

# **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, 2021**

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



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](http://www.arlingtonva.us/retirement)

**Board of Trustees**

Jonathan C. Kinney,  
President  
Richard Alt,  
Vice President  
Michelle Cowan,  
Treasurer  
Michael-dharma Irwin,  
Secretary  
William Ross,  
Assistant Treasurer  
Brian Lynch  
Barbara Donnellan

**Substitute Trustees**

Emily Hughes  
Shaun Lewis  
Carl Newby

**Executive Director**

Susie Ardeshir

December 2, 2021

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, 2021 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 above expectations this year as the system assets achieved a return of 28.3%; outperforming the portfolio benchmark return of 23.2%. With net position of \$3.187 billion at year end, the System remains 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 108.4%, an increase over fiscal year 2020's funded ratio of 101.2%.

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 2022.

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,

A handwritten signature in blue ink, appearing to read "J. Kinney", written over a light blue horizontal line.

Jonathan C. Kinney  
President

## Table of Contents

<b>INTRODUCTORY SECTION .....</b>	<b>1</b>
Certificate of Achievement .....	1
Letter of Transmittal .....	2
Administrative Organization .....	7
Organizational Chart .....	8
<b>FINANCIAL SECTION .....</b>	<b>9</b>
Independent Auditors' Report .....	11
Management's Discussion and Analysis .....	13
Basic Financial Statements.....	16
Statement of Fiduciary Net Position .....	16
Statement of Changes in Fiduciary Net Position .....	17
Notes to Financial Statements .....	18
Required Supplementary Information .....	37
Schedule of Changes in Net Pension Liability/Asset & Related Ratios.....	37
Schedule of Employer Contributions.....	38
Schedule of Investment Returns .....	38
Supplemental Information .....	39
Schedule of Administrative Expense .....	39
Schedule of Investment & Consultant Expenses .....	40
<b>INVESTMENT SECTION .....</b>	<b>41</b>
Investment Presentation Basis and Policy .....	43
Investment Performance Summary .....	44
Investment Performance and Activity.....	45
Asset Allocation by Asset Class.....	48
Investment Managers and Investment Assignments .....	50
List of Largest Assets Directly Held .....	51
Schedule of Broker Commissions.....	52
<b>ACTUARIAL SECTION .....</b>	<b>53</b>
Actuary's Certification Letter .....	55

Actuarial Assumptions and Methods and Summary of Valuation Results .....	58
Valuation Method and Asset Value .....	58
Funding Method and System Liabilities.....	58
System Contributions.....	60
Plan Membership.....	61
Analysis of Financial Experience .....	61
Actuarial Assumptions .....	62
Summary of Plan Provisions.....	75
Trends .....	78
Schedule of Active Member Valuation Data.....	80
Solvency Test.....	81
Analysis of Financial Experience .....	82
Retirees and Beneficiaries Added to and Removed From Rolls.....	83
Schedule of Employer's Contributions.....	84
<b>STATISTICAL SECTION.....</b>	<b>85</b>
About the Statistical Section .....	85
Active Employee Membership in Retirement System .....	86
History of Active Employee Membership in Retirement System.....	86
Retirements Granted During Fiscal Year .....	87
History of Retirements Granted.....	87
Summary of Monthly Retirement Allowances.....	88
History of Monthly Retirement Allowances.....	88
Additions & Deductions .....	89
Plan Net Position.....	89
Contribution Analysis.....	90
Participant and Investment Data and Ratio.....	91
Schedules of Average Benefit Payments .....	92
Schedules of Retired Members by Type of Benefit .....	95

# Introductory Section

**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 Comprehensive Annual  
Financial Report  
For the Fiscal Year Ended

June 30, 2020

*Christopher P. Morill*

Executive Director/CEO

## 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](http://www.careers.arlingtonva.us/retirement-investment-office)



### Board of Trustees

Jonathan C. Kinney,

President

Richard Alt,

Vice President

Michelle Cowan,

Treasurer

Michael-dharma Irwin,

Secretary

William Ross,

Assistant Treasurer

Barbara Donnellan

Brian Lynch

### Substitute Trustees

Emily Hughes

Shaun Lewis

Carl Newby

### Executive Director

Susie Ardeshir

November 4, 2021

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, 2021 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, 2021, the fiduciary net position of the System was \$3.188 billion, an increase of \$661 million during the fiscal year. The year's 28.5% gross investment return was 5.3% above the portfolio benchmark return of 23.2%. This performance placed the System in the 29<sup>th</sup> percentile of the TUCS Public Plan universe for the year. The ten-year gross investment return is 9.5% and compares to the portfolio benchmark return of 8.5%. Over the long term, ACERS outperforms its benchmarks and ranks in the top third 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 108.4% as of June 30, 2021. 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 reallocation of funds to passive and active equity and fixed income mandates and an increased exposure to private equity. The *Investment Section* of this report includes details on the year's activity.

From an organization perspective, a search was conducted for an Executive Director/Chief Investment Officer (CIO). A new Executive Director/CIO was hired with a start date at the beginning of FY 2022.

### **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 \$7.5 million and \$2.6 million for the County and School trusts, respectively, was made during fiscal year 2021. As of June 30, 2021, the County and School trusts had assets of \$215.1 million and \$89.3 million, respectively. These trusts are

## Introductory Section

---

separate and independently managed from Retirement System assets. The OPEB trusts are managed in accordance with an Investment Policy Statement tailored to their needs.

### **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, 2021, the last day of fiscal year 2021.

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 108.4% funded ratio as of June 30, 2021, an increase over the June 30, 2020 funded ratio of 101.2%. 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 2021, the System's gross investment return was 28.5% compared to a 23.2% benchmark return. The annualized rates of return for the three and five-year periods were 13.6% and 12.3%, respectively. These compare to benchmark returns of 11.8% and 10.7% 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 28.3% and 13.5%, 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, 2020. This is the twenty-second 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.

# Introductory Section

---

## **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,

A handwritten signature in black ink, appearing to read 'Susie Ardeshir', with a long, wavy horizontal line extending to the right.

Susie Ardeshir

Executive Director & Chief Investment Officer

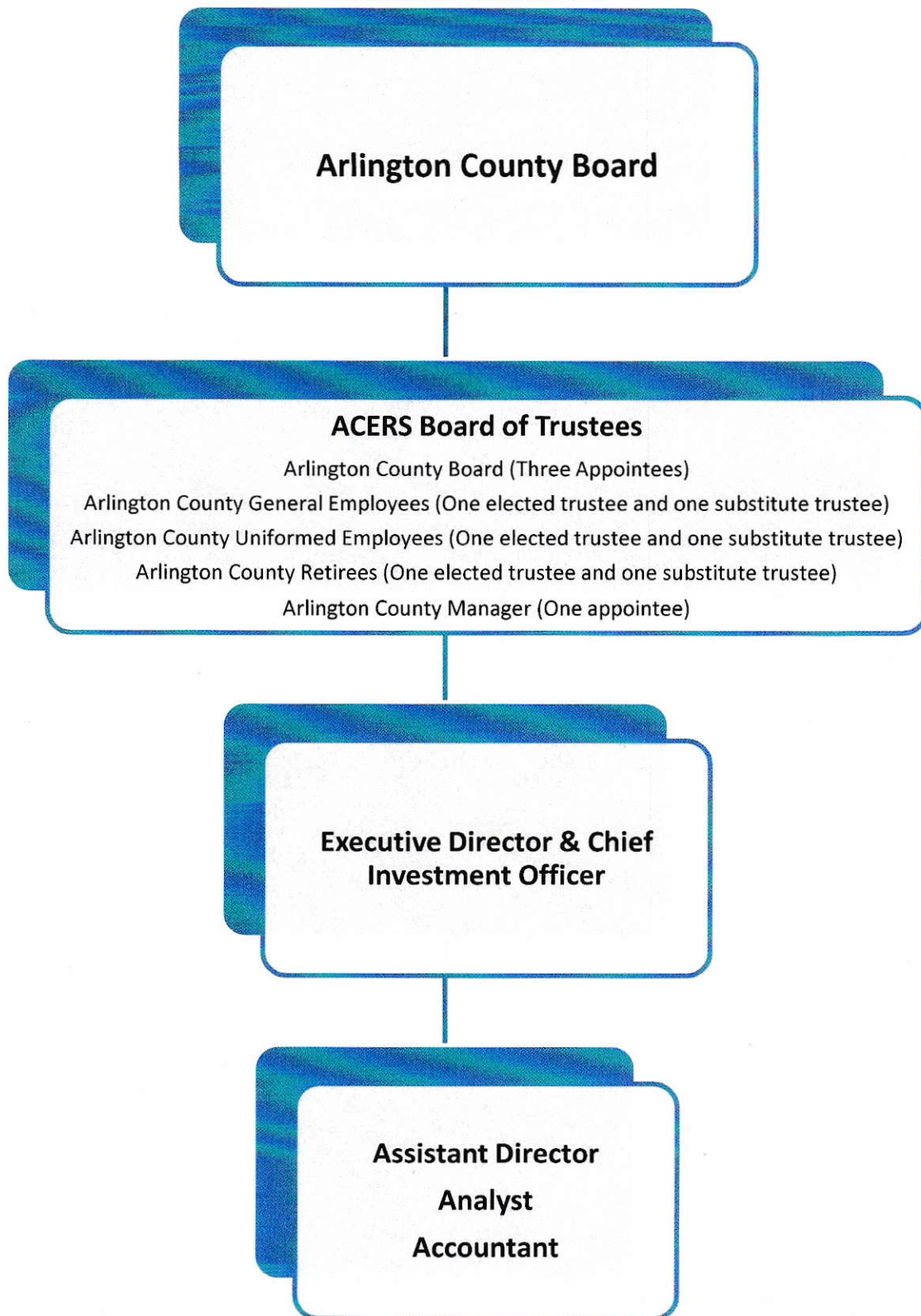
**ACERS STRUCTURE**  
**JUNE 30, 2021**

<b>TRUSTEES</b>	<b>PROFESSIONAL STAFF</b>
Jonathan C. Kinney, President <i>Appointed by County Board</i> <i>Term Expires 1/31/2025</i>	Susie Ardeshir, Executive Director & CIO Randee Stenroos, Assistant Director Katrina Milne, Investment Analyst Stephen Euell, Accountant
Richard Alt, Vice President <i>Elected by Retirees</i> <i>Term Expires 1/31/2023</i>	<b>LEGAL ADVISOR</b>
Michelle Cowan, Treasurer <i>Appointed by County Manager</i> <i>Term Expires 1/31/2023</i>	Virginia Sadler, County Attorney's Office
Michael-dharma Irwin, Secretary <i>Elected by General Employees</i> <i>Term Expires 1/31/2025</i>	<b>INVESTMENT CONSULTANT</b>
William Ross, Assistant Treasurer <i>Appointed by County Board</i> <i>Term Expires 1/31/2025</i>	Windmark Investment Partners Franklin Park LLC
Barbara Donnellan <i>Appointed by County Board</i> <i>Term Expires 1/31/2025</i>	<b>CUSTODIAN BANK</b>
Brian Lynch <i>Elected by Uniformed Employees</i> <i>Term Expires 1/31/2023</i>	The Northern Trust Company
<b>SUBSTITUTE TRUSTEES</b>	<b>CONSULTING ACTUARY</b>
Emily Hughes <i>Elected by General Employees</i> <i>Term Expires 1/31/2025</i>	Cheiron
Shaun Lewis <i>Elected by Uniformed Employees</i> <i>Term Expires 1/31/2023</i>	<b>CERTIFIED PUBLIC ACCOUNTANT</b>
Carl Newby <i>Elected by Retirees</i> <i>Term Expires 1/31/2023</i>	Cherry Bekaert LLP
	<b>INVESTMENT MANAGERS<sup>(1)</sup></b>
	Abbott Capital Altaris Healthcare Partners Arsenal Real Estate Baillie Gifford Bison Capital BV Investment Partners DoubleLine® Capital Franklin Park Gallant Partners GQG Highclere JFL Equity Investors Kiltearn Partners Marcus Partners Middleground Partners Northern Trust Orbis International Peppertree T. Rowe Price The Vanguard Group Vision Ridge Partners

<sup>(1)</sup> 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)**







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

**Report on the Financial Statements**

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, which comprise the Statement of Fiduciary Net Position, as of June 30, 2021, the related Statement of Changes in Fiduciary Net Position for the fiscal year then ended, and the related notes to the financial statements, as listed in the table of contents.

***Management's Responsibility for the Financial Statements***

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes 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.

***Auditor's Responsibility***

Our responsibility is to express an opinion on these financial statements based on our audit. 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. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements 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 entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

***Opinion***

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, 2021, and the changes in fiduciary net position thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

cbh.com

### **Other Matters**

#### ***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, 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.

#### ***Other Information***

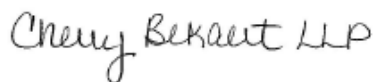
Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the System's basic financial statements. The Introductory Section, Supplemental Information, Investment Section, Actuarial Section, and Statistical Section, as listed in the table of contents, are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The Supplemental 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. Such 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.

