COMPREHENSIVE ANNUAL 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, 2017

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

ARLINGTON
VIRGINIA

ARLINGTON COUNTY EMPLOYEES' RETIREMENT SYSTEM

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

December 7, 2017

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, 2017 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.

Investment performance was above expectations this year as the system assets achieved an investment return of 12.9%, outperforming the portfolio benchmark return of 11.1%. With assets of $2.174 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 102.7%, an increase over fiscal year 2016's funded ratio of 99.6%.

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 2018.

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

Respectfully,

Jonathan C. Kinney
President

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ARLINGTON
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ARLINGTON COUNTY
EMPLOYEES' RETIREMENT SYSTEM

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, 2016

Executive Director/CEO

ARLINGTON
VIRGINIA

ARLINGTON COUNTY EMPLOYEES' RETIREMENT SYSTEM

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

November 2, 2017

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, 2017 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, 2017, the fiduciary net position of the System was $2.174 billion, an increase of $210 million during the fiscal year. The year's 12.9% gross investment return was 1.8% above the portfolio benchmark return of 11.1%. This performance placed the System in the 33rd percentile of the TUCS Public Plan universe for the year. The ten-year gross investment return is 5.8% and compares to the portfolio benchmark return of 5.3%. This performance places the System in the 32nd percentile of the TUCS Public Plan universe for ten years. The System is financially and actuarially sound with a funded ratio of the actuarial value of assets to actuarial accrued liabilities of 102.7% as of June 30, 2017. Current employer contribution levels from the County are substantial and 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	RETIREMENT BENEFITS OFFICE
2100 Clarendon Boulevard, Suite 504	2100 Clarendon Boulevard, Suite 511
Arlington, VA 22201	Arlington, VA 22201
(703) 228-3321, Fax (703) 228-0646	(703) 228-3900, Fax (703) 228-3902

Major Initiatives

From an investment perspective, the Board took action at several points during the year to manage the portfolio's risk/return profile in light of developments in the capital markets. Notable activity included the termination of several actively managed mandates, the reallocation of funds to passively managed, pooled investment funds, the addition of a new active equity mandate and an increased exposure to direct private equity funds. The *Investment Section* of this report includes details on the year's activity.

From an administrative perspective, a request for proposal for actuarial services resulted in the retention of the incumbent firm and new reporting was implemented.

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 Post-Employment Benefits (OPEB) such as post-retirement health care. Authority for a local retirement board to act as Trustee for OPEB assets is provided for in Virginia Code §15.2-1547. Additional funding of $6.9 million for the County trust was made during fiscal year 2017. As of June 30, 2017, the County and School trusts had assets of

$115.1 million and $48.3 million, respectively. These trusts are completely separate and independently managed from Retirement System assets. The OPEB trusts are managed in accordance with an Investment Policy Statement tailored to their needs. Detailed financial reporting and actuarial data for the OPEB trusts are included in the County and School annual financial reports.

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, 2017, the last day of fiscal year 2017.

A retirement system is fully funded when the actuarial value of the assets are adequate to meet the expected obligations to participants, or actuarial liabilities. The System's actual liability and investment experience result in a 102.7% funded ratio as of June 30, 2017, an increase over the June 30, 2016 funded ratio of 99.6%. 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 market 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 defined investment responsibility, 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 2017, the System's investment return was 12.9% compared to a 11.1% benchmark return. The annualized rates of return for the three and five-year periods were 5.0% and 9.3%, respectively. These compare to benchmark returns of 5.0% and 8.2% for the same periods, respectively. The actuarial assumed rate of return is 6.75%. The System's net returns for the one and three-year periods were 12.7% and 4.7%, 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. Ashford Consulting Group 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, CliftonLarsonAllen, 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 comprehensive annual financial report for the fiscal year ended June 30, 2016. This is the eighteenth consecutive year that ACERS has achieved this recognition. In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized comprehensive annual 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 comprehensive annual financial report meets the Certificate of Achievement Program's requirements and it will be submitted to the GFOA to determine its eligibility for certification.

