N/A	.275
67	N/A	.360	N/A	.275
68	N/A	.360	N/A	.275
69	N/A	.360	N/A	.275
70	N/A	1.000	N/A	1.000

100% of members are assumed to retire after 30 years of service.

Chapter 46 Actives

Age	Early	Unreduced
50	.065	.210
51	.065	.210
52	.065	.210
53	.065	.210
54	.065	.210
55	.065	.210
56	.065	.210
57	.065	.210
58	.065	.210
59	.065	.210
60	.100	.210
61	.125	.210
62	N/A	.210
63	N/A	.210
64	N/A	.210
65	N/A	.210
66	N/A	.210
67	N/A	.210
68	N/A	.210
69	N/A	.210
70	N/A	1.000

100% of members are assumed to retire after 30 years of service.

Vested Former Members

Vested former members are assumed to commence benefits upon attaining age 60 (Chapter 21) or age 62 (Chapter 46).

5. **Family Composition**

70% of members are assumed to be married. The male spouse is assumed to be three-years older than the female spouse.

6. **Unused Sick Leave**

Each member's creditable service was increased by 1.6%.

7. **Change Since Last Valuation - General**

None.

3. Demographic Assumptions – Uniformed Members

1. Death Rates

a. Active Members – 100% of the Pub-2010 Safety Employee above-median income mortality table [*PubS-2010(A) Employee*] for males (125% for females) projected with generational mortality improvements from 2010 using Scale MP-2018.

b. Healthy Retirees and Beneficiaries – 100% of the Pub-2010 Safety Retiree mortality table [*PubS-2010(A) Healthy Retiree*] for males (125% for females) projected with generational mortality improvements from 2010 using Scale MP-2018.

c. Disabled Retirees – 100% of the Pub-2010 Safety Disabled Retiree mortality table [*PubS-2010 Disabled Retiree*] for males (125% for females) projected with generational mortality improvements from 2010 using Scale MP-2018.

2. Disability Rates

	Chapter 21		Chapter 46	
Age	Male	Female	Male	Female
22	.00225	.00300	.00041	.00135
27	.00375	.00500	.00068	.00225
32	.00600	.00800	.00108	.00360
37	.00975	.01300	.00176	.00585
42	.01350	.01800	.00243	.00810
47	.01800	.02400	.00324	.01080
52	.02250	.03000	.00405	.01350
57	.00000	.00000	.00344	.01148
62	.00000	.00000	.00324	.01080

95% (Chapter 21) or 100% (Chapter 46) of disablements are assumed to be service-connected; of these, benefits for future disableds are assumed to be reduced by 0.6% for Workers' Compensation.

3. Termination Rates

Years of Service	Male	Female
0	.14	.14
1	.13	.13
2	.12	.12
3	.11	.11
4	.10	.10
5	.09	.09
6	.08	.08
7	.07	.07
8	.06	.06
9	.05	.05
10	.04	.04
11	.03	.03
12	.02	.02
13	.01	.01
14	.01	.01
15	.01	.01
16	.01	.01
17	.01	.01
18+	.01	.01

Members who terminate prior to the earlier of age 40, five years of service, and Rule of 55 (sum of age and service equals 55) are assumed to elect a refund of contributions in lieu of a deferred vested benefit. No termination is assumed once a participant is eligible for early or normal retirement.

4. **Retirement Rates (including entry into DROP)**

Chapter 21 Actives

	Male		Female	
Age	Early	Unreduced	Early	Unreduced
49	.10	.40	.10	.40
50	N/A	.39	N/A	.39
51	N/A	.38	N/A	.38
52	N/A	.37	N/A	.37
53	N/A	.36	N/A	.36
54	N/A	.35	N/A	.35
55	N/A	.34	N/A	.34
56	N/A	.33	N/A	.33
57	N/A	.32	N/A	.32
58	N/A	.31	N/A	.31
59	N/A	.30	N/A	.30
60	N/A	1.00	N/A	1.00

100% of members are assumed to retire after 30 years of service.

Chapter 46 Actives

Age	Early	Unreduced
<45	.015	.225
45 - 48	.030	.225
49	.080	.225
50	.110	.225
51	.150	.225
52	N/A	.225
53	N/A	.225
54	N/A	.225
55	N/A	.225
56	N/A	.225
57	N/A	.225
58	N/A	.225
59	N/A	.225
60	N/A	1.000

100% of members are assumed to retire after 30 years of service.

Vested Former Members

Vested former members are assumed to commence benefits upon attaining age 50 (Chapter 21) or age 52 (Chapter 46).

5. **Family Composition**

70% of members are assumed to be married. The male spouse is assumed to be three-years older than the female spouse.

6. **Unused Sick Leave**

Each member's creditable service is increased by 2.3%.

7. **Change Since Last Valuation - Uniformed**

None.

4. **<u>Demographic Assumptions – School Board Members</u>**

1. **Death Rates**

a. Active Members – 100% of the Pub-2010 Teachers Employee mortality table [*PubT-2010 Employee*] for males (115% for females) projected with generational mortality improvements from 2010 using Scale MP-2018.

b. Healthy Retirees and Beneficiaries – 100% of the Pub-2010 Teachers Retiree mortality table [*PubT-2010 Healthy Retiree*] for males (115% for females) projected with generational mortality improvements from 2010 using Scale MP-2018.

c. Disabled Retirees – 100% of the Pub-2010 Non-Safety Disabled Retiree mortality table [*PubNS-2010 Disabled Retiree*] for males (115% for females) projected with generational mortality improvements from 2010 using Scale MP-2018.

2. Disability Rates

	Chapter 35	
Age	Male	Female
22	.00049	.00027
27	.00053	.00030
32	.00059	.00033
37	.00070	.00039
42	.00118	.00066
47	.00252	.00140
52	.00462	.00257
57	.00770	.00428
62	.01350	.00750

3. Termination Rates

			Males Years of Service			
Age	0-1	1-2	2-3	3-4	4-5	5+
22	.160	.160	.150	.140	.140	.140
27	.150	.150	.140	.130	.130	.130
32	.140	.140	.130	.120	.120	.100
37	.130	.130	.120	.110	.110	.066
42	.110	.110	.100	.090	.090	.054
47	.090	.090	.080	.070	.070	.040
52	.080	.080	.070	.060	.060	.030
57	.070	.070	.060	.050	.050	.020
62	.065	.065	.055	.045	.045	.020

			Females Years of Service			
Age	0-1	1-2	2-3	3-4	4-5	5+
22	.160	.160	.150	.140	.140	.140
27	.150	.150	.140	.130	.130	.130
32	.140	.140	.130	.120	.120	.100
37	.130	.130	.120	.110	.110	.066
42	.110	.110	.100	.090	.090	.054
47	.090	.090	.080	.070	.070	.040
52	.080	.080	.070	.060	.060	.030
57	.070	.070	.060	.050	.050	.020
62	.065	.065	.055	.045	.045	.020

No termination is assumed once a participant is eligible for early or normal retirement.

4. **Retirement Rates**

   50% when first eligible (except if Rule of 80), the remainder when eligible for unreduced benefits or 30 years of service, whichever is earlier.

   Vested former members are assumed to commence benefits upon attaining age 62.

5. **Family Composition**

   70% of members are assumed to be married. The male spouse is assumed to be three-years older than the female spouse.

6. **Unused Sick Leave**

   Each member's creditable service is increased by 2.0%.

7. **Change Since Last Valuation - School**

   None.

Funding Method

The County is contributing a fixed percent of pay for General and Uniformed participants, which is adjusted as described in Section V of this report.

The method used for this valuation is the individual entry age normal funding method. Under this method, the employer contribution has three components: the normal cost, the payment toward the unfunded actuarial liability (UAL), and the allowance for expenses. Each component is expressed as a percentage of payroll.