The Introductory, Investment, Actuarial, and Statistical Sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

#### **Other Reporting Required by Government Auditing Standards**

In accordance with *Government Auditing Standards*, we have also issued our report dated November 5, 2021, 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.



Tysons Corner, Virginia  
November 5, 2021

---

**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, 2021. 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, 2021 totaled \$3.188 billion, an increase of \$661 million, or 26.1%, from June 30, 2020, due to an increase 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 2021:

- Contributions remained stable from prior fiscal year at \$74.5 million.
- Dividends and interest on investments decreased to \$22.9 million from \$28.1 million in fiscal year 2020.
- Payments and refunds to members increased to \$119.9 million from \$115.5 million in fiscal year 2020.

**Investment Gains and Losses** Investment gains, which include realized and unrealized changes in investment portfolio fair value, were \$693.4 million in fiscal year 2021, given the strong gains earned in the fiscal year. This was a \$558.2 million increase from the \$135.2 million in fiscal year 2020 and this outsized gain is not expected.

- Fund net investment returns, including dividends and interest, of 28.3% for the year outperformed the 23.2% benchmark. The Fund's allocation to and within equities contributed to results. 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** As of June 30, 2021, the System was actuarially funded at 108.4%, up from 101.2% as of June 30, 2020. This funding ratio compares actuarial value of assets to the actuarial liabilities. We also present the fair value funding ratio of 125.5% as of June 30, 2021, 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.

## Financial Section

### MANAGEMENT'S DISCUSSION & ANALYSIS

#### SUMMARY OF FIDUCIARY NET POSITION AND CHANGES IN FIDUCIARY NET POSITION FOR THE YEARS ENDED JUNE 30, 2021 & 2020

##### Summary of Fiduciary Net Position

<b>Assets</b>	<b>June 30, 2021</b>	<b>Increase (Decrease)</b>	<b>June 30, 2020</b>
Cash	\$ 209,332,379	\$ (5,027,837)	\$ 214,360,216
Receivables	2,339,392	(1,051,243)	3,390,635
Investments	2,979,074,739	667,285,569	2,311,789,170
<b>Total Assets</b>	<b>\$ 3,190,746,510</b>	<b>\$ 661,206,489</b>	<b>\$ 2,529,540,021</b>
<b>Liabilities</b>			
Accrued Expense and Other Liabilities	\$ 2,849,672	\$ 545,177	\$ 2,304,495
<b>Total Liabilities</b>	<b>\$ 2,849,672</b>	<b>\$ 545,177</b>	<b>\$ 2,304,495</b>
<b>Total Fiduciary Net Position</b>	<b>\$ 3,187,896,838</b>	<b>\$ 660,661,312</b>	<b>\$ 2,527,235,526</b>

##### Summary of Changes in Fiduciary Net Position

<b>Additions</b>	<b>June 30, 2021</b>	<b>Increase (Decrease)</b>	<b>June 30, 2020</b>
Employer Contributions	\$ 59,657,891	\$ (221,040)	\$ 59,878,931
Member Contributions	14,792,219	127,366	14,664,853
Dividends & Interest	22,931,088	(5,146,433)	28,077,521
Investment Gains	693,362,973	558,184,004	135,178,969
Other	119,286	(54,003)	173,289
Investment Expense	(8,277,361)	(1,690,563)	(6,586,798)
<b>Total Additions</b>	<b>\$ 782,586,096</b>	<b>\$ 551,199,331</b>	<b>\$ 231,386,765</b>
<b>Deductions</b>			
Retirement Benefits	\$ 119,479,669	\$ 4,881,426	\$ 114,598,243
Refund of Contributions	395,298	(467,969)	863,267
Administrative & Consulting Expense	2,049,817	72,300	1,977,517
<b>Total Deductions</b>	<b>\$ 121,924,784</b>	<b>\$ 4,485,757</b>	<b>\$ 117,439,027</b>
<b>Change in Fiduciary Net Position</b>	<b>\$ 660,661,312</b>	<b>\$ 546,713,574</b>	<b>\$ 113,947,738</b>

## **MANAGEMENT'S DISCUSSION & ANALYSIS**

### **Overview of Financial Statements**

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

- Basic financial statements
- Notes to the 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, 2021, 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.

**Notes to the Basic Financial Statements** The financial statement notes provide additional information essential to fully understanding the data provided in the Basic 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](http://www.arlingtonva.us/retirement). A summary report will be issued to plan members in January 2022.

## Financial Section

---

### **ARLINGTON COUNTY EMPLOYEES' RETIREMENT SYSTEM**

*(A Pension Trust Fund of Arlington County, Virginia)*

#### **STATEMENT OF FIDUCIARY NET POSITION**

JUNE 30, 2021

#### ASSETS

Cash and Cash Equivalents		\$209,332,379
Contributions Receivable:		
Employer		1,811,569
Employee		429,929
Accrued Interest and Other Receivables		97,894
Investments, at Fair Value:		
Foreign, Municipal and U.S. Government Obligations	\$112,688,540	
Corporate Fixed Income Obligations	158,662,606	
Domestic and Foreign Equities	958,713,849	
Private Equity	170,707,870	
Real Estate Funds	5,133,848	
Pooled Equity	1,090,556,812	
Pooled Fixed Income	482,611,214	
Total Investments		<u>2,979,074,739</u>
Total Assets		<u>3,190,746,510</u>

#### LIABILITIES

Accrued Expenses and Other Liabilities	<u>2,849,672</u>
Total Liabilities	<u>2,849,672</u>

NET POSITION RESTRICTED FOR PENSIONS	<u><u>\$3,187,896,838</u></u>
--------------------------------------	-------------------------------

*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, 2021

**ADDITIONS**

Contributions	
Employer	\$59,657,891
Employee	14,792,219
Total Contributions	<u>\$74,450,110</u>
Investment Income	
Interest and Dividends	22,931,088
Net Appreciation in Fair Value	693,362,973
Investment Income	<u>716,294,061</u>
Less: Investment Expense	<u>8,277,361</u>
Net Investment Income	708,016,700
Securities Lending Activity	
Security Lending Income	159,790
Bank Management Fees	40,504
Net Income From Security Lending	<u>119,286</u>

Total Additions	<u><b>\$782,586,096</b></u>
-----------------	-----------------------------

**DEDUCTIONS**

Members' Benefits	\$119,479,669
Refund of Members' Contributions	395,298
Administrative Expenses	923,242
Other Consulting Expenses	1,126,575

Total Deductions	<u><b>\$121,924,784</b></u>
------------------	-----------------------------

Net Increase in Net Position	<b>\$660,661,312</b>
------------------------------	----------------------

Net Position Restricted for Pensions, Beginning of Year	<u><b>2,527,235,526</b></u>
---	-----------------------------

NET POSITION RESTRICTED FOR PENSIONS, End of Year	<u><u><b>\$3,187,896,838</b></u></u>
---	--------------------------------------

*See accompanying notes to financial statements*

## NOTES TO FINANCIAL STATEMENTS

JUNE 30, 2021

### **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 earned and deductions from fiduciary net position recorded when incurred. Member and employer contributions to 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 Arlington County Employees' Retirement System (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, 2021

**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, 2021, System membership consisted of the following:

	<u>General</u>	<u>Uniformed</u>	<u>School</u>	<u>Total</u>
<i>Active Employees:</i>				
Vested	1,668	522	4	2,194
Non-vested	<u>980</u>	<u>342</u>	<u>0</u>	<u>1,322</u>
Total Active Employees	<u>2,648</u>	<u>864</u>	<u>4</u>	<u>3,516</u>
<i>Vested Deferred</i>	567	119	20	706
<i>Retirees and Beneficiaries</i>	2,475	915	828	4,218

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, 2021

#### **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, 2021 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, 2021

**NOTE 2. PLAN DESCRIPTION****Member Contributions and Retirement Benefits**

	<b><u>Participants Covered Under Chapter</u></b>		
	<b><u>21</u></b>	<b><u>35</u></b>	<b><u>46</u></b>
	Before 2/8/81	Before 2/8/81	2/8/81 or After
Covers Employees Hired:			
Contribution Rates:			
<i>General Employees</i>	4%	N/A	4%
<i>School Board Employees</i> <i>(Covered by VRS)</i>	0%	0%	0%
<i>Uniformed Employees:</i>			
- 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:			
<i>General County Employees</i>	60	N/A	62
<i>School Board Employees</i>	60	62	62
<i>Uniformed Employees</i>	50	N/A	52
<i>"Rule of 80" Applies</i>	Yes	No	Yes
Retirement Benefit:			<u><i>Retiring on/prior to 1/3/09</i></u>
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	General: 1.5% Uniform: 2.0% until Social Security Eligible then 1.5%, 1.7% & 2.0% for each 10 year increment
			<u><i>Retiring on/after 1/4/09</i></u>
			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, 2021

### 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, 2021, 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 20.6% of annual covered payroll.

#### Rate of Return

For the year ending June 30, 2021, the annual money-weighted (dollar weighted) rate of return on pension plan investments, net of pension plan investment expense, was 28.3%. 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, 2021, were as follows:

*(\$ in millions)*

Total Pension Liability	\$	2,540.9
Plan Fiduciary Net Position		3,187.9
County's Net Pension Asset	\$	(647.0)
percentage of the Total Pension Liability		125.5%

#### Actuarial Assumptions

The total pension liability was determined by entry age actuarial cost method as of June 30, 2021, 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, 2021

**NOTE 3. NET PENSION LIABILITY**

The actuarial assumptions used in the June 30, 2021 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 Rate of Return
Domestic Equity	6.0%
International Equity	7.2%
Fixed Income	1.9%
Cash/Short Term	0.7%
Non-Traditional	9.6%

**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%)
<i>(\$ in millions)</i>			
Plan's net pension liability/(asset)	(\$284.5)	(\$647.0)	(\$941.6)

### NOTES TO FINANCIAL STATEMENTS

JUNE 30, 2021

#### 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:

<u>Asset Class</u>	<u>Current Allocation</u>	<u>10 Year Average Allocation</u>
Domestic Equity	34%	49%
International Equity	30%	16%
Fixed Income	24%	30%
Cash/Short Term	6%	1%
Non-Traditional	6%	4%
Total	<u>100%</u>	<u>100%</u>

##### 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, 2021

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 15% 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, 2021

#### **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, 2021, the System had \$56 in open net forward currency contracts.

##### **d. Cash and Cash Equivalents**

At June 30, 2021, the System had cash and cash equivalents of \$209,332,379. Cash deposits in bank accounts totaled \$375,851. This amount was insured by the Federal Deposit Insurance Corporation up to \$250,000 for each System participant. Cash equivalents totaling \$208,956,528 is invested in the custodian's Short-Term Investment Fund. This account is uninsured and uncollateralized.



**NOTES TO FINANCIAL STATEMENTS**  
JUNE 30, 2021

**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, 2021:

<b>SYSTEM INVESTMENTS</b>	
<b>Investment Type</b> <i>(in \$ 000s)</i>	<b>Investment Value</b>
Foreign, Municipal and U.S. Governments:	
Government and Government Agency Debt	\$ 22,051
Government Pooled Fund	90,638
Total Foreign, Municipal, and U.S. Governments	112,689
Corporate Fixed Income Obligations:	
Residential Mortgaged Backed	72,467
Commercial Mortgage Backed	19,375
Collateralized Mortgage Obligations	27,075
Asset Backed Securities	39,745
Total Corporate Fixed Income Obligations	158,662
Domestic and Foreign Equities:	
Common Stock	951,679
REITs	3,980
Preferred Stock	3,055
Total Domestic and Foreign Equities	958,714
Private Equity:	
Private Equity	170,708
Real Estate Funds:	
Real Estate	5,134
Pooled Equity:	
Pooled Equity Funds	1,090,557
Pooled Fixed Income:	
Pooled Bond Funds	482,611
<b>Total</b>	<b>\$ 2,979,075</b>

## NOTES TO FINANCIAL STATEMENTS

JUNE 30, 2021

### 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 \$180.7 million of directly owned fixed income securities and on \$573.2 million invested in three pooled US fixed income funds. The System's directly owned fixed income investments and maturities at June 30, 2021 are:

INVESTMENT MATURITIES					
Investment Type (in \$ 000s)	Fair Value	Maturities (years)			
		Under 1	1-5	6-10	Over 10
Asset Backed Securities	\$39,745	-	2,850	4,510	32,385
Commercial Mortgage Backed	19,375	-	-	277	19,098
Government & Government Agencies	22,051	-	-	11,887	10,164
Residential Mortgage Backed	72,467	-	-	4,776	67,691
Collateralized Mortgage Obligations	27,075	-	2,429	967	23,679
Total	\$180,713	-	5,279	22,417	153,017

## NOTES TO FINANCIAL STATEMENTS

JUNE 30, 2021

**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, 2021 is shown below:

**INVESTMENT DURATIONS**

<b>Investment Type</b> <b>(in \$ 000s)</b>	<b>Fair Value</b>	<b>Effective Duration (Yrs)</b>
Asset Backed Securities	\$39,745	3.283
Commercial Mortgage Backed	19,375	3.976
Government & Government Agencies	22,051	14.005
Residential Mortgage Backed	72,467	5.092
Collateralized Mortgage Obligations	27,075	5.449
<b>Total</b>	<b><u>\$180,713</u></b>	<b><u>5.752</u></b>