Acknowledgments

This annual report was prepared by the System's staff under the direction of the Retirement Board of Trustees. The administrative staff of Arlington County provided critical assistance in preparation of the *Statistical Section,* for which I am 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,

Daniel Zito
Executive Director & Chief Investment Officer

ADMINISTRATIVE ORGANIZATION
JUNE 30, 2017

TRUSTEES

Jonathan C. Kinney, President
Appointed by County Board
Term Expires 1/31/2021

Richard Alt, Vice President
Elected by Retirees
Term Expires 1/31/2019

Michelle Cowan, Treasurer
Appointed by County Manager
Term Expires 1/31/2019

Jimmie Barrett, Secretary & Assistant Treasurer
Elected by Uniformed Employees
Term Expires 1/31/2019

William Ross
Appointed by County Board
Term Expires 1/31/2021

Sara Teyema
Elected by General Employees
Term Expires 1/31/2021

Vacant

SUBSTITUTE TRUSTEES

Brian Lynch
Elected by Uniformed Employees
Term Expires 1/31/2019

Vacant

Wayne Rhodes
Elected by Retirees
Term Expires 1/31/2019

PROFESSIONAL STAFF

Daniel Zito, Executive Director & CIO
Randee Stenroos, Assistant Director
Katrina Milne, Investment Analyst
Stephen Euell, Accountant