The employer normal cost rate is the percentage of pay which, along with member contributions, would be sufficient to fund the plan benefits if it were paid from each member's entry into the System until termination or retirement. Separate rates are developed for General vs. Uniformed employees.

The actuarial liability is determined as the portion of the value of the projected benefit at retirement including future pay increases that will not be paid by future employer normal costs or member contributions.

Asset Valuation Method

For purposes of the valuation, assets are valued at an "actuarial value." The actuarial value is used in order to smooth the fluctuations that would occur if market values were used. The specific technique adopted sets the Actuarial Value of Assets by projecting forward each of the four previous years' market values to the valuation date using actual cash flows (contributions less benefit payments and expenses) and assuming the Fund returned the actuarial assumption of 6.75% per year. The four projected market values plus the current market value are averaged to determine the Actuarial Value of Assets. The Board opted to limit the Actuarial Value of Assets to be no less than 80% of the Market Value of Assets, but not greater than 120% of the Market Value of Assets.

The Actuarial Value of Assets is then allocated to each employee group (General, Uniformed, or School) based on their respective Actuarial Liability.

Summary of Plan Provisions

Arlington County has three Retirement Plans with plan membership dependent on the date of hire and plan provisions dependent on whether the employee is classified in the General, Uniformed or School Board employee group. A summary of the provisions for each of the plans follows.

Chapter 21 - General and Uniform Employees hired before February 8, 1981

Retirement benefits are funded by employee and employer contributions and by investment earnings.

The basic formula for calculating benefits is: 2.5% x years of creditable service for up to 20 years plus 2.0% x years of creditable service beyond 20 years x average final salary = annual retirement benefit. There is a maximum benefit of 70% of the average final salary.

Normal retirement eligibility is age 60 for General employees, age 50 for Uniformed employees. Unreduced benefits are available for General employees at age 55 with 25 years of service or at age 57 with 20 years of service or when the sum of age and service is equal to 80.

Early retirement is available with a reduction in benefits.

Cost of living increases are equal to 1.5% of the benefit and are added to the benefit each July.

Retirement benefits are vested after 5 years of service.

Service Connected disability benefits are available regardless of length of service.

Ordinary disability benefits are available after five years of service.

Survivor options are available at the time of retirement with actuarial reductions to the benefit.

Chapter 35 - School Board and Department of Human Services Employees hired before 2/8/1981

Retirement benefits are funded by employer contributions and by investment earnings.

The basic formula for calculating benefits is: 2.125% x credited service x average final salary = annual retirement benefit. The calculated benefit is then reduced by the benefit calculated under Formula A of the Virginia Retirement System (VRS).

Normal retirement eligibility is age 62. Unreduced benefits are available at age 55 with 30 years of service.

Early retirement is available with a reduction in benefits.

Retirement benefits are vested after 5 years of service.

Ordinary disability benefits are available after five years of service.

Spousal survivor options are available to the spouse at the time of retirement with actuarial reductions to the benefit.

Chapter 46 - All Employees hired on or after February 8, 1981

Effective January 4, 2009, the maximum benefit for General Employees is 51% and they have two options for calculating their normal retirement benefits:

1. 1.7% x all years of creditable service x new average final salary, OR
2. 1.5% x years of creditable service prior to January 3, 2009 x old average final salary *plus* 1.7% x years of creditable service after January 3, 2009 x new avg. final salary.

For Uniform Employees, the maximum benefit is 81% and their benefit calculation options are:

1. 2.5% x years of creditable service prior to January 4, 2009 x new average final salary *plus* 2.7% x years of creditable service on/after January 4, 2009 x new average final salary, OR
2. 2.7% x years of creditable service on/after January 4, 2009 x new average final salary *plus* old average final salary times 2.0% times years of service prior to January 4, 2009. When the Uniformed employee retiree begins to receive Social Security, the latter half of the above formula reverts to the old three-tiered benefit formula (1.5% for the first 10 years of service, 1.7% for the second 10 years of service, 2.0% for the final 10 years of service) times old average final salary for years of service prior to January 4, 2009.

Prior to January 3, 2009, the basic formula for calculating benefits for general employees was: 1.5% x years of creditable service x average final salary, including overtime = annual retirement benefit with a maximum of 45% and, for Uniformed employees, the benefit formula uses a factor of 2.0% for all service until the retiree is eligible for full Social Security benefits with a maximum of 60%. When the retiree begins to receive Social Security, the formula reverts to 1.5% for the first 10 years of service, 1.7% for the next 10 and 2.0% for the final 10 years with a maximum of 52%.

Retirement benefits are vested after 5 years of service and early retirement is available with a reduction in benefits. Cost of living increases are based on increases in the CPI-U and are added to the benefit each July. Employees who are members of the Virginia Retirement System have their Arlington County benefit offset by the VRS benefit.

Normal retirement eligibility is age 62 for General employees, age 52 for Uniformed employees. All employees can qualify for an unreduced benefit when the sum of age plus service equals 80. General employees can also qualify for an unreduced benefit after 30 years of service and Public Safety after 25 years of service.

Service Connected disability benefits are available at any time prior to normal retirement age. Ordinary disability benefits are available after two years of service. Survivor options are available with actuarial reductions to the benefit.

Additional Information

This information and description of plan provisions does not in any way change or modify Code of the County Chapters 21, 35 or 46. The Code always takes precedence in the event of questions or interpretations.

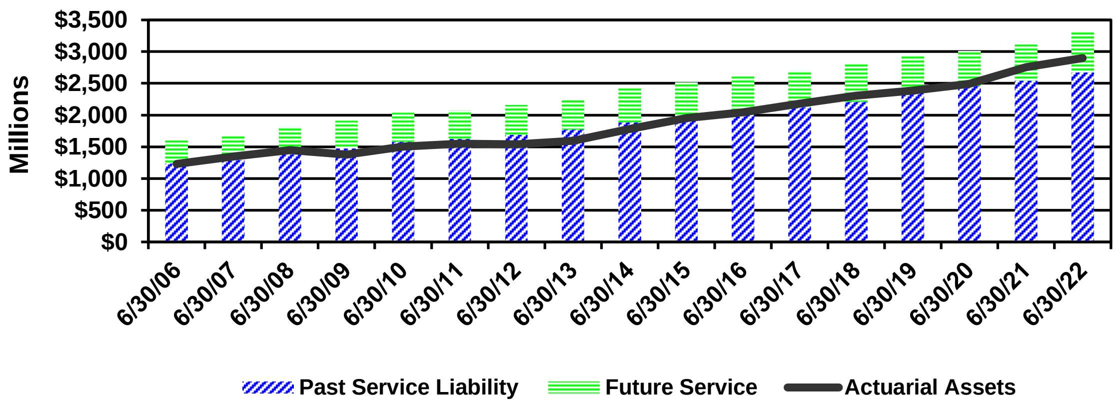
A Deferred Retirement Option Program (DROP) was added effective January 1, 2002, for all Chapters. DROP is a voluntary program that provides a way for employees to continue to work for the County in their present or a similar capacity, earn a salary, and receive a portion of their retirement benefits at the same time. The portion is equal to the monthly retirement benefit an employee would be eligible for at the time they DROP. An employee is eligible for participation in the DROP upon reaching eligibility for unreduced benefits. DROP participation is limited to 3 years.

Trends

One of the best ways to evaluate the financial condition of a pension plan is to examine the historical trends. The charts below present trend information on the System's assets and liabilities, annual cash flows and County contribution rate.

Chart A illustrates the System's assets and liabilities. At June 30, 2022, the ratio of actuarial assets to liabilities is 108.5%, up slightly from 108.4% in the prior year's Actuarial Valuation due to continued recognition of prior favorable investment experience.