**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.

## Financial Section

### NOTES TO FINANCIAL STATEMENTS

JUNE 30, 2021

#### NOTE 4. DEPOSITS AND INVESTMENTS

##### Credit Risk

The System's credit quality distribution for the System's directly held fixed income investments of \$180.7 million at June 30, 2021 is shown below:

##### FIXED INCOME CREDIT QUALITY DISTRIBUTION

Investment Type (in \$ 000s)	Credit Quality							Unrated
	AAA	AA	A	BBB	BB	B	Below B	
Asset Backed Securities	\$6,985	-	775	1,928	773	-	19,408	9,876
Commercial Mortgage Backed	6,146	2,522	900	2,333	1,240	168	-	6,066
Government & Government Agencies	22,051	-	-	-	-	-	-	-
Residential Mortgage Backed	72,467	-	-	-	-	-	-	-
Collateralized Mortgage Obligations	-	-	-	2,312	-	-	8,162	16,601
<b>Total</b>	<b>\$107,649</b>	<b>2,522</b>	<b>1,675</b>	<b>6,573</b>	<b>2,013</b>	<b>168</b>	<b>27,570</b>	<b>32,543</b>

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

**NOTES TO FINANCIAL STATEMENTS**

JUNE 30, 2021

**NOTE 4. DEPOSITS AND INVESTMENTS****Foreign Currency Risk**

Foreign investments include equity and fixed income securities, including convertible securities 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, 2021 was as follows:

**FOREIGN CURRENCY EXPOSURE IN US DOLLARS**

<b>Currency (in \$ 000s)</b>	<b>Equity</b>	<b>Fixed Income &amp; Convertible</b>	<b>Cash</b>	<b>Total</b>
Brazilian Real	\$2,657	\$0	\$0	\$2,657
British pound sterling	13,832	-	21	13,853
Danish Krone	7,831	-	1	7,832
Euro	52,360	-	1	52,361
HK offshore Chinese Yuan Renminbi	2,304	-	-	2,304
Hong Kong Dollar	31,492	-	-	31,492
Indonesian Rupiah	4,829	-	5	4,834
Japanese Yen	6,900	-	22	6,922
Nigerian Naira	249	-	209	458
Norwegian Krone	-	-	1	1
Philippines Peso	4,583	-	-	4,583
Singapore Dollar	-	-	-	-
South African Rand	679	-	-	679
Swedish Krona	1,935	-	-	1,935
Swiss Franc	4,340	-	1	4,341
<b>Total</b>	<b>\$ 133,991</b>	<b>\$ -</b>	<b>\$ 261</b>	<b>\$ 134,252</b>

### NOTES TO FINANCIAL STATEMENTS

JUNE 30, 2021

#### 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 increased from \$45.3 million at the beginning of the year to \$75.0 million at June 30, 2021.

The following table details the net income from securities lending for the fiscal year ended June 30, 2021:

Gross Income from Securities Lending	\$	159,790
Less: Bank Management Fees		(40,504)
Net Income from Securities Lending	\$	<u>119,286</u>

The following table presents the fair value of underlying securities and the value of the non-cash collateral pledged at June 30, 2021:

Securities Lent	Fair Value of Securities on Loan	Fair Value of Non-cash Collateral
Total	\$ 75,665,443	\$ 78,641,222

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

---

**NOTES TO FINANCIAL STATEMENTS**  
JUNE 30, 2021**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, 2021

### 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, 2021:

#### Investments and Derivative Instruments Measured at Fair Value (\$ in millions)

\$ in millions)

		Fair Value Measurements Using		
		Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
	June 30, 2021			
Investments by fair value level				
Debt securities				
Foreign, Municipal and U.S. Governments				
Government and Government Agency Debt	\$ 22,051,188	-	22,051,188	-
Corporate Fixed Income Obligations				
Residential Mortgage Backed	72,466,932	-	72,466,932	-
Commercial Mortgage Backed	19,375,356	-	19,375,356	-
Asset Backed	39,745,478	-	39,745,478	-
Non-Government Backed C.M.O.s	27,074,840	-	27,074,840	-
Pooled Fixed Income				
Pooled Bond Funds	79,851,524	79,851,524	-	-
Total debt securities measured at fair value	260,565,318	79,851,524	180,713,794	-
Equity Securities				
Domestic and Foreign Equities				
Common Stock	763,333,200	763,054,669	-	278,531
Preferred Stock	3,054,420	3,054,420	-	-
Pooled Equity				
Pooled Equity Funds	812,631,526	812,631,526	-	-
Total equity securities measured at fair value	1,579,019,146	1,578,740,615	-	278,531
Total investments by fair value level	\$1,839,584,464	\$1,658,592,139	\$180,713,794	\$278,531

Investments measured at the net asset value (NAV)	
Debt securities	
Pooled Fixed Income	
Pooled Bond Funds	493,397,041
Total debt securities measured at the NAV	493,397,041
Equity Securities	
Domestic and Foreign Equities	
Pooled Global Equity Fund	305,878,042
Pooled International Equity Fund	164,373,474
Total equity securities measured at the NAV	470,251,516
Alternative Investments	
Private Equity	
Private Equity	170,707,870
	170,707,870
Real Estate Funds	
Real Estate	5,133,848
Total alternative investments measured at the NAV	175,841,718

Total investments measured at the NAV	1,139,490,275
Total investments	\$ 2,979,074,739



**NOTES TO FINANCIAL STATEMENTS**  
JUNE 30, 2021

**NOTE 5. FAIR VALUE OF INVESTMENTS**

	June 30, 2021	Unfunded Commitments (millions)	Redemption Frequency	Redemption Notice Period
Debt Securities				
Pooled Fixed Income	\$ 493,397,041	-	Daily	None
Total debt securities	493,397,041	-		
Equity Securities				
Domestic and Foreign Equities	305,878,042	-	Monthly	15 - 45 days
International Pooled Equity	164,373,474	-	Monthly	15 - 45 days
Total equity securities	470,251,516	-		
Alternative Investments				
Private Equity	170,707,870	93	N/A	N/A
Real Estate	5,133,848	21	N/A	N/A
Total alternative investments	175,841,718	114		
Total investments measured at the NAV	\$ 1,139,490,275	114		

- *Unfunded Commitments.* The System has at June 30, 2021 committed to alternative investments in the amount of \$328.0 million. Funding of \$213.7 million has been provided leaving an unfunded commitment of \$114.3 million.
- *Alternative Investments.* Real estate includes one fund, structured as a limited partnership, which invests in land in the United States. Private Equity includes seventeen 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 one fund 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, 2021

#### **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 5, 2021 the date the financial statements were available to be issued. Events or transactions occurring after June 30, 2021, but prior to November 5, 2021 that provided additional evidence about conditions that existed at June 30, 2021, have been recognized in the financial statements for the year ended June 30, 2021. Events or transactions that provided evidence about conditions that did not exist at June 30, 2021 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, 2021.

**SCHEDULES OF REQUIRED SUPPLEMENTARY INFORMATION**  
**June 30, 2021**

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

	June 30, 2021	June 30, 2020	June 30, 2019	June 30, 2018	June 30, 2017	June 30, 2016	June 30, 2015	June 30, 2014
<b><u>Total Pension Liability</u></b>								
Service Cost	\$ 60.8	\$ 59.8	\$ 59.3	\$ 57.8	\$ 56.5	\$ 53.8	\$ 54.8	\$ 52.1
Interest	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	(29.4)	(30.1)	(31.1)	(13.7)	(27.1)	(47.3)	(16.2)	(11.0)
Benefit Payments	(119.9)	(115.5)	(110.8)	(105.0)	(99.7)	(95.3)	(90.8)	(86.3)
Net Change in Total Pension Liability	\$ 77.8	\$ 75.6	\$ 179.5	\$ 85.7	\$ 68.8	\$ 82.0	\$ 83.4	\$ 115.8
Total Pension Liability - Beginning	\$ 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	\$ 2,540.9	\$ 2,463.1	\$ 2,387.5	\$ 2,208.0	\$ 2,122.3	\$ 2,053.5	\$ 1,971.5	\$ 1,888.1
<b><u>Plan Fiduciary Net Position</u></b>								
Contributions - Employer	\$ 59.7	\$ 59.9	\$ 56.7	\$ 54.9	\$ 51.8	\$ 54.5	\$ 58.2	\$ 53.7
Contributions - Employee	14.8	14.7	13.0	12.9	12.7	12.3	12.2	11.9
Net Investment Income	708.1	156.8	152.1	167.3	246.3	(1.3)	37.3	304.2
Benefits Payments	(119.9)	(115.5)	(110.8)	(105.0)	(99.7)	(95.3)	(90.8)	(86.3)
Administrative Expenses	(2.0)	(2.0)	(0.8)	(0.8)	(0.8)	(1.7)	(1.5)	(0.7)
Net Change in Plan Fiduciary Net Position	\$ 660.7	\$ 113.9	\$ 110.2	\$ 129.3	\$ 210.3	\$ (31.5)	\$ 15.4	\$ 282.8
Plan Fiduciary Net Position - Beginning	\$ 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	\$ 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	\$ (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	125.5%	102.6%	101.1%	104.3%	102.4%	95.6%	101.2%	104.9%
Covered Payroll	\$ 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	(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.

# Financial Section

## SCHEDULES OF REQUIRED SUPPLEMENTARY INFORMATION

June 30, 2021

### Schedule of Employer Contributions (\$ in millions)

Fiscal Year Ended	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Actuarially Determined Contribution	\$ 59.7	\$ 59.9	\$ 56.7	\$ 54.9	\$ 51.8	\$ 54.5	\$ 58.2	\$ 53.7	\$ 48.0	\$ 46.3
County Contributions in Relation to the Actuarially Determined Contributions	59.7	59.9	56.7	54.9	51.8	54.5	58.2	53.7	48.0	46.3
Contribution Deficiency/(Excess)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Covered Payroll	\$ 285.6	\$ 285.2	\$ 270.0	\$ 261.4	\$ 236.5	\$ 248.9	\$ 243.5	\$ 252.4	\$ 231.1	\$ 234.9
Contributions as a Percentage of Covered Payroll	20.9%	21.0%	21.0%	21.0%	21.9%	21.9%	23.9%	21.3%	20.8%	19.7%

#### Notes to Schedule:

Valuation Date

June 30, 2019

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/seniority component which vary by year of service and are compounded annually

Mortality

General and Uniformed

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.

School

RP-2000 Employee Mortality with White Collar adjustment with generational improvements using Scale BB for active and non-disabled inactive members; no deaths assumed 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	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Annual money-weighted rate of return, net of investment expense	28.3%	6.6%	6.8%	7.8%	12.7%	0.0%	1.9%	18.1%	13.5%	0.3%

## SUPPLEMENTAL INFORMATION

JUNE 30, 2021

## SCHEDULE OF ADMINISTRATIVE EXPENSES

## Personnel Services:

Staff Salaries	\$ 497,720	
Benefits	179,358	
<b>Total Personnel Services</b>		<b>\$ 677,078</b>

<b>Professional Services</b>	226,653	<b>\$ 226,653</b>
------------------------------	---------	-------------------

## Office Expense:

Telephone	\$ 2,148	
Postage and Shipping	664	
Printing	1,268	
<b>Total Office Expense</b>		<b>\$ 4,080</b>

## Education:

Manager Meetings	\$ -	
Conferences	1,098	
Subscriptions	3,593	
<b>Total Education</b>		<b>\$ 4,691</b>

## Miscellaneous:

Insurance	\$ 54,162	
Supplies & Furniture	1,049	
Bank Fees	14,225	
Other Miscellaneous <sup>(1)</sup>	(58,696)	
<b>Total Miscellaneous</b>		<b>\$ 10,740</b>

<b>Total Administrative Expenses</b>		<b>\$ 923,242</b>
--------------------------------------	--	-------------------

<sup>(1)</sup> Consists primarily of OPEB management costs reimbursed by Arlington County and Arlington County Public Schools

## SUPPLEMENTAL INFORMATION

JUNE 30, 2021

### SCHEDULE OF INVESTMENT & CONSULTANT EXPENSES

#### Investment Expenses

Investment Manager Fees	\$ 8,155,795
Security Lending Fees	40,213
Custody Fees	<u>121,566</u>
<b>Total Investment Expenses</b>	<b><u>\$ 8,317,574</u></b>

#### Other Consultant Expenses

General Consultant	\$ 626,575
Alternative Investment Consultant	500,000
<b>Total Other Consultant Expenses</b>	<b><u>\$ 1,126,575</u></b>

# Investment Section

ARLINGTON  
VIRGINIA

**ARLINGTON COUNTY  
EMPLOYEES' RETIREMENT SYSTEM**

## Investment Section

---



## 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 that was verified by the System's consultant, Windmark Investment Partners (WIP). 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. For all functions other than return data, WIP is an advisory consultant.