LEGAL ADVISOR

Carolynn Kane, Assistant County Attorney

INVESTMENT CONSULTANT

Ashford Consulting Group
Franklin Park LLC

CUSTODIAN BANK

The Northern Trust Company

CONSULTING ACTUARY

Cheiron

CERTIFIED PUBLIC ACCOUNTANT

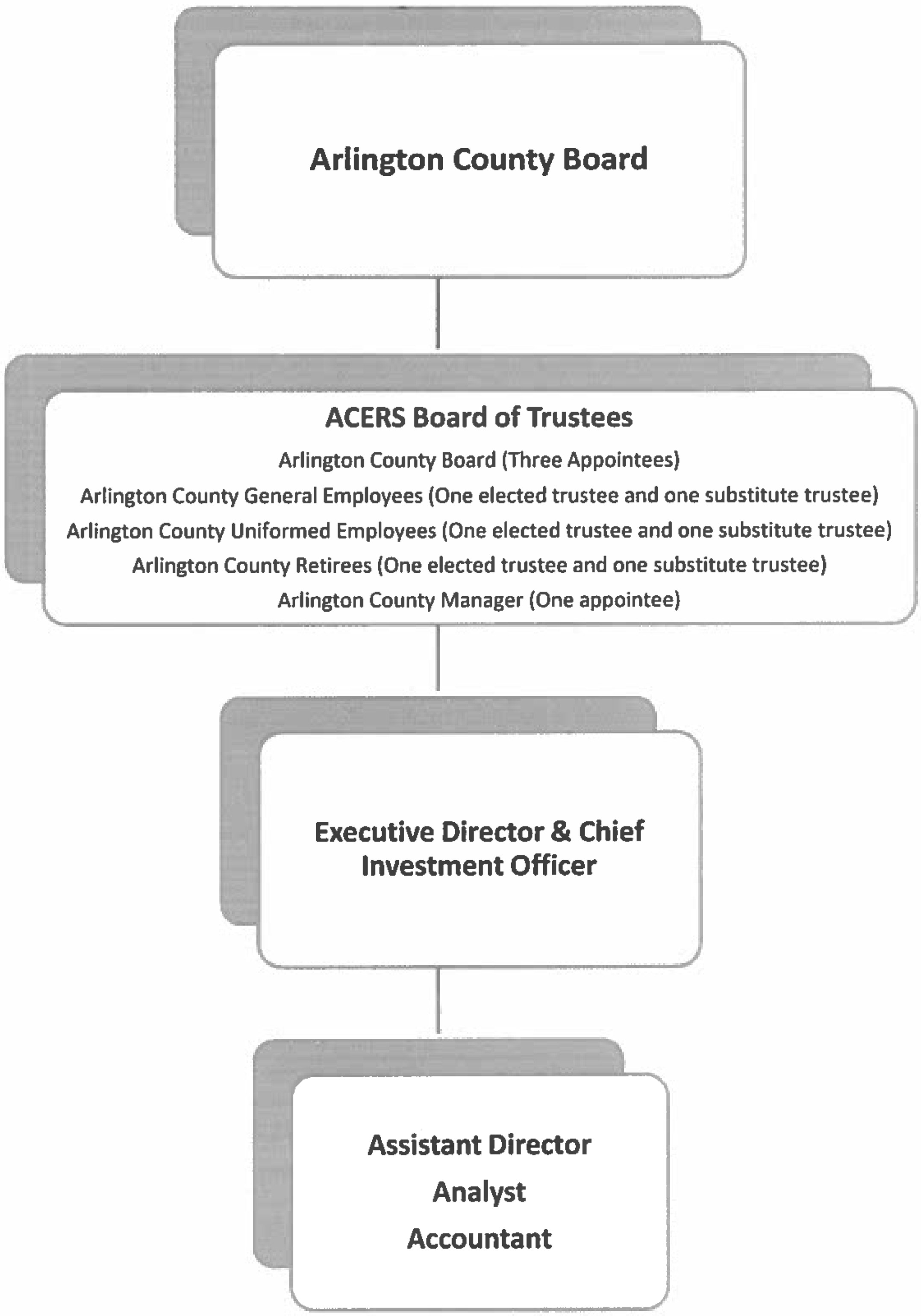
CliftonLarsonAllen LLP

INVESTMENT MANAGERS[1]

Abbott Capital
AJO
Altaris Healthcare Partners
Arsenal Real Estate
Baillie Gifford
Bison Capital
BV Investment Partners
Franklin Park
Harvest Advisors
JFL Equity Investors
Kiltearn Partners
Liquid Realty Partners
Loomis Sayles
Northern Trust
Sanderson Asset Management
T. Rowe Price
The Vanguard Group

[1] Investment manager assignments are on Page 50 and a schedule of broker commissions on Page 52

ORGANIZATIONAL CHART



Financial Section

ARLINGTON
VIRGINIA

ARLINGTON COUNTY
EMPLOYEES' RETIREMENT SYSTEM

CliftonLarsonAllen

CliftonLarsonAllen LLP
CLAconnect.com

INDEPENDENT AUDITORS' REPORT

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

Report on the Financial Statements

We have audited the accompanying financial statements of the Arlington County Employees' Retirement System (the System) which comprise the statement of fiduciary net position as of June 30, 2017, and the related statement of changes in fiduciary net position for the 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.

Auditors' 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 auditors' 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 financial position of the System as of June 30, 2017, and the respective changes in its financial position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Board of Trustees of the Arlington County
Employees' Retirement System

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and the schedules of changes in net pension liability/(asset) and related ratios, employer contributions and investment returns and related notes, as listed in the table of contents, be presented to supplement the financial statements. Such information, although not a part of the financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the 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 financial statements, and other knowledge we obtained during our audit of the 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 System's financial statements. The schedules of administrative expenses and investment and consultant expenses are supplemental information and are presented for the purposes of additional analysis and are not a required part of the financial statements. These supplemental schedules are the responsibility of management and have been subjected to the auditing procedures applied in the audit of the basic financial statements. In our opinion, the information is fairly stated, in all material respects, in relation to the financial statements taken as a whole.

The introductory, investment, actuarial and statistical sections have not been subject to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we express no opinion on them.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated November 17, 2017 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 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.

CliftonLarsonAllen LLP

CliftonLarsonAllen LLP

Baltimore, Maryland
November 17, 2017

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, 2017. 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 Comprehensive Annual 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, 2017 totaled $2.174 billion, an increase of $210 million, or 10.7%, from June 30, 2016, primarily 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 Fund investments and investment gains/losses; deductions to assets are primarily driven by benefit payments. For fiscal year 2017:

- Contributions decreased to $64.3 million from $66.6 million in fiscal year 2016.
- Dividends and interest on investments decreased to $35.5 million from $40.4 million in fiscal year 2016.
- Payments and refunds to members increased to $99.7 million from $95.3 million in fiscal year 2016.