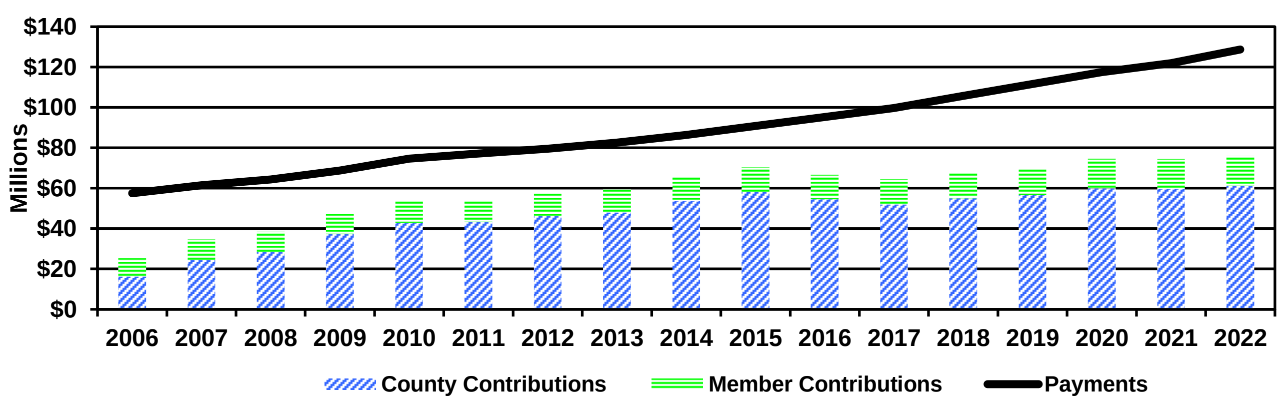
Chart A: ASSETS / LIABILITIES



Source: Actuarial Reports- Summary Results- Combined

Chart B shows payments to retirees and beneficiaries exceeding employer and employee contributions, typical of a well-funded, mature system. The difference is made up by investment return on plan assets.

Chart B: CASH FLOWS ($ in Millions)

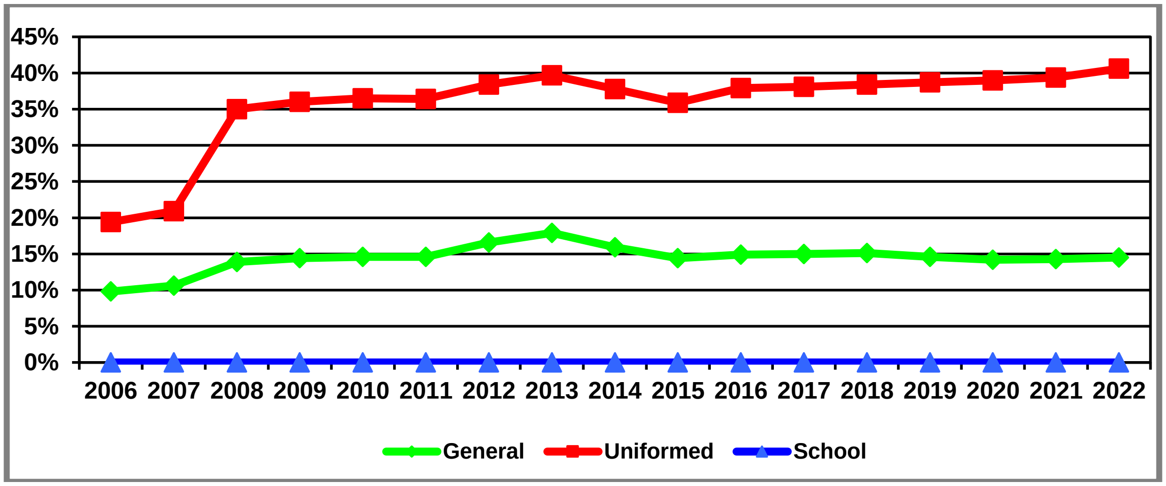


Source: Actuarial Reports- Assets, Table III-1

Chart C plots the County (employer) contribution rate by employee group. Investment gains during the late 1990's resulted in lower contribution rates under the funding method in place through 2002. Beginning in

2003, the County contribution rate began to increase towards normal cost. The School Board withdrew active teacher participants from Chapter 46 in fiscal year 2002. Benefit enhancements and a change in the definition of creditable compensation explain the increase in 2008. The increase in the contribution rate from 2015 to 2016 was attributable to the increase in the normal cost due to the Board electing to decrease the discount rate, general wage and inflation assumptions.

Chart C: COUNTY CONTRIBUTION RATE



Source: Actuarial Reports: Summary Results – General , Summary Results – Uniformed, Summary Results – School

Schedule of Active Member Valuation Data

Group	Plan	Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
General Employees						
	Chapter 21	6/30/2022	4	$ 463,881	$ 115,970	6%
		6/30/2021	4	436,738	109,185	2%
		6/30/2020	4	426,811	106,703	3%
		6/30/2019	4	415,512	103,878	4%
		6/30/2018	5	500,897	100,179	1%
		6/30/2017	5	497,505	99,501	3%
		6/30/2016	5	484,822	96,964	6%
	Chapter 46	6/30/2022	2,797	250,474,078	89,551	5%
		6/30/2021	2,644	225,359,898	85,234	3%
		6/30/2020	2,672	221,753,110	82,991	3%
		6/30/2019	2,646	212,535,305	80,323	2%
		6/30/2018	2,684	211,822,542	78,920	6%
		6/30/2017	2,718	202,604,267	74,542	3%
		6/30/2016	2,710	196,483,174	72,503	2%
School Board Employees						
	Chapter 35	6/30/2022	3	$ 340,595	$ 113,532	11%
		6/30/2021	4	407,573	101,893	10%
		6/30/2020	5	465,069	93,014	-6%
		6/30/2019	8	793,027	99,128	-7%
		6/30/2018	11	1,172,364	106,579	0%
		6/30/2017	17	1,813,370	106,669	-4%
		6/30/2016	24	2,653,631	110,568	0%
Uniformed Employees						
	Chapter 21	6/30/2022	0	$ 0	N/A	N/A
		6/30/2021	0	0	N/A	N/A
		6/30/2020	0	0	N/A	N/A
		6/30/2019	1	200,189	200,189	1%
		6/30/2018	1	198,110	198,110	1%
		6/30/2017	1	195,397	195,397	3%
		6/30/2016	1	188,919	188,919	3%
	Chapter 46	6/30/2022	880	81,418,167	92,521	6%
		6/30/2021	864	75,080,161	86,898	-1%
		6/30/2020	849	74,385,765	87,616	3%
		6/30/2019	862	73,236,106	84,961	4%
		6/30/2018	830	68,131,825	82,087	0%
		6/30/2017	835	68,433,043	81,956	0%
		6/30/2016	826	68,011,172	82,338	-3%

ARLINGTON COUNTY EMPLOYEES' RETIREMENT SYSTEM
SCHEDULE OF FUNDING PROGRESS

All $ amounts are millions

Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liabilities (b)	Unfunded Actuarial Accrued Liabilities (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b-a)/c]
6/30/2013	$1,592.5	$ 1,772.3	$ 179.8	89.9%	$ 241.3	74.5%
6/30/2014	1,782.0	1,888.1	106.1	94.4%	252.4	42.0%
6/30/2015	1,951.3	1,971.5	20.2	99.0%	263.5	7.7%
6/30/2016	2,044.4	2,053.5	9.1	99.6%	267.8	3.4%
6/30/2017	2,180.3	2,122.3	(58.0)	102.7%	273.5	(21.2%)
6/30/2018	2,304.4	2,208.0	(96.4)	104.4%	281.8	(34.2%)
6/30/2019	2,384.0	2,387.5	3.5	99.9%	287.2	1.2%
6/30/2020	2,492.8	2,463.1	(29.7)	101.2%	297.1	(10.0%)
6/30/2021	2,754.4	2,540.9	(213.5)	108.4%	301.3	(70.9%)
6/30/2022	2,898.7	2,672.7	(226.0)	108.5%	332.6	(67.9%)