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
  - A 15% cap on illiquid investment strategies restricting new commitments that would drive the Fund's total exposure to illiquid strategies above this ceiling
  - 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 10/1/07		
<b>Equities</b>	<i>Russell 3000</i>	40.0%
	<i>MSCI ACWI ex-US</i>	17.5%
<b>Fixed Income</b>	<i>Barclays Universal</i>	39.0%
	<i>Barclays TIPS</i>	1.5%
<b>Cash</b>	<i>90 Day T-Bills</i>	2.0%
		100.0%

# Investment Section

## 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	2017	2018	2019	2020	2021
<u>Investment Performance (net of fees)</u>								
Total Fund <sup>(1)</sup> (Benchmark)	9.3%	12.2%	13.5%	12.7%	7.8%	6.8%	6.6%	28.3%
Domestic Equities (Russell 3000)	11.6%	14.3%	15.3%	15.3%	10.2%	11.0%	0.7%	37.1%
Global Equities (MSCI AC World)	16.1%	24.1%	25.1%	26.9%	18.3%	3.1%	22.7%	55.0%
International Equities (MSCI AC World ex-US)	6.2%	10.4%	8.0%	22.7%	5.9%	-5.8%	-7.3%	44.3%
Fixed Income (Fixed Income)	3.7%	3.4%	4.7%	2.5%	0.3%	6.9%	6.0%	1.6%
<u>Benchmark Performance</u>								
Total Fund <sup>(2)</sup>	8.5%	10.7%	11.8%	11.1%	7.1%	7.5%	5.5%	23.2%
Russell 3000	14.7%	17.9%	18.7%	18.5%	14.8%	9.0%	6.5%	44.2%
MSCI AC World	9.9%	14.6%	14.6%	18.8%	10.7%	5.7%	2.1%	39.3%
MSCI AC World ex-US	5.4%	11.1%	9.4%	20.5%	7.3%	1.3%	-4.8%	35.7%
Fixed Income <sup>(3)</sup>	3.7%	3.4%	5.5%	0.9%	-0.3%	8.0%	7.9%	1.3%
CPI + 3.75% Annualized <sup>(4)</sup>	5.5%	6.2%	6.3%	5.4%	6.6%	5.4%	4.4%	9.1%
Actuarial Assumed Rate of Return				6.75%	6.75%	6.75%	6.75%	6.75%

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

<sup>(2)</sup> 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

<sup>(3)</sup> Weights fixed income benchmark components to 100%

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

## Investment Performance and Activity

### Overview

Global equity markets continued the historic rally from lows set in March 2020. Markets were supported by recovering earnings projections, driven by massive monetary and fiscal stimulus from central banks and governments across the globe and optimism around coronavirus treatments and vaccines during the first half of the fiscal year. The second half of the fiscal year continued the momentum supported by rising economic and earnings growth forecasts, progress in vaccine rollouts and additional fiscal stimulus in the US. However, concerns emerged at the end of the fiscal year over the trajectory of economic growth, inflation, monetary, fiscal policy, and an uptick in COVID cases and variants. The recovery continued to progress but is fragile given the risks to the continued economic rebound coupled with persistent high equity valuations resulting in more volatility ahead.

For the fiscal year ended June 30, 2021 the System gross return of 28.5% (net return of 28.3%) compared to a benchmark return of 23.2%. This performance is above the 26.9% median return of the TUCS Public Plan Universe, placing the System in the 29<sup>th</sup> percentile of public plans for the year. Over the long term, the System outperformed its benchmarks and ranks in the top third of public fund peers.

Contributing to the System's fiscal year results was the underweight fixed income and overweight equity relative to the policy benchmark and strong relative results of the equity portfolio. The table below summarizes key drivers of the System's relative performance.

	Policy Benchmark	Sector Allocation	Style Selection	Active Management	Total Fund
<b>Investment Performance</b>	<b>23.2%</b>	<b>3.7%</b>	<b>-0.7%</b>	<b>2.1%</b>	<b>28.3%</b>
<b>Value Added or Lost</b>					
<i>Fixed Income</i>		2.7%	0.1%	0.1%	
<i>US Equity</i>		1.3%	-1.0%	2.0%	
<i>International Equity</i>		0.1%	0.2%	0.0%	
<i>Other/Unallocated</i>		-0.4%	0.0%	0.0%	

Source: Windmark Investment Partners

As of June 30, 2021, the System was in compliance with its investment policy guidelines as follows:

- Fixed income investments and cash equivalents totaled 29.9% of assets.
- The total exposure (funded and unfunded commitments) of illiquid investments is 9.1% of assets.
- Derivative strategies were not in use.

# Investment Section

---

## **Investment Activity and Details**

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

### **Equity**

As of June 30, 2021, the System had 64.5% 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 third quarter of 2020, the Board trimmed global growth equity funds and moved proceeds to a value index and actively managed value mandates. In the first quarter of 2021, the Board reduced global growth equity funds and moved proceeds to fixed income.

For the fiscal year ended June 30, 2021 the domestic equity allocation posted a 37.0% return, the international equity portfolio gained 43.9% return, and the global equity mandates returned 53.0%. The total equity allocation net return was 43.2% for the year compared to a blended equity benchmark of 41.6%.

### **Fixed Income & Cash**

As of June 30, 2021, the System held 29.9% 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 \$36.8 million from these accounts during the fiscal year.

For the fiscal year ended June 30, 2021, the fixed income and cash investments posted a 1.6% return, above the blended benchmark return of 1.3%.

### **Alternative Investments**

The alternative investment category includes real estate, real assets and private equity. The total exposure of these alternative investments, totaled 9.1% of assets.

The System met its commitments to alternative investments during the year. At June 30, 2021, 65.2% of the System's total \$328.0 million in commitments were funded.

The following table summarizes the alternative investments as of June 30, 2021:

(millions)	Vintage Year	Total Commitment	Funded	Remaining Commitment
Vision Ridge III	2021	\$ 15.0	\$ -	\$ 15.0
Peppertree VIII	2020	15.0	8.0	7.0
Middleground III	2021	25.0	-	25.0
Marcus Capital III	2020	25.0	4.1	20.9
JFL Equity Investors IV	2016	15.0	14.4	0.6
JFL Equity Investors V	2020	15.0	7.1	7.9
Gallant Partners I	2018	15.0	4.3	10.7
Franklin Park Venture 2015	2015	15.0	14.2	0.8
Franklin Park Venture 2017	2017	15.0	9.0	6.0
BVIP Fund VIII	2012	15.0	13.6	1.4
BVIP Fund IX	2017	15.0	13.2	1.8
BVIP Fund X	2020	15.0	2.9	12.1
Bison Fund V	2017	15.0	12.8	2.2
Altaris Health Partners III	2014	15.0	16.3	(1.3)
Altaris Health Partners IV	2018	15.0	11.5	3.5
Abbott ACE IV	2001	50.0	49.7	0.3
Abbott ACE V	2005	8.0	7.7	0.3
Abbott ACE VI	2008	25.0	24.9	0.1
Total		\$ 328.0	\$ 213.7	\$ 114.3

The System's remaining commitments to these alternative investments total \$20.9 million for real estate, \$7M for real assets, and \$86.4 million for private equity. The System made \$30.3 million in contributions and received \$34.0 million in distributions for a net cash flow of \$3.7 million for the fiscal year. The System has sufficient liquid assets to meet funding commitments.

The alternative investments portfolio returned 44.5% for the fiscal year.

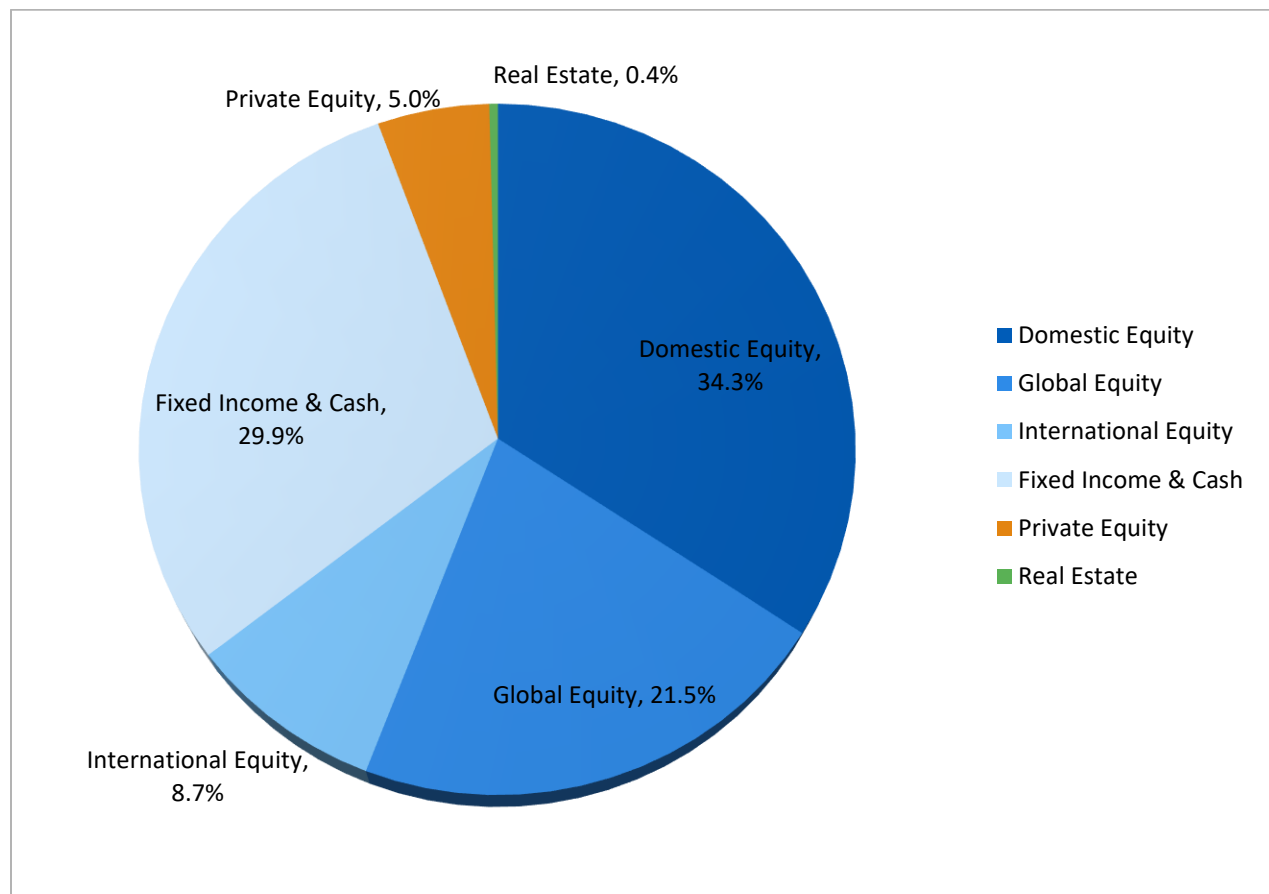
## Investment Section

---

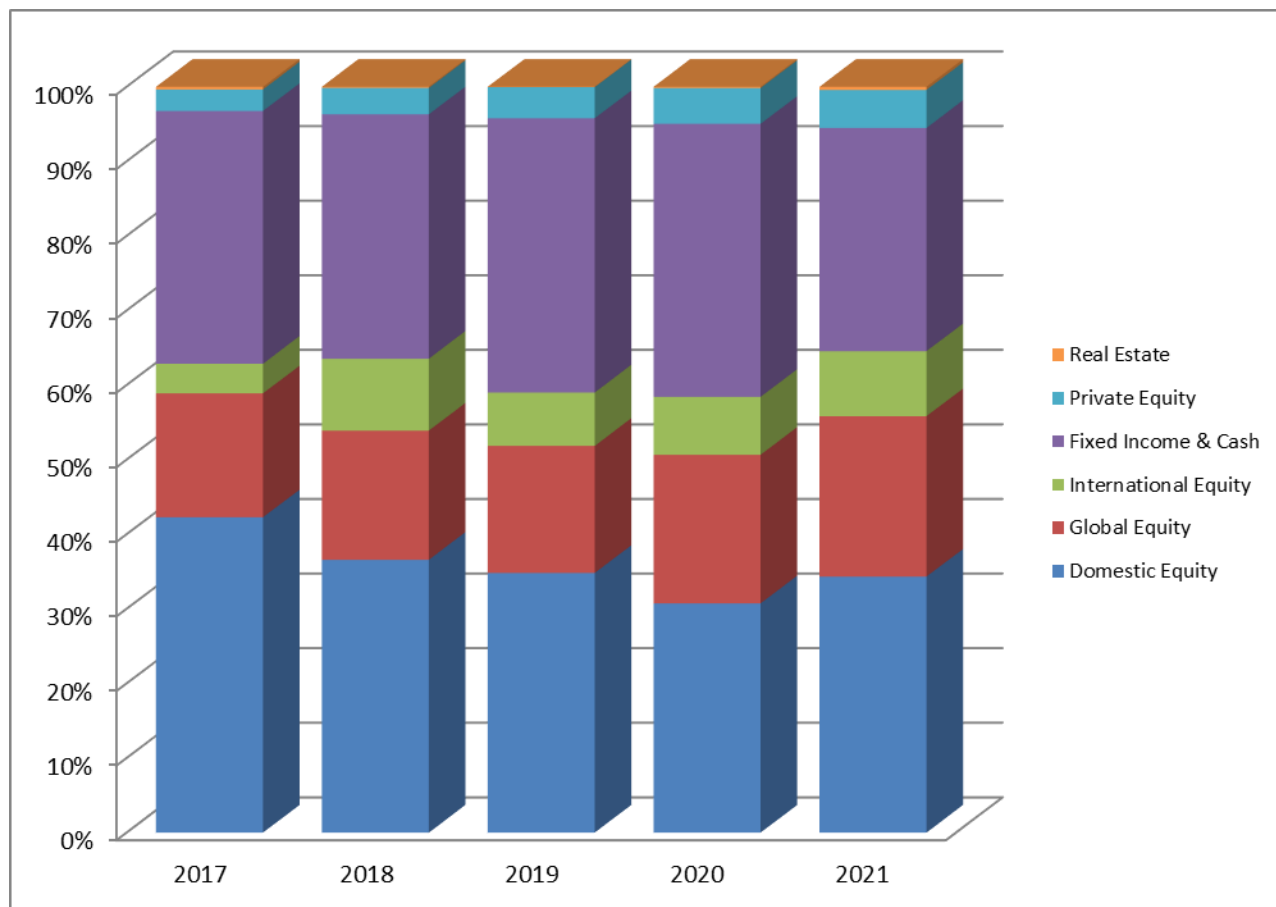
### Arlington County Employees' Retirement System Asset Allocation (As of June 30, 2021)