Investment Gains and Losses Investment gains, which include realized and unrealized changes in investment portfolio market value, were $217.4 million in fiscal year 2017, a $252.0 million increase compared to the $34.6 million loss in fiscal year 2016.

- Fund gross investment returns, including dividends and interest, of 12.9% for the year outperformed the 11.1% benchmark. The Fund's investment results were largely attributable to net active equity manager outperformance and an underweight allocation to fixed income. 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, 2017, the System was actuarially funded at 102.7%, up from 99.6% as of June 30, 2016, due to continued recognition of the favorable investment experience in the current and prior years. This funding ratio compares actuarial value of assets to the actuarial liabilities. The combination of liability and recognition of prior year investment experiences resulted in the increase in this ratio.

We also present the market value GASB 67 ratio of 102.4% as of June 30, 2017, which is the current market value to actuarial liabilities. The market 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 volatility of market values.

MANAGEMENT'S DISCUSSION & ANALYSIS

SUMMARY OF FIDUCIARY NET POSITION AND CHANGES IN FIDUCIARY NET POSITION
FOR THE YEARS ENDED JUNE 30, 2017 & 2016

Summary of Fiduciary Net Position

Assets	June 30, 2017	Increase (Decrease)	June 30, 2016
Cash	$ 7,091,977	$ (17,367,802)	$ 24,459,779
Receivables	6,275,308	(1,046,265)	7,321,573
Investments	2,162,529,363	228,801,041	1,933,728,322
Total Assets	**$ 2,175,896,648**	**$ 210,386,974**	**$ 1,965,509,674**
Liabilities			
Accrued Expense and Other Liabilities	$ 2,077,480	$ 66,635	$ 2,010,845
Total Liabilities	**$ 2,077,480**	**$ 66,635**	**$ 2,010,845**
Total Fiduciary Net Position	**$ 2,173,819,168**	**$ 210,320,339**	**$ 1,963,498,829**

Summary of Changes in Fiduciary Net Position

Additions	June 30, 2017	Increase (Decrease)	June 30, 2016
Employer Contributions	$ 51,782,007	$ (2,668,265)	$ 54,450,272
Member Contributions	12,498,591	305,336	12,193,255
Dividends & Interest	35,527,917	(4,844,369)	40,372,286
Investment Gains	217,354,325	251,989,117	(34,634,792)
Other	442,200	160,784	281,416
Investment Expense	(5,853,260)	1,380,046	(7,233,306)
Total Additions	**$ 311,751,780**	**$ 246,322,649**	**$ 65,429,131**
Deductions			
Retirement Benefits	$ 98,729,853	$ 4,741,076	$ 93,988,777
Refund of Contributions	946,394	(323,695)	1,270,089
Administrative & Consulting Expense	1,755,198	51,624	1,703,574
Total Deductions	**$ 101,431,445**	**$ 4,469,005**	**$ 96,962,440**
Change in Fiduciary Net Position	**$ 210,320,335**	**$ 241,853,644**	**$ (31,533,309)**

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, 2017, 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 financial statements were issued

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. Copies of the Comprehensive Annual Financial Report are available from the Retirement Office or at the Central Public Library. The report may also be accessed at *www.arlingtonva.us/retirement*. A summary report will be issued to plan members in January 2018.