Source: June 30, 2022 Actuarial Report - Accounting Information, Table VI-4

ARLINGTON COUNTY EMPLOYEES' RETIREMENT SYSTEM
SCHEDULE OF FUNDED LIABILITIES BY TYPE

All $ amounts are millions

	Aggregate Accrued Liability For:					Portion of Accrued Liabilities Covered by Value of Assets		
	(1)	(2)	(3)					
Valuation Date	Active Employee Contrib.	Inactive* Employees	Active Employer Contrib.	Actuarial Liability	Actuarial Value of Assets	(1)	(2)	(3)
6/30/2013	$ 358.8	$ 971.7	$ 441.8	$ 1,772.3	$1,592.5	100%	100%	59%
6/30/2014	400.4	1,067.0	420.7	1,888.1	1,782.0	100%	100%	75%
6/30/2015	430.8	1,122.9	417.8	1,971.5	1,951.3	100%	100%	95%
6/30/2016	451.9	1,211.6	390.0	2,053.5	2,044.4	100%	100%	98%
6/30/2017	466.9	1,284.9	370.5	2,122.3	2,180.3	100%	100%	116%
6/30/2018	481.6	1,366.2	360.2	2,208.0	2,304.4	100%	100%	127%
6/30/2019	505.0	1,490.7	391.8	2,387.5	2,384.0	100%	100%	99%
6/30/2020	528.8	1,547.6	386.7	2,463.1	2,492.8	100%	100%	108%
6/30/2021	545.9	1,621.9	373.1	2,540.9	2,754.4	100%	100%	157%
6/30/2022	567.9	1,720.5	384.3	2,672.7	2,898.7	100%	100%	159%

* *Retirees, beneficiaries and vested deferred members*

Source: June 30, 2022 Actuarial Report - Accounting Information, Table VI-5

ANALYSIS OF FINANCIAL EXPERIENCE

Gain and (Loss) in Actuarial Liability during Years ended June 30
Resulting from Differences between Assumed Experience and Actual Experience

Type of Activity	2016	2017	2018	2019	2020	2021	2022
Invest Income	$ (18.0)	$ 35.1	$ 16.2	$ (32.7)	$ (7.9)	$142.3	$ 12.7
Combined Liability Experience	47.3	27.1	13.7	31.1	30.1	29.4	(24.1)
Gain (or Loss) During Year from Financial Experience	$ 29.3	$ 62.2	$ 29.9	$ (1.6)	$ 22.2	$171.7	$(11.4)
Non-Recurring Items	(27.2)	0.0	(3.1)	(112.6)	0.0	0.0	0.0
Composite Gain (or Loss) During Year	$ 2.1	$ 62.2	$ 26.8	$(114.2)	$ 22.2	$171.7	$ (11.4)

RETIREMENT ALLOWANCES ADDED TO AND REMOVED FROM ROLLS

Retirement Allowances Added To and Removed From Rolls

Plan	Year Ended	Added to Rolls No.	Added to Rolls Annual Allowances	Removed from Rolls No.	Removed from Rolls Annual Allowances	On Rolls at Year End Year-End Total	On Rolls at Year End Annual Allowances	% Increase Allowance	Average Annual Allowance
Chapter 21	6/30/2022	18	$1,260,563	68	$2,232,675	1,005	$42,696,767	(2.2%)	$42,484
	6/30/2021	8	$965,690	51	$1,289,435	1,055	$43,668,879	(0.7%)	$41,392
	6/30/2020	9	$932,312	59	$1,535,299	1,098	$43,992,624	(1.4%)	$40,066
	6/30/2019	7	$956,499	60	$1,511,821	1,148	$44,595,611	(1.2%)	$38,846
	6/30/2018	13	$919,228	58	$1,443,991	1,201	$45,150,933	(1.1%)	$37,594
	6/30/2017	14	$955,814	53	$1,195,159	1,246	$45,675,696	(0.5%)	$36,658
	6/30/2016	15	$941,372	62	$1,556,358	1,285	$45,915,041	(1.3%)	$35,732
	6/30/2015	21	$1,153,898	67	$1,597,303	1,332	$46,530,027	(0.9%)	$34,932
	6/30/2014	23	$1,111,407	67	$1,344,775	1,378	$46,973,432	(0.5%)	$34,088
	6/30/2013	18	$1,198,027	67	$1,149,400	1,422	$47,206,800	0.1%	$33,197
Chapter 35	6/30/2022	5	$45,097	45	$315,682	701	$8,000,725	(3.3%)	$11,413
	6/30/2021	4	$29,626	38	$279,732	741	$8,271,310	(2.9%)	$11,162
	6/30/2020	12	$122,242	37	$302,848	775	$8,521,416	(2.1%)	$10,995
	6/30/2019	7	$94,838	48	$356,107	800	$8,702,022	(2.9%)	$10,878
	6/30/2018	10	$137,310	37	$268,380	841	$8,963,291	(1.4%)	$10,658
	6/30/2017	15	$181,889	40	$287,778	868	$9,094,361	(1.2%)	$10,477
	6/30/2016	17	$147,917	33	$265,282	893	$9,200,250	(1.3%)	$10,303
	6/30/2015	18	$196,276	55	$329,093	909	$9,317,615	(1.4%)	$10,250
	6/30/2014	13	$243,621	43	$238,283	946	$9,450,432	0.1%	$9,990
	6/30/2013	15	$285,716	29	$182,049	976	$9,445,094	1.1%	$9,677
Chapter 46	6/30/2022	160	$8,694,048	38	$699,673	2,544	$78,818,914	11.3%	$30,982
	6/30/2021	163	$7,013,915	30	$379,063	2,422	$70,824,539	10.3%	$29,242
	6/30/2020	158	$5,676,959	34	$524,559	2,289	$64,189,687	8.7%	$28,043
	6/30/2019	150	$6,125,003	28	$428,398	2,165	$59,037,287	10.7%	$27,269
	6/30/2018	165	$6,554,661	12	$129,668	2,043	$53,340,682	13.7%	$26,109
	6/30/2017	181	$6,222,597	22	$286,842	1,890	$46,915,689	14.5%	$24,823
	6/30/2016	165	$5,391,165	22	$160,767	1,731	$40,979,934	14.6%	$23,674
	6/30/2015	167	$5,235,227	29	$424,352	1,588	$35,749,536	15.5%	$22,512
	6/30/2014	150	$4,053,309	27	$253,729	1,450	$30,938,661	14.0%	$21,337
	6/30/2013	130	$3,714,142	21	$207,260	1,327	$27,139,081	14.8%	$20,451

Source: Supplemental Data Provided by Actuary

Schedule of Employer's Contributions
($ in millions)

Fiscal Year Ended	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Actuarially Determined Contribution	$ 61.2	$ 59.7	$ 59.9	$ 56.7	$ 54.9	$ 51.8	$ 54.5	$ 58.2	$ 53.7	$ 48.0
County Contributions in Relation to the Actuarially Determined Contribution	61.2	59.7	59.9	56.7	54.9	51.8	54.5	58.2	53.7	48.0
Contribution Deficiency/(Excess)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Covered Payroll	$ 297.1	$ 285.6	$ 285.2	$ 270.0	$ 261.4	$ 255.2	$ 248.9	$ 243.5	$ 237.6	$ 233.0
Contributions as a Percentage of Covered Payroll	20.6%	20.9%	21.0%	21.0%	21.0%	20.3%	21.9%	23.9%	22.6%	20.6%

Notes to Schedule

Valuation Date	June 30, 2020
Timing	Actuarially determined contribiton rates are calculated based on the actuarial valuation one year prior to the beginning of the Plan Year.