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, 2021. 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)	2017	2018	2019	2020	2021
Domestic Equity	\$918.2	\$841.8	\$839.5	\$777.0	\$1,094.2
Global Equity	\$360.9	\$398.6	\$410.7	\$503.5	\$685.6
International Equity	\$86.3	\$221.7	\$172.7	\$196.2	\$277.9
Fixed Income & Cash	\$736.1	\$753.9	\$886.7	\$925.2	\$954.3
Private Equity	\$62.7	\$81.5	\$100.6	\$121.4	\$162.4
Real Estate	\$7.7	\$3.5	\$1.1	\$4.1	\$13.4
	\$2,171.9	\$2,301.0	\$2,411.4	\$2,527.4	\$3,187.8
Domestic Equity	42.3%	36.6%	34.8%	30.7%	34.3%
Global Equity	16.6%	17.3%	17.0%	19.9%	21.5%
International Equity	4.0%	9.6%	7.2%	7.8%	8.7%
Fixed Income & Cash	33.8%	32.8%	36.8%	36.6%	29.9%
Private Equity	2.9%	3.5%	4.2%	4.8%	5.2%
Real Estate	0.4%	0.2%	0.0%	0.2%	0.4%
	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.

## Investment Section

---

---

**Arlington County Employees' Retirement System  
Investment Managers and Strategy Mandate  
(As of June 30, 2021)**

<b>Manager</b>	<b>Assignment</b>	<b>Fiscal Year Retained</b>
<b>Domestic Equities</b>		
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
<b>International and Global Equities</b>		
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
<b>Alternatives</b>		
Abbott Capital	Private Equities	2001
Altaris Health Partners	Private Equities	2014
Arsenal Real Estate	Opportunistic Real Estate	2006
Bison Capital	Private Equities	2017
BV Investment Partners	Private Equities	2015
Franklin Park	Venture Private Equity	2015
Gallant Partners	Private Equities	2019
JFL Equity Partners	Private Equities	2016
Marcus Partners	Real Estate	2019
Middleground Partners	Private Equities	2021
Peppertree Partners	Infrastructure	2020
Vision Ridge Partners	Private Equities	2021
<b>Fixed Income and Cash</b>		
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<sup>(1)</sup> (excludes investments in pooled vehicles)**

<b>Equities</b>	<b>Shares</b>	<b>Fair Value (\$)</b>	<b>% of Fund</b>
AMAZON	8,974	\$ 30,871,996	0.97%
ALPHABET INC	12,074	30,261,308	0.95%
FACEBOOK	76,342	26,544,877	0.83%
NVIDIA CORP	29,927	23,994,593	0.75%
MICROSOFT CORP	81,790	22,156,911	0.70%
UNITED HEALTH GROUP	39,024	15,626,771	0.49%
TARGET CORP	60,977	14,740,580	0.46%
MODERNA INC	62,065	14,584,034	0.46%
BANK OF AMERICA	306,801	12,649,405	0.40%
PHILIP MORRIS	126,222	12,509,862	0.39%
ALIBABA	320,398	12,477,082	0.39%
ILLUMINA INC	26,189	12,392,897	0.39%
VISA INC	51,659	12,078,907	0.38%
ARCELORMITTAL	379,947	11,801,154	0.37%
EXXON MOBIL	184,488	11,637,503	0.37%
MORGAN STANLEY	126,426	11,592,000	0.36%
CHARTER COMMUNICATIONS	15,824	11,416,225	0.36%
TENCENT	146,100	10,986,872	0.34%
TESLA	15,727	10,689,642	0.34%
MEITUAN	257,800	10,636,198	0.33%
ASML HOLDINGS	12,670	8,712,302	0.27%
ADOBE SYSTEMS	14,537	8,513,449	0.27%
OCCIDENTAL PETROLEUM	268,653	8,400,779	0.26%
PINDUODUO INC	65,970	8,379,509	0.26%
PELOTAN	67,175	8,331,044	0.26%
<b>Equities Total</b>		<u><u>\$ 361,985,899</u></u>	<b>11.36%</b>

<b>Fixed Income</b>	<b>Face Value (\$)</b>	<b>Fair Value (\$)</b>	<b>% of Fund</b>
FNMA	54,707,828	\$ 45,233,294	1.42%
FHLMC	23,907,032	22,335,382	0.70%
US TREASURY	22,700,000	22,051,188	0.69%
CITIGROUP	5,296,259	5,136,716	0.16%
JP MORGAN	6,111,874	4,572,709	0.14%
ACE SECS CORP	8,116,084	4,511,548	0.14%
GNMA	33,289,809	4,189,905	0.13%
SECURITIZED ASSET	10,213,007	4,129,971	0.13%
CHL MORTGAGE PASS THRU	5,557,587	3,843,821	0.12%
FREDDIE MAC	2,975,227	3,222,185	0.10%
ALTERNATIVE LOAN TR	3,988,615	3,144,428	0.10%
ARGENT SECS INC	7,566,556	2,946,643	0.09%
MORGAN STANLEY	7,795,046	2,266,685	0.07%
AJAX MTG	2,146,730	2,161,496	0.07%
ANGEL OAK MORTGAGE	2,000,000	1,997,357	0.06%
WASHINGTON MUTUAL	3,109,555	1,460,332	0.05%
WELLS FARGO	11,302,857	1,438,541	0.05%
STRUCTURED ASSET	1,882,259	1,424,293	0.04%
PRPM	1,295,100	1,307,494	0.04%
INDYMAC	1,489,864	1,307,309	0.04%
CWALT INC	1,496,583	1,139,127	0.04%
LEGACY MTG	1,059,318	1,065,171	0.03%
CPS AUTO	1,000,000	992,758	0.03%
VIBRANT	993,523	992,286	0.03%
BANK MORTGAGE PASS THRU	9,305,672	931,556	0.03%
<b>Fixed Income Total</b>		<u><u>\$ 143,802,195</u></u>	<b>4.51%</b>

<sup>(1)</sup> 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 \$263,588 and the average commission rate paid was 0.4 cents per share. The following is a list of brokers who received commissions of \$5,000 or more during fiscal year 2021. A complete schedule of all commissions paid is available from the Retirement Office.

Broker	Number of Shares	Total Commission	Commission Per Share (\$ per share)
Bank of America	395,299	\$10,513	0.027
Citigroup	968,129	15,534	0.016
CLSA	13,181,359	5,823	0.000
Credit Suisse	9,480,955	22,712	0.002
CSFB	403,920	5,265	0.013
Goldman Sachs	1,260,962	18,093	0.014
JP Morgan	787,074	18,908	0.024
Jefferies	3,860,722	18,292	0.005
Merrill Lynch	447,202	8,550	0.019
MKM Partners	535,218	5,357	0.010
Morgan Stanley	3,338,999	35,240	0.011
National Financial Services	1,960,961	14,708	0.008
Raymond James	594,261	11,159	0.019
Sanford Bernstein	8,171,576	11,176	0.001
UBS	224,080	7,821	0.035

# Actuarial Section

ARLINGTON  
VIRGINIA

## ARLINGTON COUNTY EMPLOYEES' RETIREMENT SYSTEM





*Classic Values, Innovative Advice.*

*Via Electronic Mail*

September 28, 2021

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 Comprehensive Annual 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, 2021, 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 20.6% of pay for the 2021-22 plan year, which meets the funding objective for this fiscal year.

The County's contribution appropriated for the fiscal year ended June 30, 2021 was determined based on the results of the June 30, 2019 valuation. The County's contribution rate was 20.9% of pay, which equated to contributions of \$59.7 million.

As of June 30, 2021, the System's actuarial liability was 108.4% funded based on the Actuarial Value of Assets. The actuarial liability was 125.5% 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.

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. In our opinion, the actuarial assumptions used in the valuation are reasonable both individually and in aggregate. Future results may differ significantly from the current results due to such factors as the following:

[www.cheiron.us](http://www.cheiron.us) 1.877.CHEIRON (243.4766)

Board of Trustees  
Arlington County Employees' Retirement System  
September 28, 2021  
Page 2

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 Comprehensive Annual 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 Comprehensive Annual Financial Report based on the June 30, 2021 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 Comprehensive Annual 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, 2021 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 Comprehensive Annual Financial Report based on the June 30, 2021 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 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



Board of Trustees  
Arlington County Employees' Retirement System  
September 28, 2021  
Page 3

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, FSA, EA, MAAA  
Principal Consulting Actuary



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



### **Actuarial Assumptions, Methods and Summary of Valuation Results**

#### **Valuation Method and Asset Value**

An actuarial valuation is performed annually. At June 30, 2021, the date of the actuarial valuation used for fiscal year 2021 reporting, the market value of System assets was \$3,187.9 million compared to \$2,527.2 million in assets at June 30, 2020.

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, 2021 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, 2021 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, 2021 was \$2,754.4 million, which is 86.4% 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 (\$213.5) million as of June 30, 2021 due to Actuarial Value of assets being larger than the Actuarial Liability.

The table below summarizes, at June 30, 2021, the actuarial liabilities, both funded and unfunded, by employee type and for the total System.

	<u>Liabilities (in millions of \$)</u>			
	<u>General</u>	<u>School</u>	<u>Uniformed</u>	<u>Total</u>
Present Value of Future Benefits				
Active Members	\$796.9	\$1.1	\$690.2	\$1,488.2
Retired Member and Beneficiaries	682.1	68.8	529.2	1,280.1
Disabled Members	31.7	0.7	122	154.4
Vested Deferred Members	43.9	0.3	16.6	60.8
DROP Members	<u>49.9</u>	<u>0.3</u>	<u>76.5</u>	<u>126.7</u>
Total	\$1,604.5	\$71.2	\$1,434.5	\$3,110.2
Normal Cost Rate	12.0%	0.0%	32.3%	N/A
Present Value of Future Payroll	\$1,756.9	\$0.0	\$699.9	\$2,456.8
Present Value of Future Employer Costs	\$210.8	\$0.0	\$226.1	\$436.9
Present Value of Future Member Contributions	\$73.3	\$0.0	\$59.1	\$132.4
Actuarial Liability	\$1,320.4	\$71.2	\$1,149.3	\$2,540.9
Actuarial Value of Assets	\$1,433.9	\$71.2	\$1,249.3	\$2,754.4
Unfunded Actuarial Liability	(\$113.5)	\$0.0	(\$100.0)	(\$213.5)

Source: June 30, 2021 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, 2021 Actuarial Valuation reflects the County's blended (General and Uniformed) contribution rate of 20.8% for fiscal year 2023. This blended contribution rate is comprised of a normal cost rate, including administrative expenses, of 17.8% 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 2023 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 2023:

	<u>Employer Contribution Rate as a Percentage of Payroll</u>	
	<u>General</u>	<u>Uniformed</u>
Normal Cost	16.0%	39.8%
Member Contribution Rate	4.0%	7.5%
Employer Normal Cost	12.0%	32.3%
Expense Loading as Percentage of Payroll	0.7%	0.7%
County Normal Cost Plus Expenses	12.7%	33.0%

Source: June 30, 2021 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, 2021, the date of the actuarial valuation, was 3,516, a small decrease from 3,530 at June 30, 2020.

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 used with the June 30, 2019 valuation.

During the fiscal year 2021, the financial markets performed greater than expectation. The actual net investment return, on a market value basis, was approximately 28.3% which is more than the actuarial rate of return assumption of 6.75% for that period. The market value of System assets increased \$660.7 million in 2021. On an actuarial basis, System assets increased \$261.6 million.

On the liability side, the System had a \$77.8 million increase in actuarial liabilities. The liabilities increased by \$107.2 million due to normal annual liability growth which were offset by \$29.4 million due to the System's actual experience gain.