Methods and Assumptions Used to Determine Contribution Rates:

Actuarial Cost Method	Entry Age Normal Cost Method
Asset Valuation Method	Five year, smoothed
Amortization Method	Level Percent Open
Discount Rate	6.75%
Amortization Growth Rate	3.00%
Inflation	3.00%
Salary Increases	3% plus merit/seniority component which vary by year of service and are compounded annually
Mortality	General - Pub-2010 General mortality (110% for females) projected with generational mortality improvements from 2010 using Scale MP-2018 School - Pub-2010 Teacher mortality (115% for females) projected with generational mortality improvements from 2010 using Scale MP-2018 Uniformed - Pub-2010 Safety above-median mortality (125% for females) projected with generational mortality improvements from 2010 using Scale MP-2018.

Statistical Section

ARLINGTON
VIRGINIA

ARLINGTON COUNTY
EMPLOYEES' RETIREMENT SYSTEM

About the Statistical Section

This section includes detailed information about the demographic and economic trends experienced by the System over the past ten years to assist the reader in assessing how the System's overall financial condition has changed over time. Specific information provided includes:

- Schedules of Active Employee Members present the number of employees by chapter and type
- Schedules of Retirements Granted present the number of retirements granted by chapter and type
- Schedules of Monthly Retirement Allowances show the number of retirees and payments, by chapter and type
- Schedules of Additions and Deductions and Plan Net Position reflect payments made to and by the System and the impact on net assets
- Contribution Analysis by source
- Participant & Investment Data and Ratio
- Schedules of Average Benefit Payments present the average monthly benefit, by chapter
- Schedules of Retired Members by Type of Benefit identify number of retirees by retirement type for each chapter

ACTIVE EMPLOYEE MEMBERSHIP IN RETIREMENT SYSTEM
AS OF JUNE 30, 2022

GROUP	CHAPTER 21	CHAPTER 35	CHAPTER 46	TOTAL MEMBERSHIP
General County	4	0	2,747	2,751
Deputy Sheriffs	0	0	212	212
Firefighters	0	0	346	346
Police Officers	0	0	322	322
School	0	3	50	53
TOTALS	**4**	**3**	**3,677**	**3,684**

HISTORY OF ACTIVE EMPLOYEE MEMBERSHIP IN RETIREMENT SYSTEM
JUNE 30, 2022

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
CHAPTER 21										
General County	9	8	6	4	4	4	4	4	4	4
Police Officers	1	1	1	1	1	1	1	0	0	0
Firefighters	0	0	0	0	0	0	0	0	0	0
Deputy Sheriffs	0	0	0	0	0	0	0	0	0	0
School	3	3	1	1	1	1	0	0	0	0
TOTAL	13	12	8	6	6	6	5	4	4	4
CHAPTER 35										
School	43	34	28	23	17	11	8	5	4	3
General County	0	0	0	0	0	0	0	0	0	0
TOTAL	43	34	28	23	17	11	8	5	4	3
CHAPTER 46										
General County	2,520	2,535	2,563	2,607	2,626	2,596	2,570	2,616	2,587	2,747
Police Officers	336	347	345	339	329	316	323	318	327	322
Firefighters	293	294	278	283	295	300	328	322	317	346
Deputy Sheriffs	205	204	199	204	211	214	211	209	220	212
School	140	128	112	104	93	88	76	65	57	50
TOTAL	3,494	3,508	3,497	3,537	3,554	3,514	3,508	3,530	3,508	3,677
GRAND TOTAL	**3,550**	**3,554**	**3,533**	**3,566**	**3,577**	**3,531**	**3,521**	**3,539**	**3,516**	**3,684**

Note 1: Descriptions of Plan Provisions of the various Plans described as Chapter 21, Chapter 35 and Chapter 46 on these and other tables can be found on pages 56 - 58 of this report.

RETIREMENTS GRANTED
DURING FISCAL YEAR 2022

Chapters 21 & 46	SERVICE RETIREMENTS	DEFFERED RETIREMENT OPTION PLAN (DROP)	ORDINARY DISABILITY	SERVICE CONNECTED DISABILITY	TOTAL
General County	48	33			81
Deputy Sheriffs	3	1			4
Firefighters	1	9		3	13
Police Officers	13	9			22
School	6	1			7
TOTAL	**71**	**53**	**0**	**3**	**127**

Chapter 35	SERVICE RETIREMENTS	DEFFERED RETIREMENT OPTION PLAN (DROP)	ORDINARY DISABILITY	SERVICE CONNECTED DISABILITY	TOTAL
General County					0
School	1				1
TOTAL	**1**	**0**	**0**	**0**	**1**

HISTORY OF RETIREMENTS GRANTED
YEAR ENDED JUNE 30

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
CHAPTERS 21 & 46										
Service Retirements	73	74	81	74	77	74	57	78	85	71
DROP	49	52	68	67	74	71	55	48	54	53
Ordinary Disability	2	4	4	4	4	1	1	2	0	0
Service Connected Disability	3	4	4	2	2	3	4	5	8	3
	127	134	157	147	157	149	117	133	147	127
CHAPTER 35										
Service Retirements	14	12	14	13	13	6	2	3	0	1
DROP	0	0	0	0	1	0	0	0	1	0
Ordinary Disability	0	0	0	0	0	0	0	0	0	0
	14	12	14	13	14	6	2	3	1	1
GRAND TOTAL	**141**	**146**	**171**	**160**	**171**	**155**	**119**	**136**	**148**	**128**

SUMMARY OF MONTHLY RETIREMENT ALLOWANCES
RETIREES AND SURVIVORS
AS OF JUNE 30, 2022

	Service Retirements		DROP		Ordinary Disability		Service Connected Disability		Total	
CHAPTER 21	#	Amount	#	Amount	#	Amount	#	Amount	#	Amount
General County	536	$1,717,595	0	$0	8	$25,394	15	$45,221	559	$1,788,210
Deputy Sheriffs	12	$44,024	0	$0	0	$0	3	$7,204	15	$51,228
Firefighters	126	$554,033	0	$0	0	$0	39	$142,304	165	$696,337
Police Officers	182	$723,228	1	$12,217	3	$5,563	35	$131,670	221	$872,678
School	93	$201,278	0	$0	3	$6,879	2	$3,981	98	$212,138
TOTAL	**949**	**$3,240,158**	**1**	**$12,217**	**14**	**$37,836**	**94**	**$330,380**	**1,058**	**$3,620,591**
CHAPTER 46										
General County	1,540	$2,840,079	93	$264,254	32	$32,617	38	$102,977	1,703	$3,239,927
Deputy Sheriffs	118	$475,358	9	$57,866	1	$827	19	$62,797	147	$596,848
Firefighters	117	$627,353	25	$182,424	0	$0	61	$292,727	203	$1,102,504
Police Officers	185	$949,604	24	$173,145	0	$0	25	$98,518	234	$1,221,267
School	261	$218,575	1	$2,074	21	$11,143	1	$1,883	284	$233,675
TOTAL	**2,221**	**$5,110,969**	**152**	**$679,763**	**54**	**$44,587**	**144**	**$558,902**	**2,571**	**$6,394,221**
CHAPTER 35										
General County	28	$22,642	0	$0	0	$0	0	$0	28	$22,642
School	689	$644,940	1	$2,444	16	$8,057	0	$0	706	$655,441
TOTAL	**717**	**$667,582**	**1**	**$2,444**	**16**	**$8,057**		**$0**	**734**	**$678,083**
GRAND TOTAL	**3,887**	**$ 9,018,709**	**154**	**$ 694,424**	**84**	**$ 90,480**	**238**	**$ 889,282**	**4,363**	**$ 10,692,895**