### **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.

#### **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<br>(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

#### **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

Age	Chapter 21		Chapter 46	
	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	<u>Male</u>		<u>Female</u>	
	Early	Unreduced	Early	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

Age	Chapter 21		Chapter 46	
	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

Age	Male		Female	
	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. Demographic Assumptions – School Board Members**

### **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

Age	Males Years of Service					
	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

Age	Females Years of Service					
	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 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:  $2.5\% \times \text{years of creditable service for up to 20 years} + 2.0\% \times \text{years of creditable service beyond 20 years} \times \text{average final salary} = \text{annual retirement benefit}$ . 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:  $2.125\% \times \text{credited service} \times \text{average final salary} = \text{annual retirement benefit}$ . 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.  $1.7\% \times \text{all years of creditable service} \times \text{new average final salary}$ , OR
2.  $1.5\% \times \text{years of creditable service prior to January 3, 2009} \times \text{old average final salary} + 1.7\% \times \text{years of creditable service after January 3, 2009} \times \text{new avg. final salary}$ .

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

1.  $2.5\% \times \text{years of creditable service prior to January 4, 2009} \times \text{new average final salary} \text{ plus } 2.7\% \times \text{years of creditable service on/after January 4, 2009} \times \text{new average final salary}$ , OR
2.  $2.7\% \times \text{years of creditable service on/after January 4, 2009} \times \text{new average final salary} \text{ plus old average final salary times } 2.0\% \text{ times years of service prior to January 4, 2009}$ . 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:  $1.5\% \times \text{years of creditable service} \times \text{average final salary, including overtime} = \text{annual retirement benefit}$  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.

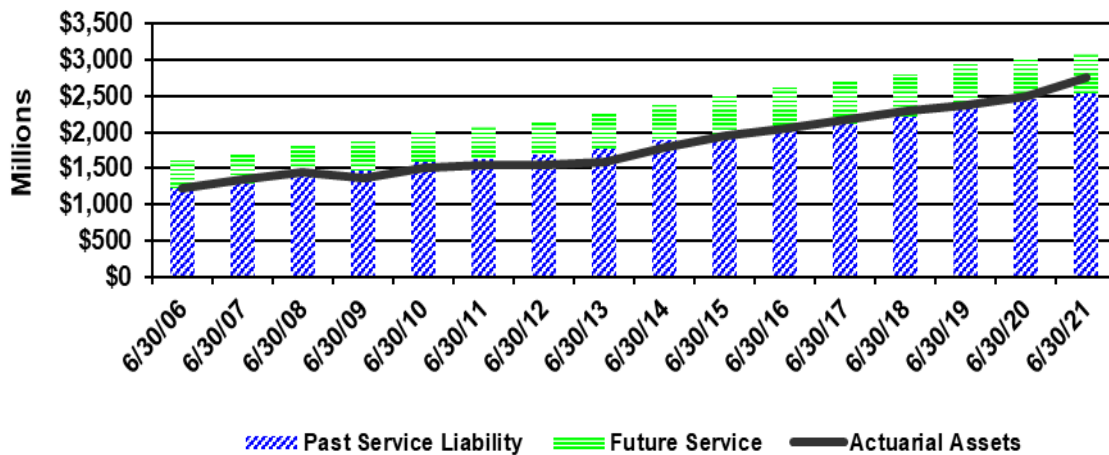
A Deferred Retirement Option Program (DROP) was added effective January 1, 2002, for all Chapters. DROP is a voluntary program that provides a way for employees to continue to work for the County in their present or a similar capacity, earn a salary, and receive a portion of their retirement benefits 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, 2021, the ratio of actuarial assets to liabilities is 108.4%, up from 101.2% in the prior year's Actuarial Valuation due primarily to favorable asset experience.

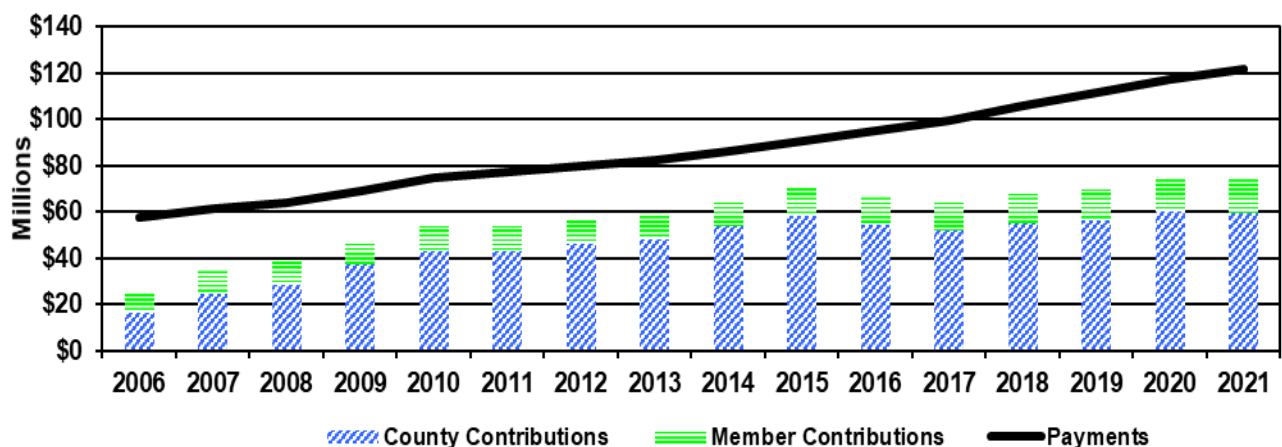
**Chart A: ASSETS / LIABILITIES**



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.

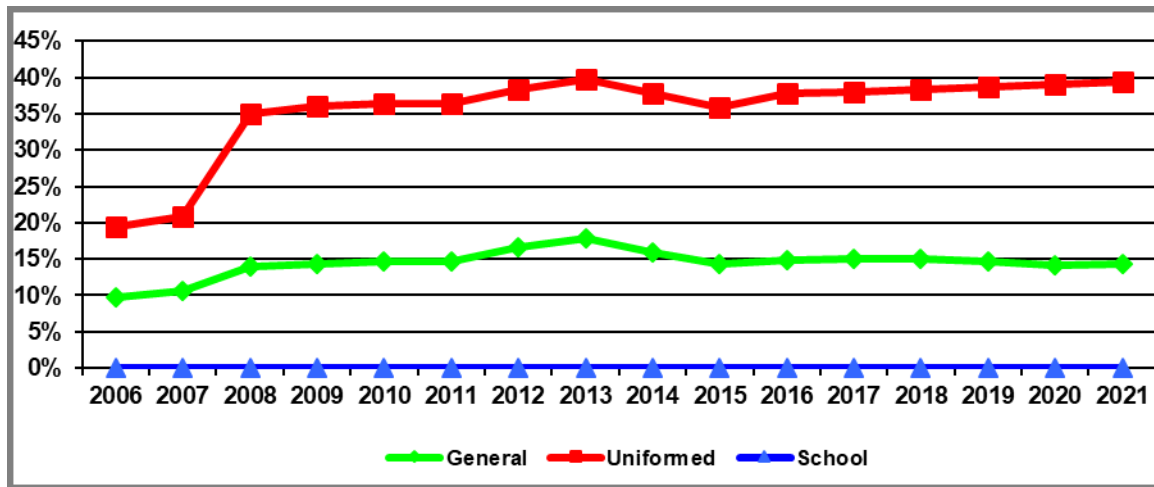
**Chart B: CASH FLOWS (\$ in Millions)**



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
<u>General Employees</u>						
Chapter 21		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%
		6/30/2015	7	639,694	91,385	25%
		6/30/2014	11	806,320	73,302	0%
		6/30/2013	12	880,596	73,383	14%
		6/30/2012	17	1,097,631	64,567	-14%
Chapter 46		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	211,822,452	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%
		6/30/2015	2,675	189,852,542	70,973	4%
		6/30/2014	2,664	181,610,323	68,172	5%
		6/30/2013	2,661	172,528,398	64,836	4%
		6/30/2012	2,678	166,385,460	62,130	4%
<u>School Board Employees</u>						
Chapter 35		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%
		6/30/2015	28	3,090,658	110,381	12%
		6/30/2014	34	3,348,649	98,490	-3%
		6/30/2013	43	4,376,035	101,768	2%
		6/30/2012	56	5,561,923	99,320	18%
<u>Uniformed Employees</u>						
Chapter 21		6/30/2021	0	\$ -	N/A	N/A
		6/30/2020	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%
		6/30/2015	1	183,717	183,717	7%
		6/30/2014	1	171,978	171,978	4%
		6/30/2013	1	165,786	165,786	16%
		6/30/2012	2	286,129	143,065	15%
Chapter 46		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%
		6/30/2015	822	69,747,061	84,850	8%
		6/30/2014	845	66,565,878	78,776	4%
		6/30/2013	833	63,361,907	76,065	6%
		6/30/2012	856	61,548,430	71,902	-1%

Source: Actuarial Reports - Appendix A, Table A-1

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

*All \$ amounts are millions*

Valuation Date	<u>Aggregate Accrued Liability For:</u>					<u>Portion of Accrued Liabilities Covered by Value of Assets</u>		
	(1)		(2)		(3)	(1)	(2)	(3)
	Active Employee Contrib.	Inactive* Employees	Active Employer Contrib.	Actuarial Liability	Actuarial Value of Assets			
6/30/2012	\$ 325.1	\$ 925.9	\$ 438.9	\$ 1,689.9	\$ 1,538.7	100%	100%	66%
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%

Source: June 30, 2021 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**

<u>Type of Activity</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>
Investment Income	\$92.3	\$61.9	(\$18.0)	\$35.1	\$16.2	(\$32.7)	(\$7.9)	\$142.3
Combined Liability Experience	<u>11.0</u>	<u>16.2</u>	<u>47.3</u>	<u>27.1</u>	<u>13.7</u>	<u>31.1</u>	<u>30.1</u>	<u>29.4</u>
Gain (or Loss) During Year from Financial Experience	\$103.3	\$78.1	\$29.3	\$62.2	\$29.9	(\$1.6)	\$22.2	\$171.7
Non-Recurring Items	<u>(29.4)</u>	<u>0.0</u>	<u>(27.2)</u>	<u>0.0</u>	<u>(3.1)</u>	<u>(112.6)</u>	<u>0.0</u>	<u>0.0</u>
Compositive Gain (or Loss) During Year	\$73.9	\$78.1	\$2.1	\$62.2	\$26.8	(\$114.2)	\$22.2	\$171.7



**RETIREMENT ALLOWANCES ADDED TO AND REMOVED FROM ROLLS**

Plan	Year Ended	No.	Added to Rols Annual Allowances	No.	Removed from Rols Annual Allowances	Year-End Total	On Rols at Year End Annual Allowances	% Increase Allowance	Average Annual Allowance
Chapter 21	6/30/2021	8	\$965,690	51	\$1,289,435	1055	\$43,668,879	-0.7%	\$41,392
	6/30/2020	9	\$932,312	59	\$1,535,299	1098	\$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
	6/30/2012	14	\$1,147,753	57	\$1,038,305	1,471	\$47,158,173	0.2%	\$32,059
Chapter 35	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	\$23,283	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
	6/30/2012	18	\$236,125	49	\$240,554	990	\$9,341,427	0.0%	\$9,436
Chapter 46	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
	6/30/2012	108	\$3,511,334	17	\$167,182	1,218	\$23,632,199	16.5%	\$19,402

Source: Supplemental Data Provided by Actuary

**Schedule of Employer's Contributions**  
**(\$ in millions)**

Fiscal Year Ended	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Actuarially Determined Contribution	\$ 59.7	\$ 59.9	\$ 56.7	\$ 54.9	\$ 51.8	\$ 54.5	\$ 58.2	\$ 53.7	\$ 48.0	\$ 46.3
County Contributions in Relation to the Actuarially Determined Contributions	59.7	59.9	56.7	54.9	51.8	54.5	58.2	53.7	48.0	46.3
Contribution Deficiency/(Excess)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Covered Payroll	\$ 285.6	\$ 285.2	\$ 270.0	\$ 261.4	\$ 236.5	\$ 248.9	\$ 243.5	\$ 252.4	\$ 231.1	\$ 234.9
Contributions as a Percentage of Covered Payroll	20.9%	21.0%	21.0%	21.0%	21.9%	21.9%	23.9%	21.3%	20.8%	19.7%

Notes to Schedule:

Valuation Date

June 30, 2019

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/seniority component which vary by year of service and are compounded annually

Mortality

General and Uniformed

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.

School

RP-2000 Employee Mortality with White Collar adjustment with generational improvements using Scale BB for active and non-disabled inactive members; no deaths assumed to be service-connected. RP-2000 Disabled Mortality with generational mortality improvements using Scale AA for disabled lives.