HISTORY OF MONTHLY RETIREMENT ALLOWANCES
YEAR ENDED JUNE 30

($ in thousands)	2013		2014		2015		2016		2017	
TYPE	#	Amount	#	Amount	#	Amount	#	Amount	#	Amount
Service	3,320	$5,675	3,350	$5,877	3,408	$6,201	3,465	$6,536	3,544	$6,861
DROP	120	$415	145	$505	155	$545	169	$611	192	$707
Ordinary Disability	137	$126	133	$123	129	$122	129	$124	125	$123
Service Connected Disability	256	$777	254	$791	251	$797	243	$792	241	$790
TOTAL	3,833	$6,993	3,882	$7,296	3,943	$7,665	4,006	$8,063	4,102	$8,481

	2018		2019		2020		2021		2022	
TYPE	#	Amount	#	Amount	#	Amount	#	Amount	#	Amount
Service	3,632	$7,301	3,693	$7,692	3,767	$8,149	3,828	$8,622	3,887	$9,019
DROP	190	$746	183	$723	159	$646	148	$621	154	$694
Ordinary Disability	118	$113	110	$108	105	$107	97	$104	84	$90
Service Connected Disability	239	$796	240	$818	240	$844	241	$879	238	$889
TOTAL	4,179	$8,956	4,226	$9,341	4,271	$9,746	4,314	$10,226	4,363	$10,692

ADDITIONS & DEDUCTIONS
YEAR ENDED JUNE 30

(millions)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
ADDITIONS										
Contribution Total	**$ 59.4**	**$ 65.6**	**$ 70.4**	**$ 66.7**	**$ 64.5**	**$ 67.8**	**$ 69.7**	**$ 74.6**	**$ 74.4**	**$ 76.0**
Employer	48.0	53.7	58.2	54.4	51.8	54.9	56.7	59.9	59.6	61.2
Employee	11.4	11.9	12.2	12.3	12.7	12.9	13.0	14.7	14.8	14.8
Net Investment Income	**203.6**	**304.9**	**37.4**	**(1.3)**	**247.3**	**168.3**	**153.2**	**156.8**	**708.1**	**(321.3)**
Income & Appreciation	208.7	310.7	45.6	5.7	252.9	173.1	158.7	163.3	716.3	(312.1)
Less Investment Expense	(5.3)	(5.9)	(8.4)	(7.2)	(5.9)	(5.0)	(5.7)	(6.6)	(8.3)	(9.5)
Security Lending	0.1	0.1	0.2	0.2	0.3	0.2	0.2	0.2	0.1	0.2
TOTAL ADDITIONS	**$ 263.0**	**$ 370.5**	**$ 107.7**	**$ 65.4**	**$ 311.8**	**$ 236.2**	**$ 222.9**	**$ 231.4**	**$ 782.5**	**$ (245.3)**
DEDUCTIONS										
Benefit Payments	**$ 81.5**	**$ 85.3**	**$ 88.9**	**$ 94.0**	**$ 98.7**	**$ 104.2**	**$ 109.6**	**$ 114.6**	**$ 119.2**	**$ 124.9**
Normal Retirement	45.3	47.9	50.4	53.0	57.8	61.6	67.0	71.7	76.9	82.0
Early Retirement	16.5	16.7	16.7	16.7	16.9	16.9	16.9	17.0	16.9	16.9
Death in Service	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3
Duty Disability Retirement	9.2	9.3	9.4	9.7	9.3	9.5	9.6	10.1	10.2	10.5
Ordinary Disability	1.5	1.4	1.4	1.5	1.4	1.3	1.3	1.3	1.2	1.0
Survivor Payments	3.7	3.8	4.1	4.4	4.6	4.8	4.9	5.0	5.2	5.4
DROP	4.7	5.6	6.4	6.7	8.0	9.3	9.1	8.5	7.9	8.1
Other	0.4	0.4	0.4	1.9	0.5	0.6	0.6	0.6	0.7	0.7
Refunds	**1.1**	**1.0**	**1.8**	**1.3**	**0.9**	**0.8**	**1.2**	**1.1**	**0.7**	**1.6**
Administrative Expenses	**1.0**	**1.4**	**1.5**	**1.7**	**1.8**	**1.9**	**1.9**	**2.0**	**2.0**	**2.2**
TOTAL DEDUCTIONS	**$ 83.6**	**$ 87.7**	**$ 92.2**	**$ 97.0**	**$ 101.4**	**$ 106.9**	**$ 112.7**	**$ 117.6**	**$ 121.9**	**$ 128.6**

PLAN NET POSITION
YEAR ENDED JUNE 30

At Market (millions)	2013	2014	2015	2016	2017
Beginning	**$1,517.3**	**$1,696.8**	**$1,979.6**	**$1,995.1**	**$1,963.5**
Additions	263.0	370.5	107.7	65.4	311.8
Deductions	83.4	87.7	92.2	97.0	101.4
Net Change	179.6	282.8	15.5	(31.6)	210.4
Year End	**$1,696.8**	**$1,979.6**	**$1,995.1**	**$1,963.5**	**$2,173.9**

	2018	2019	2020	2021	2022
Beginning	**$2,173.9**	**$2,303.1**	**$2,413.3**	**$2,527.2**	**$3,187.9**
Additions	236.1	222.9	231.4	782.5	(245.3)
Deductions	106.9	112.7	117.5	121.9	128.7
Net Change	129.2	110.2	113.9	660.6	(374.0)
Year End	**$2,303.1**	**$2,413.3**	**$2,527.2**	**$3,187.9**	**$2,813.9**

CONTRIBUTION ANALYSIS
YEAR ENDED JUNE 30

(Dollars in millions)	Group	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimated Covered Payroll		$231.1	$252.4	$243.5	$248.9	$236.5	$261.4	$270.0	$285.2	$285.6	$297.1
Employer Contribution: *(% of Payroll)*	A, D	14.6%	16.6%	17.9%	15.9%	14.4%	14.9%	15.0%	15.1%	14.6%	14.3%
	B, C	36.4%	38.4%	39.7%	37.8%	35.9%	37.9%	38.1%	38.4%	38.7%	39.4%
	E	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Employer Contribution		$48.0	$53.7	$58.2	$54.5	$51.8	$54.9	$56.7	$59.9	$59.7	$61.2
Employee Contribution: *(% of Payroll)*											
Chapter 21	A,D	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
	B	6.6%	6.6%	6.6%	6.6%	6.6%	6.6%	6.6%	6.6%	6.6%	6.6%
	C	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%
Chapter 35	E	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Chapter 46	A, D	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
	B, C	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%
	E	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Employee Contribution		$11.4	$11.9	$12.2	$12.3	$12.7	$12.9	$13.0	$14.7	$14.8	$14.8
Employer/Employee Contribution		4.2	4.5	4.8	4.4	4.1	4.2	4.3	4.1	4.0	4.1
Unfunded Actuarial Liability		$151.2	$106.1	$20.2	$9.1	($58.0)	($96.4)	$3.5	($29.7)	($213.5)	($226.0)