# 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

## Statistical Section

### ACTIVE EMPLOYEE MEMBERSHIP IN RETIREMENT SYSTEM

AS OF JUNE 30, 2021

GROUP	CHAPTER			TOTAL MEMBERSHIP
	21	35	46	
General County	4	0	2,587	2,591
Deputy Sheriffs	0	0	220	220
Firefighters	0	0	317	317
Police Officers	0	0	327	327
School	0	4	57	61
<b>TOTALS</b>	<b>4</b>	<b>4</b>	<b>3,508</b>	<b>3,516</b>

### HISTORY OF ACTIVE EMPLOYEE MEMBERSHIP

#### IN RETIREMENT SYSTEM

JUNE 30, 2021

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>CHAPTER 21</b>										
General County	14	9	8	6	4	4	4	4	4	4
Police Officers	1	1	1	1	1	1	1	1	0	0
Firefighters	1	0	0	0	0	0	0	0	0	0
Deputy Sheriffs	0	0	0	0	0	0	0	0	0	0
School	3	3	3	1	1	1	1	0	0	0
<b>TOTAL</b>	<b>19</b>	<b>13</b>	<b>12</b>	<b>8</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>5</b>	<b>4</b>	<b>4</b>
<b>CHAPTER 35</b>										
School	56	43	34	28	23	17	11	8	5	4
General County	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>56</b>	<b>43</b>	<b>34</b>	<b>28</b>	<b>23</b>	<b>17</b>	<b>11</b>	<b>8</b>	<b>5</b>	<b>4</b>
<b>CHAPTER 46</b>										
General County	2,525	2,520	2,535	2,563	2,607	2,626	2,596	2,570	2,616	2,587
Police Officers	345	336	347	345	339	329	316	323	318	327
Firefighters	302	293	294	278	283	295	300	328	322	317
Deputy Sheriffs	210	205	204	199	204	211	214	211	209	220
School	153	140	128	112	104	93	88	76	65	57
<b>TOTAL</b>	<b>3,535</b>	<b>3,494</b>	<b>3,508</b>	<b>3,497</b>	<b>3,537</b>	<b>3,554</b>	<b>3,514</b>	<b>3,508</b>	<b>3,530</b>	<b>3,508</b>
<b>GRAND TOTAL</b>	<b>3,610</b>	<b>3,550</b>	<b>3,554</b>	<b>3,533</b>	<b>3,566</b>	<b>3,577</b>	<b>3,531</b>	<b>3,521</b>	<b>3,539</b>	<b>3,516</b>

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 2021**

<b>Chapters 21 &amp; 46</b>	<b>SERVICE RETIREMENTS</b>	<b>DEFERRED RETIREMENT OPTION PLAN (DROP)</b>	<b>ORDINARY DISABILITY</b>	<b>SERVICE CONNECTED DISABILITY</b>	<b>TOTAL</b>
General County	64	34		1	99
Deputy Sheriffs	2	5			7
Firefighters	3	6		7	16
Police Officers	9	9			18
School	7	0			7
<b>TOTAL</b>	<b>85</b>	<b>54</b>	<b>0</b>	<b>8</b>	<b>147</b>

<b>Chapter 35</b>	<b>SERVICE RETIREMENTS</b>	<b>DEFERRED RETIREMENT OPTION PLAN (DROP)</b>	<b>ORDINARY DISABILITY</b>	<b>SERVICE CONNECTED DISABILITY</b>	<b>TOTAL</b>
General County					0
School		1			1
<b>TOTAL</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>

**HISTORY OF RETIREMENTS GRANTED  
YEAR ENDED JUNE 30**

	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
<b>CHAPTERS 21 &amp; 46</b>										
Service Retirements	49	73	74	81	74	77	74	57	78	85
DROP	54	49	52	68	67	74	71	55	48	54
Ordinary Disability	0	2	4	4	4	4	1	1	2	0
Service Connected Disability	12	3	4	4	2	2	3	4	5	8
	115	127	134	157	147	157	149	117	133	147
<b>CHAPTER 35</b>										
Service Retirements	12	14	12	14	13	13	6	2	3	0
DROP	2	0	0	0	0	1	0	0	0	1
Ordinary Disability	0	0	0	0	0	0	0	0	0	0
	14	14	12	14	13	14	6	2	3	1
<b>GRAND TOTAL</b>	<b>129</b>	<b>141</b>	<b>146</b>	<b>171</b>	<b>160</b>	<b>171</b>	<b>155</b>	<b>119</b>	<b>136</b>	<b>148</b>



# Statistical Section

## SUMMARY OF MONTHLY RETIREMENT ALLOWANCES RETIREES AND SURVIVORS AS OF JUNE 30, 2021

	Service Retirements		DROP		Ordinary Disability		Service Connected Disability		Total	
	#	Amount	#	Amount	#	Amount	#	Amount	#	Amount
<b>CHAPTER 21</b>										
General County	553	\$1,732,640	0	\$0	10	\$30,447	17	\$47,469	580	\$1,810,556
Deputy Sheriffs	13	\$43,699	0	\$0	0	\$0	3	\$7,104	16	\$50,803
Firefighters	133	\$564,601	0	\$0	0	\$0	40	\$141,437	173	\$706,038
Police Officers	184	\$729,836	1	\$12,048	4	\$6,743	37	\$135,113	226	\$883,740
School	93	\$196,442	1	\$4,627	4	\$7,674	3	\$7,550	101	\$216,293
<b>TOTAL</b>	<b>976</b>	<b>\$3,267,218</b>	<b>2</b>	<b>\$16,675</b>	<b>18</b>	<b>\$44,864</b>	<b>100</b>	<b>\$338,673</b>	<b>1,096</b>	<b>\$3,667,430</b>
<b>CHAPTER 46</b>										
General County	1,466	\$2,631,831	94	\$249,975	36	\$36,842	38	\$101,046	1,634	\$3,019,694
Deputy Sheriffs	109	\$439,728	10	\$59,445	1	\$816	19	\$61,651	139	\$561,640
Firefighters	107	\$567,675	20	\$141,268	0	\$0	58	\$277,248	185	\$986,191
Police Officers	163	\$820,133	20	\$147,172	0	\$0	25	\$98,412	208	\$1,065,717
School	258	\$205,769	1	\$3,525	22	\$11,944	1	\$1,857	282	\$223,095
<b>TOTAL</b>	<b>2,103</b>	<b>\$4,665,136</b>	<b>145</b>	<b>\$601,385</b>	<b>59</b>	<b>\$49,602</b>	<b>141</b>	<b>\$540,214</b>	<b>2,448</b>	<b>\$5,856,337</b>
<b>CHAPTER 35</b>										
General County	28	\$22,233	0	\$0	0	\$0	0	\$0	28	\$22,233
School	721	\$667,435	1	\$2,444	20	\$9,351	0	\$0	742	\$679,230
<b>TOTAL</b>	<b>749</b>	<b>\$689,668</b>	<b>1</b>	<b>\$2,444</b>	<b>20</b>	<b>\$9,351</b>		<b>\$0</b>	<b>770</b>	<b>\$701,463</b>
<b>GRAND TOTAL</b>	<b>3,828</b>	<b>\$ 8,622,022</b>	<b>148</b>	<b>\$ 620,504</b>	<b>97</b>	<b>\$ 103,817</b>	<b>241</b>	<b>\$ 878,887</b>	<b>4,314</b>	<b>\$ 10,225,230</b>

## HISTORY OF MONTHLY RETIREMENT ALLOWANCES YEAR ENDED JUNE 30

(\$ in thousands)		2012		2013		2014		2015		2016	
TYPE		#	Amount	#	Amount	#	Amount	#	Amount	#	Amount
Service		3,240	\$5,342	3,320	\$5,675	3,350	\$5,877	3,408	\$6,201	3,465	\$6,536
DROP		127	\$399	120	\$415	145	\$505	155	\$545	169	\$611
Ordinary Disability		141	\$124	137	\$126	133	\$123	129	\$122	129	\$124
Service Connected Disability		256	\$759	256	\$777	254	\$791	251	\$797	243	\$792
<b>TOTAL</b>		<b>3,764</b>	<b>\$6,624</b>	<b>3,833</b>	<b>\$6,993</b>	<b>3,882</b>	<b>\$7,296</b>	<b>3,943</b>	<b>\$7,665</b>	<b>4,006</b>	<b>\$8,063</b>
		2017		2018		2019		2020		2021	
TYPE		#	Amount	#	Amount	#	Amount	#	Amount	#	Amount
Service		3,544	\$6,861	3,632	\$7,301	3,693	\$7,692	3,767	\$8,149	3,828	\$8,622
DROP		192	\$707	190	\$746	183	\$723	159	\$646	148	\$621
Ordinary Disability		125	\$123	118	\$113	110	\$108	105	\$107	97	\$104
Service Connected Disability		241	\$790	239	\$796	240	\$818	240	\$844	241	\$879
<b>TOTAL</b>		<b>4,102</b>	<b>\$8,481</b>	<b>4,179</b>	<b>\$8,956</b>	<b>4,226</b>	<b>\$9,341</b>	<b>4,271</b>	<b>\$9,746</b>	<b>4,314</b>	<b>\$10,226</b>

**ADDITIONS & DEDUCTIONS**  
YEAR ENDED JUNE 30

<i>(millions)</i>	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>ADDITIONS</b>										
<b>Contribution Total</b>	\$ 57.3	\$ 59.4	\$ 65.6	\$ 70.4	\$ 66.7	\$ 64.5	\$ 67.8	\$ 69.7	\$ 74.6	\$ 74.4
Employer	46.3	48.0	53.7	58.2	54.4	51.8	54.9	56.7	59.9	59.6
Employee	11.0	11.4	11.9	12.2	12.3	12.7	12.9	13.0	14.7	14.8
<b>Net Investment Income</b>	<b>3.8</b>	<b>203.6</b>	<b>304.9</b>	<b>37.4</b>	<b>(1.3)</b>	<b>247.3</b>	<b>168.3</b>	<b>153.2</b>	<b>156.8</b>	<b>708.1</b>
Income & Appreciation	8.0	208.7	310.7	45.6	5.7	252.9	173.1	158.7	163.3	716.3
Less Investment Expense	(4.4)	(5.3)	(5.9)	(8.4)	(7.2)	(5.9)	(5.0)	(5.7)	(6.6)	(8.3)
Security Lending	0.2	0.1	0.1	0.2	0.2	0.3	0.2	0.2	0.2	0.1
<b>TOTAL ADDITIONS</b>	<b>\$ 61.1</b>	<b>\$ 263.0</b>	<b>\$ 370.5</b>	<b>\$ 107.7</b>	<b>\$ 65.4</b>	<b>\$ 311.8</b>	<b>\$ 236.2</b>	<b>\$ 222.9</b>	<b>\$ 231.4</b>	<b>\$ 782.5</b>
<b>DEDUCTIONS</b>										
<b>Benefit Payments</b>	\$ 77.4	\$ 81.5	\$ 85.3	\$ 88.9	\$ 94.0	\$ 98.7	\$ 104.2	\$ 109.6	\$ 114.6	\$ 119.2
Normal Retirement	41.1	45.3	47.9	50.4	53.0	57.8	61.6	67.0	71.7	76.9
Early Retirement	16.6	16.5	16.7	16.7	16.7	16.9	16.9	16.9	17.0	16.9
Death in Service	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
Duty Disability Retirement	9.0	9.2	9.3	9.4	9.7	9.3	9.5	9.6	10.1	10.2
Ordinary Disability	1.5	1.5	1.4	1.4	1.5	1.4	1.3	1.3	1.3	1.2
Survivor Payments	3.5	3.7	3.8	4.1	4.4	4.6	4.8	4.9	5.0	5.2
DROP	5.2	4.7	5.6	6.4	6.7	8.0	9.3	9.1	8.5	7.9
Other	0.4	0.4	0.4	0.4	1.9	0.5	0.6	0.6	0.6	0.7
<b>Refunds</b>	<b>1.5</b>	<b>1.1</b>	<b>1.0</b>	<b>1.8</b>	<b>1.3</b>	<b>0.9</b>	<b>0.8</b>	<b>1.2</b>	<b>1.1</b>	<b>0.7</b>
<b>Administrative Expenses</b>	<b>0.8</b>	<b>1.0</b>	<b>1.4</b>	<b>1.5</b>	<b>1.7</b>	<b>1.8</b>	<b>1.9</b>	<b>1.9</b>	<b>2.0</b>	<b>2.0</b>
<b>TOTAL DEDUCTIONS</b>	<b>\$ 79.7</b>	<b>\$ 83.6</b>	<b>\$ 87.7</b>	<b>\$ 92.2</b>	<b>\$ 97.0</b>	<b>\$ 101.4</b>	<b>\$ 106.9</b>	<b>\$ 112.7</b>	<b>\$ 117.6</b>	<b>\$ 121.9</b>

**PLAN NET POSITION**  
YEAR ENDED JUNE 30

<i>At Market (millions)</i>	2012	2013	2014	2015	2016
<b>Beginning</b>	<b>\$ 1,535.8</b>	<b>\$ 1,517.3</b>	<b>\$ 1,696.8</b>	<b>\$ 1,979.6</b>	<b>\$ 1,995.1</b>
Additions	61.1	263.0	370.5	107.7	65.4
Deductions	79.7	83.4	87.7	92.2	97.0
Net Change	(18.5)	179.6	282.8	15.5	(31.6)
<b>Year End</b>	<b>\$ 1,517.3</b>	<b>\$ 1,696.8</b>	<b>\$ 1,979.6</b>	<b>\$ 1,995.1</b>	<b>\$ 1,963.5</b>
	2017	2018	2019	2020	2021
<b>Beginning</b>	<b>\$ 1,963.5</b>	<b>\$ 2,173.9</b>	<b>\$ 2,303.1</b>	<b>\$ 2,413.3</b>	<b>\$ 2,527.2</b>
Additions	311.8	236.1	222.9	231.4	782.5
Deductions	101.4	106.9	112.7	117.5	121.9
Net Change	210.4	129.2	110.2	113.9	660.6
<b>Year End</b>	<b>\$ 2,173.9</b>	<b>\$ 2,303.1</b>	<b>\$ 2,413.3</b>	<b>\$ 2,527.2</b>	<b>\$ 3,187.9</b>