Group Key

(A) General Employees

(B) Uniformed Employees

(C) Managers - Uniformed

(D) School Board Employees - Non VRS

(E) School Board Employees - VRS

PARTICIPANT AND INVESTMENT DATA AND RATIO

YEAR ENDED JUNE 30

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Participant Data										
Active Employees	3,550	3,554	3,533	3,566	3,576	3,531	3,521	3,539	3,516	3,684
Deferred Vested Members	358	500	548	559	584	631	665	693	706	753
Retirees	3,833	3,882	3,945	3,909	4,004	4,085	4,113	4,271	4,218	4,250
Retirees as a % of Active Employees	108.0%	109.2%	111.7%	109.6%	112.0%	115.7%	116.8%	120.7%	120.0%	115.4%
Retirement Benefits Paid (millions)	$81.4	$85.3	$88.9	$94.0	$98.7	$104.2	$109.6	$114.4	$119.7	$128.7
Average Benefit Payment ($/month)										
Chapter 21	$2,671	$2,756	$2,831	$2,898	$2,967	$3,049	$3,135	$3,239	$3,346	$3,422
Chapter 35 (Supplement)	$793	$813	$832	$846	$854	$869	$885	$896	$911	$924
Chapter 46[(1)]	$1,659	$1,741	$1,842	$1,952	$2,033	$2,132	$2,210	$2,286	$2,392	$2,487
Investment Data										
Net Assets, Market Value (millions)	$1,696.8	$1,979.6	$1,995.0	$1,963.5	$2,173.8	$2,303.1	$2,413.3	$2,527.2	$3,187.9	$2,813.9
Ratio: Net Assets/ Benefits Paid	20.8	23.2	22.4	20.9	22.0	22.1	22.0	22.1	26.6	21.9

(1)The averages for Chapter 46 retirees is impacted by several factors: This Chapter is relatively new; disability retirees significantly affect the average and there is blending of VRS and non-VRS members' benefits.

SCHEDULE OF AVERAGE BENEFIT PAYMENTS
CHAPTER 21 EMPLOYEES

Uniform & General Employees
Hired Before 2/8/81

	Years of Credited Service					
	5-9	10-14	15-19	20-24	25-29	30+
Period 7/1/12 to 6/30/13						
Average of Final Monthly Salaries	$1,120	$0	$3,810	$0	$0	$8,072
Average Monthly Benefit	$277	$0	$1,964	$0	$0	$5,777
Number of Current Retirees	1	0	1	0	0	5
Period 7/1/13 to 6/30/14						
Average of Final Monthly Salaries	$2,413	$2,515	$3,066	$5,942	$0	$0
Average Monthly Benefit	$476	$712	$1,415	$2,957	$0	$0
Number of Current Retirees	3	3	1	2	0	0
Period 7/1/14 to 6/30/15						
Average of Final Monthly Salaries	$0	$0	$3,279	$3,378	$0	$4,796
Average Monthly Benefit	$0	$0	$1,493	$1,414	$0	$3,238
Number of Current Retirees	0	0	1	2	0	3
Period 7/1/15 to 6/30/16						
Average of Final Monthly Salaries	$0	$0	$4,880	$0	$0	$5,791
Average Monthly Benefit	$0	$0	$2,325	$0	$0	$4,367
Number of Current Retirees	0	0	1	0	0	1
Period 7/1/16 to 6/30/17						
Average of Final Monthly Salaries	$0	$2,899	$0	$0	$0	$0
Average Monthly Benefit	$0	$823	$0	$0	$0	$0
Number of Current Retirees	0	1	0	0	0	0
Period 7/1/17 to 6/30/18						
Average of Final Monthly Salaries	$0	$0	$0	$4,907	$0	$0
Average Monthly Benefit	$0	$0	$0	$2,981	$0	$0
Number of Current Retirees	0	0	0	1	0	0
Period 7/1/18 to 6/30/19						
Average of Final Monthly Salaries	$0	$0	$0	$0	$0	$7,402
Average Monthly Benefit	$0	$0	$0	$0	$0	$4,696
Number of Current Retirees	0	0	0	0	0	1
Period 7/1/19 to 6/30/20						
Average of Final Monthly Salaries	$0	$0	$0	$0	$0	$16,976
Average Monthly Benefit	$0	$0	$0	$0	$0	$12,217
Number of Current Retirees	0	0	0	0	0	1
Period 7/1/20 to 6/30/21						
Average of Final Monthly Salaries	$0	$0	$0	$0	$0	$0
Average Monthly Benefit	$0	$0	$0	$0	$0	$0
Number of Current Retirees	0	0	0	0	0	0
Period 7/1/21 to 6/30/22						
Average of Final Monthly Salaries	$0	$0	$0	$0	$0	$0
Average Monthly Benefit	$0	$0	$0	$0	$0	$0
Number of Current Retirees	0	0	0	0	0	0

SCHEDULE OF AVERAGE BENEFIT PAYMENTS
CHAPTER 35 EMPLOYEES

School Board and DHS
Hired Before 2/8/81

	Years of Credited Service					
	5-9	**10-14**	**15-19**	**20-24**	**25-29**	**30+**
Period 7/1/12 to 6/30/13						
Average of Final Monthly Salaries	$0	$0	$0	$6,682	$6,991	$8,382
Average Monthly Benefit	$0	$0	$0	$1,344	$1,481	$1,868
Number of Current Retirees	0	0	0	1	3	10
Period 7/1/13 to 6/30/14						
Average of Final Monthly Salaries	$1,220	$0	$8,044	$8,021	$0	$8,244
Average Monthly Benefit	$46	$0	$1,369	$1,314	$0	$1,829
Number of Current Retirees	1	0	1	4	0	7
Period 7/1/14 to 6/30/15						
Average of Final Monthly Salaries	$1,574	$3,691	$3,926	$0	$4,003	$8,409
Average Monthly Benefit	$90	$385	$772	$0	$684	$1,850
Number of Current Retirees	5	1	2	0	1	5
Period 7/1/15 to 6/30/16						
Average of Final Monthly Salaries	$1,456	$3,687	$8,044	$0	$0	$9,363
Average Monthly Benefit	$81	$268	$926	$0	$0	$1,904
Number of Current Retirees	5	3	1	0	0	4
Period 7/1/16 to 6/30/17						
Average of Final Monthly Salaries	$1,292	$1,996	$4,845	$0	$8,027	$8,993
Average Monthly Benefit	$98	$195	$817	$0	$1,624	$1,878
Number of Current Retirees	2	3	1	0	2	4
Period 7/1/17 to 6/30/18						
Average of Final Monthly Salaries	$0	$0	$3,891	$0	$0	$7,913
Average Monthly Benefit	$0	$0	$593	$0	$0	$1,715
Number of Current Retirees	0	0	1	0	0	5
Period 7/1/18 to 6/30/19						
Average of Final Monthly Salaries	$0	$4,711	$0	$0	$0	$11,947
Average Monthly Benefit	$0	$501	$0	$0	$0	$2,912
Number of Current Retirees	0	1	0	0	0	1
Period 7/1/19 to 6/30/20						
Average of Final Monthly Salaries	$0	$0	$0	$0	$0	$8,990
Average Monthly Benefit	$0	$0	$0	$0	$0	$2,346
Number of Current Retirees	0	0	0	0	0	3
Period 7/1/20 to 6/30/21						
Average of Final Monthly Salaries	$0	$0	$0	$0	$0	$8,149
Average Monthly Benefit	$0	$0	$0	$0	$0	$2,444
Number of Current Retirees	0	0	0	0	0	1
Period 7/1/21 to 6/30/22						
Average of Final Monthly Salaries	$0	$0	$0	$0	$0	$6,105
Average Monthly Benefit	$0	$0	$0	$0	$0	$1,638
Number of Current Retirees	0	0	0	0	0	1