# Statistical Section

## CONTRIBUTION ANALYSIS YEAR ENDED JUNE 30

(Dollars in millions)		Group	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Estimated Covered Payroll			\$234.9	\$231.1	\$252.4	\$243.5	\$248.9	\$236.5	\$261.4	\$270.0	\$285.2	\$285.6
Employer Contribution: (% of Payroll)	A, D	14.2%	14.6%	16.6%	17.9%	15.9%	14.4%	14.9%	15.0%	15.1%	14.6%	
	B, C	36.5%	36.4%	38.4%	39.7%	37.8%	35.9%	37.9%	38.1%	38.4%	38.7%	
	E	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Total Employer Contribution			\$46.3	\$48.0	\$53.7	\$58.2	\$54.5	\$51.8	\$54.9	\$56.7	\$59.9	\$59.7
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%	4.0%
	B	6.6%	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%	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%	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%	4.0%
	B, C	7.5%	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%	0.0%
Total Employee Contribution			\$11.0	\$11.4	\$11.9	\$12.2	\$12.3	\$12.7	\$12.9	\$13.0	\$14.7	\$14.8
Employer/Employee Contribution			4.2	4.2	4.5	4.8	4.4	4.1	4.2	4.3	4.1	4.0
Unfunded Actuarial Liability			\$75.3	\$151.2	\$106.1	\$20.2	\$9.1	(\$58.0)	(\$96.4)	\$3.5	(\$29.7)	(\$213.5)

### 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

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Participant Data</b>										
Active Employees	3,610	3,550	3,554	3,533	3,566	3,576	3,531	3,521	3,539	3,516
Deferred Vested Members	326	358	500	548	559	584	631	665	693	706
Retirees	3,764	3,833	3,882	3,945	3,909	4,004	4,085	4,113	4,271	4,218
Retirees as a % of Active Employees	104.3%	108.0%	109.2%	111.7%	109.6%	112.0%	115.7%	116.8%	120.7%	120.0%
<b>Retirement Benefits Paid</b> (millions)	\$77.4	\$81.4	\$85.3	\$88.9	\$94.0	\$98.7	\$104.2	\$109.6	\$114.4	\$119.7
<b>Average Benefit Payment (\$/month)</b>										
Chapter 21	\$2,599	\$2,671	\$2,756	\$2,831	\$2,898	\$2,967	\$3,049	\$3,135	\$3,239	\$3,346
Chapter 35 (Supplement)	\$771	\$793	\$813	\$832	\$846	\$854	\$869	\$885	\$896	\$911
Chapter 46 <sup>(1)</sup>	\$1,559	\$1,659	\$1,741	\$1,842	\$1,952	\$2,033	\$2,132	\$2,210	\$2,286	\$2,392
<b>Investment Data</b>										
Net Assets, Market Value (millions)	\$1,517.3	\$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
Ratio: Net Assets/ Benefits Paid	19.6	20.8	23.2	22.4	20.9	22.0	22.1	22.0	22.1	26.6

(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.

# Statistical Section

## 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+
<b><u>Period 7/1/11 to 6/30/12</u></b>						
Average of Final Monthly Salaries	\$1,157	\$0	\$0	\$3,786	\$0	\$7,086
Average Monthly Benefit	\$169	\$0	\$0	\$2,115	\$0	\$5,344
Number of Current Retirees	1	0	0	2	0	1
<b><u>Period 7/1/12 to 6/30/13</u></b>						
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
<b><u>Period 7/1/13 to 6/30/14</u></b>						
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
<b><u>Period 7/1/14 to 6/30/15</u></b>						
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
<b><u>Period 7/1/15 to 6/30/16</u></b>						
Average of Final Monthly Salaries	\$0	\$0	\$4,880	\$0	\$0	\$5,791
Average Monthly Benefit	\$0	\$0	\$2,290	\$0	\$0	\$4,302
Number of Current Retirees	0	0	1	0	0	1
<b><u>Period 7/1/16 to 6/30/17</u></b>						
Average of Final Monthly Salaries	\$0	\$2,899	\$0	\$0	\$0	\$0
Average Monthly Benefit	\$0	\$810	\$0	\$0	\$0	\$0
Number of Current Retirees	0	1	0	0	0	0
<b><u>Period 7/1/17 to 6/30/18</u></b>						
Average of Final Monthly Salaries	\$0	\$0	\$0	\$4,907	\$0	\$0
Average Monthly Benefit	\$0	\$0	\$0	\$2,937	\$0	\$0
Number of Current Retirees	0	0	0	1	0	0
<b><u>Period 7/1/18 to 6/30/19</u></b>						
Average of Final Monthly Salaries	\$0	\$0	\$0	\$0	\$0	\$7,402
Average Monthly Benefit	\$0	\$0	\$0	\$0	\$0	\$4,627
Number of Current Retirees	0	0	0	0	0	1
<b><u>Period 7/1/19 to 6/30/20</u></b>						
Average of Final Monthly Salaries	\$0	\$0	\$0	\$0	\$0	\$16,976
Average Monthly Benefit	\$0	\$0	\$0	\$0	\$0	\$12,048
Number of Current Retirees	0	0	0	0	0	1
<b><u>Period 7/1/20 to 6/30/21</u></b>						
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+
<b><u>Period 7/1/11 to 6/30/12</u></b>						
Average of Final Monthly Salaries	\$1,676	\$0	\$4,798	\$0	\$7,466	\$8,800
Average Monthly Benefit	\$118	\$0	\$675	\$0	\$1,388	\$1,750
Number of Current Retirees	2	0	1	0	2	7
<b><u>Period 7/1/12 to 6/30/13</u></b>						
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
<b><u>Period 7/1/13 to 6/30/14</u></b>						
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
<b><u>Period 7/1/14 to 6/30/15</u></b>						
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
<b><u>Period 7/1/15 to 6/30/16</u></b>						
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
<b><u>Period 7/1/16 to 6/30/17</u></b>						
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
<b><u>Period 7/1/17 to 6/30/18</u></b>						
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
<b><u>Period 7/1/18 to 6/30/19</u></b>						
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
<b><u>Period 7/1/19 to 6/30/20</u></b>						
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
<b><u>Period 7/1/20 to 6/30/21</u></b>						
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

# Statistical Section

## 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+
<b><u>Period 7/1/11 to 6/30/12</u></b>							
Average of Final Monthly Salaries	\$4,581	\$4,824	\$4,589	\$4,915	\$5,715	\$7,507	\$7,113
Average Monthly Benefit	\$71	\$541	\$1,089	\$1,338	\$2,398	\$4,610	\$4,829
Number of Current Retirees	1	11	16	16	27	19	10
<b><u>Period 7/1/12 to 6/30/13</u></b>							
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
<b><u>Period 7/1/13 to 6/30/14</u></b>							
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
<b><u>Period 7/1/14 to 6/30/15</u></b>							
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
<b><u>Period 7/1/15 to 6/30/16</u></b>							
Average of Final Monthly Salaries	\$0	\$4,645	\$5,103	\$6,521	\$7,031	\$7,138	\$7,763
Average Monthly Benefit	\$0	\$494	\$1,073	\$2,099	\$3,553	\$4,490	\$4,846
Number of Current Retirees	0	26	23	13	16	51	27
<b><u>Period 7/1/16 to 6/30/17</u></b>							
Average of Final Monthly Salaries	\$4,251	\$5,787	\$6,422	\$5,937	\$6,141	\$7,370	\$6,993
Average Monthly Benefit	\$313	\$793	\$1,580	\$1,923	\$2,822	\$4,737	\$4,838
Number of Current Retirees	2	24	24	22	25	48	20
<b><u>Period 7/1/17 to 6/30/18</u></b>							
Average of Final Monthly Salaries	\$3,689	\$5,458	\$6,203	\$6,518	\$6,490	\$8,633	\$8,121
Average Monthly Benefit	\$798	\$524	\$1,264	\$1,931	\$2,799	\$5,098	\$4,961
Number of Current Retirees	5	19	14	22	18	30	19
<b><u>Period 7/1/18 to 6/30/19</u></b>							
Average of Final Monthly Salaries	\$3,689	\$5,458	\$6,203	\$6,518	\$6,429	\$8,633	\$8,121
Average Monthly Benefit	\$784	\$513	\$1,242	\$1,896	\$2,719	\$5,008	\$4,874
Number of Current Retirees	5	19	14	22	19	30	19
<b><u>Period 7/1/19 to 6/30/20</u></b>							
Average of Final Monthly Salaries	\$4,218	\$5,554	\$6,053	\$6,950	\$6,788	\$8,548	\$7,905
Average Monthly Benefit	\$198	\$686	\$1,638	\$2,173	\$2,875	\$5,071	\$4,518
Number of Current Retirees	2	18	21	25	27	24	24
<b><u>Period 7/1/20 to 6/30/21</u></b>							
Average of Final Monthly Salaries	\$4,144	\$6,851	\$6,665	\$7,774	\$8,015	\$7,778	\$8,032
Average Monthly Benefit	\$272	\$725	\$1,635	\$2,380	\$3,540	\$4,449	\$4,980
Number of Current Retirees	1	15	19	20	36	37	19

**SCHEDULE OF RETIRED MEMBERS BY TYPE OF BENEFIT**  
**CHAPTER 21 EMPLOYEES**  
**YEAR ENDED JUNE 30, 2021**

Amount of Monthly Benefit	Number of Retirees	Type of Retirement								Spousal Benefit Option			
		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>Opt1</u>	<u>Opt2</u>	<u>Opt3</u>	<u>Opt4</u>
Deferred	1	1								1			
\$1 - 250	13	7	2	2			1		1	13			
251 - 500	35	18	4	9			4			33	2		
501 - 750	30	9	4	13			4			26	1	1	2
751 - 1,000	43	8	6	17		3	4		5	41	1		1
1001 - 1,250	45	13	6	19	1	1	4		1	38	5		2
1,251 - 1,500	41	6	7	23	1	2	2			38	2		1
1,501 - 1,750	44	11	7	21	1	1	1		2	40	2	1	1
1,751 - 2,000	38	8	7	15	4	2	1		1	35	2	1	
Over 2,000	807	474	152	63	93	9	9	2	5	441	245	55	66
Totals	1,097	555	195	182	100	18	30	2	15	706	260	58	73

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%



# Statistical Section

## SCHEDULE OF RETIRED MEMBERS BY TYPE OF BENEFIT CHAPTER 35 EMPLOYEES YEAR ENDED JUNE 30, 2021

### Chapter 35

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	14	14								14			
\$1 - 250	101	32	28	9		7	24		1	96	2		3
251 - 500	100	41	35	15		4	3		2	96	2	1	1
501 - 750	104	35	44	14		6	4		1	89	5	1	9
751 - 1,000	125	31	85	4		2	3			94	14	6	11
1001 - 1,250	153	37	105	6		1	4			126	14	4	9
1,251 - 1,500	89	37	49	1			2			76	5	2	6
1,501 - 1,750	43	33	8				2			36	2		5
1,751 - 2,000	31	25	6							28	2		1
Over 2,000	24	22		1				1		21	1		2
Totals	784	307	360	50	0	20	42	1	4	676	47	14	47

Type of Retirement	
1 - Normal retirement	5 - Non-duty disability retirement
2 - Early retirement	6 - Vested benefit
3 - Survivor payment, retiree	7 - DROP
4 - Duty disability retirement	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, 2021**

**Chapter 46**

Amount of Monthly Benefit	Number of Retirees	Type of Retirement								Spousal Benefit Options			
		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>Opt1</u>	<u>Opt2</u>	<u>Opt3</u>	<u>Opt4</u>
Deferred	688	688								688			
\$1 - 250	169	48	76	6		10	26		3	156	5		8
251 - 500	185	70	42	23		10	36	1	3	155	13		17
501 - 750	212	101	48	16		6	39		2	169	19	3	21
751 - 1,000	166	91	27	10		10	22	4	2	135	16	3	12
1001 - 1,250	191	101	30	11	4	10	29	4	2	129	33	8	21
1,251 - 1,500	149	86	30	10	1	5	8	6	3	101	21	6	21
1,501 - 1,750	128	83	17	8	1	7	2	5	5	95	15	4	14
1,751 - 2,000	123	87	19	3	2			11	1	78	33	2	10
Over 2,000	1,125	755	90	17	133	1	10	114	5	649	324	66	86
Totals	3,136	2,110	379	104	141	59	172	145	26	2,355	479	92	210

Type of Retirement

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

Spousal Option Selected

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