SCHEDULE OF AVERAGE BENEFIT PAYMENTS
CHAPTER 46 EMPLOYEES

All Employees Hired On or after 2/8/81	Years of Credited Service						
	2-4	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30+**
Period 7/1/12 to 6/30/13							
Average of Final Monthly Salaries	$4,529	$4,451	$4,894	$5,707	$5,608	$6,926	$6,514
Average Monthly Benefit	$257	$637	$1,230	$1,635	$2,387	$4,443	$3,944
Number of Current Retirees	3	21	17	24	22	32	9
Period 7/1/13 to 6/30/14							
Average of Final Monthly Salaries	$3,037	$5,834	$5,345	$5,738	$6,424	$6,852	$5,640
Average Monthly Benefit	$137	$1,031	$930	$1,503	$2,961	$3,858	$4,805
Number of Current Retirees	3	29	16	17	19	37	6
Period 7/1/14 to 6/30/15							
Average of Final Monthly Salaries	$2,972	$5,677	$5,639	$6,091	$6,513	$6,651	$8,878
Average Monthly Benefit	$195	$816	$1,916	$1,916	$3,075	$3,994	$4,817
Number of Current Retirees	1	21	27	17	26	46	10
Period 7/1/15 to 6/30/16							
Average of Final Monthly Salaries	$0	$4,662	$5,103	$6,521	$7,031	$7,137	$7,763
Average Monthly Benefit	$0	$497	$1,088	$2,129	$3,628	$4,553	$4,914
Number of Current Retirees	0	23	23	13	16	51	27
Period 7/1/16 to 6/30/17							
Average of Final Monthly Salaries	$4,251	$5,787	$6,422	$5,866	$6,141	$7,370	$7,048
Average Monthly Benefit	$317	$804	$1,602	$1,905	$2,792	$4,811	$4,964
Number of Current Retirees	2	24	24	21	25	48	19
Period 7/1/17 to 6/30/18							
Average of Final Monthly Salaries	$3,311	$5,941	$7,098	$6,364	$6,748	$8,127	$6,502
Average Monthly Benefit	$257	$919	$1,502	$2,200	$3,313	$5,018	$3,954
Number of Current Retirees	1	20	28	28	17	46	23
Period 7/1/18 to 6/30/19							
Average of Final Monthly Salaries	$3,689	$5,458	$6,203	$6,466	$6,490	$8,633	$8,121
Average Monthly Benefit	$809	$531	$1,282	$1,978	$2,838	$5,178	$4,984
Number of Current Retirees	5	19	14	21	18	30	19
Period 7/1/19 to 6/30/20							
Average of Final Monthly Salaries	$4,218	$5,554	$6,063	$6,950	$6,788	$8,548	$7,905
Average Monthly Benefit	$201	$696	$1,669	$2,226	$2,925	$5,142	$4,582
Number of Current Retirees	2	18	21	25	27	24	24
Period 7/1/20 to 6/30/21							
Average of Final Monthly Salaries	$4,144	$6,400	$6,545	$7,554	$8,015	$7,832	$8,146
Average Monthly Benefit	$272	$732	$1,608	$2,308	$3,571	$4,490	$5,136
Number of Current Retirees	1	16	20	22	36	41	22
Period 7/1/21 to 6/30/22							
Average of Final Monthly Salaries	$3,320	$7,121	$8,934	$7,098	$7,930	$8,516	$7,744
Average Monthly Benefit	$229	$770	$1,965	$2,135	$3,867	$5,576	$4,616
Number of Current Retirees	1	20	14	14	28	36	14

SCHEDULE OF RETIRED MEMBERS BY TYPE OF BENEFIT

CHAPTER 21 EMPLOYEES

YEAR ENDED JUNE 30, 2022

Chapter 21

Amount of Monthly Benefit	Number of Retirees	Type of Retirement								Spousal Benefit Option			
		1	2	3	4	5	6	7	8	Opt1	Opt2	Opt3	Opt4
Deferred	1	1								1			
$1 - 250	13	6	2	3			1		1	13			
251 - 500	31	16	4	7			4			29	2		
501 - 750	28	9	4	11			4			24	1	1	2
751 - 1,000	36	7	5	15		1	4		4	34	1		1
1001 - 1,250	39	10	6	17		1	4		1	33	4		2
1,251 - 1,500	37	7	6	22		1	1			33	3		1
1,501 - 1,750	44	9	6	25		1	2		1	41	2		1
1,751 - 2,000	39	9	7	16	3	2	1		1	35	2	2	
Over 2,000	791	459	146	71	91	8	9	1	6	453	224	52	62
Totals	1,059	533	186	187	94	14	30	1	14	696	239	55	69

Type of Retirement

1 - Normal retirement
2 - Early retirement
3 - Survivor payment, retiree
4 - Duty disability retirement
5 - Non-duty disability retirement
6 - Vested benefit
7 - DROP
8 - Court Order

Spousal Option Selected

Opt 1 - 0%
Opt 2 - 50%
Opt 3 - 66.7%
Opt 4 - 100%

SCHEDULE OF RETIRED MEMBERS BY TYPE OF BENEFIT

CHAPTER 35 EMPLOYEES

YEAR ENDED JUNE 30, 2022

Chapter 35

Amount of Monthly Benefit	Number of Retirees	Type of Retirement								Sposual Benefit Options			
		1	2	3	4	5	6	7	8	Opt1	Opt2	Opt3	Opt4
Deferred	12	12								12			
$1 - 250	97	30	28	10		5	24			93	1		3
251 - 500	90	36	32	15		3	3		1	87	1	1	1
501 - 750	97	32	40	15		5	4		1	82	5	1	9
751 - 1,000	118	28	82	3		2	3			88	13	6	11
1001 - 1,250	144	35	99	5		1	4			121	12	4	7
1,251 - 1,500	88	36	49	1			2			75	4	2	7
1,501 - 1,750	45	35	8				2			38	2		5
1,751 - 2,000	31	25	6							28	2		1
Over 2,000	24	22		1				1		21	1		2
Totals	746	291	344	50	0	16	42	1	2	645	41	14	46

Type of Retirement

1 - Normal retirement
2 - Early retirement
3 - Survivor payment, retiree
4 - Duty disability retirement
5 - Non-duty disability retirement
6 - Vested benefit
7 - DROP
8 - Court Order

Spousal Option Selected

Opt 1 - 0%
Opt 2 - 50%
Opt 3 - 66.7%
Opt 4 - 100%

SCHEDULE OF RETIRED MEMBERS BY TYPE OF BENEFIT
CHAPTER 46 EMPLOYEES
YEAR ENDED JUNE 30, 2022

Chapter 46

Amount of Monthly Benefit	Number of Retirees	Type of Retirement								Spousal Benefit Options			
		1	2	3	4	5	6	7	8	Opt1	Opt2	Opt3	Opt4
Deferred	681	681								681			
$1 - 250	192	101	31	11	4	8	29	3	5	129	33	7	23
251 - 500	163	46	72	6		9	26	-	4	149	6		8
501 - 750	152	88	29	11	1	6	10	3	4	106	21	5	20
751 - 1,000	123	82	18	9	1	4	2	3	4	97	11	4	11
1001 - 1,250	135	94	23	3	2	1		11	1	82	38	4	11
1,251 - 1,500	183	67	40	26		9	37		4	153	14		16
1,501 - 1,750	214	100	44	21		6	40		3	173	19	4	18
1,751 - 2,000	185	99	32	10		10	28	3	3	152	14	6	13
Over 2,000	1,224	820	102	22	136	1	10	129	4	716	331	80	97
Totals	3,252	2,178	391	119	144	54	182	152	32	2,438	487	110	217

Type of Retirement

1 - Normal retirement
2 - Early retirement
3 - Survivor payment, retiree
4 - Duty disability retirement
5 - Non-duty disability retirement
6 - Vested benefit
7 - DROP
8 - Court Order

Spousal Option Selected

Opt 1 - 0%
Opt 2 - 50%
Opt 3 - 66.7%
Opt 4 - 100%