ARLINGTON COUNTY EMPLOYEES' RETIREMENT SYSTEM
(A Pension Trust Fund of Arlington County, Virginia)
STATEMENT OF FIDUCIARY NET POSITION
JUNE 30, 2017

ASSETS		
Cash and Cash Equivalents		$7,091,977
Contributions Receivable:		
Employer		3,035,329
Employee		722,625
Accrued Interest and Other Receivables		2,517,354
Investments, at Fair Value:		
Foreign, Municipal and U.S. Government Obligations	65,318,345	
Corporate Fixed Income Obligations	86,351,251	
Domestic and Foreign Equities	478,506,363	
Private Equity	62,639,056	
Real Estate Funds	7,718,263	
Pooled Equity	884,668,907	
Pooled Fixed Income	570,727,082	
Convertibles	6,600,095	
Total Investments		2,162,529,363
Total Assets		**2,175,896,648**
LIABILITIES		
Accrued Expenses and Other Liabilities		2,077,480
Total Liabilities		**2,077,480**
NET POSITION RESTRICTED FOR PENSIONS		**$2,173,819,168**

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, 2017

ADDITIONS	
Contributions	
Employer	$51,782,007
Employee	12,498,591
Service Credit Buybacks	176,460
Total Contributions	$64,457,058
Investment Income	
Interest and Dividends	35,527,917
Net Appreciation/(Depreciation) in Fair Value	217,354,326
Commission Recapture	103
Investment Income/(Loss)	252,882,346
Less: Investment Expense	5,853,260
Net Investment Income/(Loss)	247,029,086
Securities Lending Activity	
Security Lending Income	354,176
Bank Management Fees	(88,539)
Net Income/(Loss) From Security Lending	265,637
Total Additions	**$311,751,781**
DEDUCTIONS	
Members' Benefits	98,729,853
Refund of Members' Contributions	946,394
Administrative Expenses	796,901
Other Consulting Expenses	958,297
Total Deductions	**101,431,445**
Net Increase in Net Position	**$210,320,336**
Net Position Restricted for Pensions, Beginning of Year	**1,963,498,832**
Net Position Restricted for Pensions, End of Year	**2,173,819,168**

See accompanying notes to financial statements

NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2017

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 (GAAP). The preparation of financial statements in conformity with GAAP 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 air 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 the Arlington County, Virginia (the County) financial reporting entity and is included in the County's comprehensive annual financial report. The accompanying financial statements present information on the operations of the System in conformity with generally accepted accounting principles.

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, 2017

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 Arlington 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, 2017, System membership consisted of the following:

	General	Uniformed	School	Total
Active Employees:				
Vested	1,686	603	17	2,306
Non-vested	1,037	233	0	1,270
Total Active Employees	2,723	836	17	3,576
Vested Deferred	462	83	39	584
Retirees and Beneficiaries	2,227	821	956	4,004

Please refer to Chapters 21, 35 and 46 of the Arlington 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 the following page describes the benefits and how they are calculated.

NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2017

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 Arlington County Code for the period ending June 30, 2017 is provided on the following page.

Benefit terms provide for annual cost of living adjustments to each member's retirement allowance subsequent to 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, 2017

NOTE 2. PLAN DESCRIPTION

Member Contributions and Retirement Benefits

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

NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2017

NOTE 2. PLAN DESCRIPTION

Contributions

Chapters 21, 35 and 46 of the Arlington 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 of Trustees, 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, 2017, 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 20.3% of annual covered payroll.

Rate of Return

For the year ending June 30, 2017, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 12.7%. The money-weighted 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, 2017, were as follows:

($ in millions)		
Total Pension Liability	$	2,122.3
Plan Fiduciary Net Position		2,173.8
County's Net Pension Liability/(Asset)	$	(51.5)
Plan Fiduciary Net Position as a percentage of the Total Pension Liability		102.4%

Actuarial Assumptions

The total pension liability was determined by an actuarial valuation as of June 30, 2017, 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 RP 2000 Combined Mortality projected with scale AA.

NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2017

NOTE 3. NET PENSION LIABILITY

The actuarial assumptions used in the June 30, 2017 valuation were based on the results of an actuarial experience study for the period July 1, 2009 to June 30, 2014. 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 best estimate ranges of expected future real rates of return (expected returns, net of investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long term expected rate of return by weighting the expected future real rates of return by an asset allocation percentage which is based on the nature and mix of current and expected pension plan investments, and by adding expected inflation. Best estimates of geometric real rates of return for each major asset class included in the pension plan's expected asset allocation as of June 30, 2017 (see the discussion of the pension plan's investment policy) are summarized in the following table:

Asset Class	Long Term Expected Real Rate of Return
Domestic Equity	6.6%
International Equity	7.1%
Fixed Income	2.9%
Cash/Short Term	1.7%
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 liability of the Plan, calculated using the discount rate of 6.75%, as well as what the Plan's net position liability would be if it were calculated using a discount rate that is 1 percentage point lower (5.75%) or 1 percentage point higher (7.75%) than the current rate:

	1% Decrease (5.75%)	Current Discount Rate (6.75%)	1% Increase (7.75%)
($ in millions)			
Plan's net pension liability/ (asset)	$237.4	($51.5)	($288.9)

NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2017

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. Arlington 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. Arlington 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 in all major sectors of the capital markets in order to diversify and minimize total investment program risk. Such sectors include, but are not limited to:

- Convertible securities
- Cash, money market funds and other short term investment funds

NOTE 4. DEPOSITS AND INVESTMENTS

- Common stocks, preferred stocks, warrants and similar rights of U.S. and non-U.S. companies.
- Private equity. The System invests in private equity via a fund-of-funds and direct approach to maximize diversification by vintage year and investment type.
- Open and closed end pooled real estate funds and real estate investment trust securities
- 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. Limits on concentration, credit quality and duration are governed by each investment manager's contract.

Since the Fund does not utilize a target allocation approach, the following table shows the Fund's ten year average allocation:

Asset Class	10 Year Average Allocation
Domestic Equity	46.7%
International Equity	17.2%
Fixed Income	29.9%
Cash/Short Term	1.8%
Non-Traditional	4.4%
Total	100.0%

While the above asset allocation is not a restrictive target (see investment restrictions on page 25), it is representative of the nature and mix of current and expected System investments.

NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2017

NOTE 4. DEPOSITS AND INVESTMENTS

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 market value. The Fund must be rebalanced if the market weight of fixed income investments falls below 20%, unless the Board, acting 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 market value and commitments, to exceed 15% of the System's market value.

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

- Invest more than 10% of the market 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
- Purchase non-registered securities, such as private placements
- 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 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 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

NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2017

NOTE 4. DEPOSITS AND INVESTMENTS

- 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

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, 2017, the System had $93,575 in open net forward currency contracts.

d. Cash and Cash Equivalents

At June 30, 2017, the System had cash and cash equivalents of $7,091,977. Cash deposits in bank accounts totaled $415,428. This amount was insured by the Federal Deposit Insurance Corporation up to $250,000 for each System participant. Cash equivalents totaling $6,676,549 is invested in the custodian's Short-Term Investment Fund. This account is uninsured and uncollateralized.

NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2017

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, 2017:

SYSTEM INVESTMENTS

Investment Type *(in $ 000s)*		Investment Value
Foreign, Municipal and U.S. Governments		
Government and Government Agency Debt	$	62,490
Government State and Local Debt		2,829
Total Foreign, Municipal, and U.S. Governments		65,319
Corporate Fixed Income Obligations		
Corporate Bonds		86,326
Asset Backed Securities		25
Bank Loans		1
Total Corporate Fixed Income Obligations		86,352
Domestic and Foreign Equities		
Common Stock		473,059
REITs		5,436
Preferred Stock		11
Total Domestic and Foreign Equities		478,506
Private Equity		
Private Equity		62,639
Real Estate Funds		
Real Estate		7,718
Pooled Equity		
Pooled Equity Funds		884,669
Pooled Fixed Income		
Pooled Bond Funds		570,727
Convertibles		
Convertible Equity		1,477
Corporate Convertible Bonds		5,123
Total Convertibles		6,600
Total	$	2,162,530

NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2017

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 $156.8 million of directly owned fixed income securities and on $570.7 million invested in three pooled US fixed income funds. The System's directly owned fixed income investments and maturities at June 30, 2017 are:

INVESTMENT MATURITIES

Investment Type		Maturities (years)			
(in $ 000s)	Fair Value	Under 1	1-5	6-10	Over 10
Asset Backed Securities	$ 25	25	-	-	-
Bank Loans	1	-	1	-	-
Corporate Bonds	86,326	1,035	23,058	22,065	40,168
Corporate Convertible Bonds	5,123	848	1,840	678	1,757
Government & Government Agencies	58,210	19,015	32,471	4,529	2,195
Government State & Local Debt	7,109	4,280	-	-	2,829
Total	$ 156,794	$ 25,203	$ 57,370	$ 27,272	$ 46,949

NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2017

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, 2017 is shown below:

INVESTMENT DURATIONS

Investment Type *(in $ 000s)*	Fair Value	Effective Duration (Yrs)
Asset Backed Securities	$ 25	0.90
Bank Loans	1	-
Corporate Bonds	86,326	7.12
Corporate Convertible Bonds	5,123	5.27
Government & Government Agencies	58,210	2.50
Government State & Local Debt	7,109	2.99
Total	**$ 156,794**	**5.11**

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.

NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2017

NOTE 4. DEPOSITS AND INVESTMENTS

Credit Risk

The System's credit quality distribution for the System's directly held fixed income investments of $156.8 million at June 30, 2017 is shown below:

FIXED INCOME CREDIT QUALITY DISTRIBUTION

Investment Type	Credit Quality							
(in $ 000s)	AAA	AA	A	BBB	BB	B	Below B	Unrated
Asset Backed Securities	$ 25	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Bank Loans	-	-	-	-	-	-	-	1
Corporate Bonds	-	8,420	8,275	24,116	27,500	14,285	3,264	465
Corporate Convertible Bonds	-	-	1,049	1,403	711	320	678	962
Government & Government Agencies	51,485	-	4,557	-	2,168	-	-	-
Government State & Local Debt	4,281	-	-	-	-	2,829	-	-
Total	$ 55,791	$ 8,420	$ 13,881	$25,519	$30,379	$ 17,434	$ 3,942	$ 1,428

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

NOTES TO FINANCIAL STATEMENTS

JUNE 30, 2017

NOTE 4. DEPOSITS AND INVESTMENTS

Foreign Currency Risk

Foreign investments include equity and fixed income securities, including convertible securities and cash. The 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, 2017 was as follows:

FOREIGN CURRENCY EXPOSURE IN US DOLLARS

Currency *(in $ 000s)*	Equity	Fixed Income & Convertible	Cash	Total
Australian Dollar	$ 570	$ 4,631	$ -	$ 5,201
Brazilian Real	1,862	-	-	1,862
British pound sterling	7,917	414	30	8,361
Canadian Dollar	3,084	9,673	-	12,757
Danish Krone	1,497	-	-	1,497
Euro	22,211	-	22	22,233
Hong Kong Dollar	14,966	-	35	15,001
Indonesian Rupiah	7,374	-	-	7,374
Japanese Yen	7,405	-	29	7,434
Mexican Peso	1,474	3,616	-	5,090
New Zealand Dollar	-	6,170	-	6,170
Nigerian Naira	342	-	71	413
Philippines Peso	5,489	-	2	5,491
Singapore Dollar	776	-	-	776
South Korean Won	308	-	-	308
Swedish Krona	5,157	-	1	5,158
Swiss Franc	5,137	-	1	5,138
Thailand Baht	1,290	-	-	1,290
Turkish lira	1,559	-	10	1,569
Total	**$ 88,418**	**$ 24,504**	**$ 201**	**$ 113,123**

NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2017

NOTE 4. DEPOSITS AND INVESTMENTS

f. Securities Lending

Under authorization of the 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 market 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 $19.3 million at the beginning of the year to $50.8 million at June 30, 2017.

The following table details the net income from securities lending for the fiscal year ended June 30, 2017:

Gross Income from Securities Lending	$	354,176
Less: Bank Management Fees		(88,539)
Net Income from Securities Lending	$	265,637

The following table presents the fair value of underlying securities and the value of the non-cash collateral pledged at June 30, 2017:

Securities Lent		Fair Value of Securities on Loan		Fair Value of Non-cash Collateral
Total	$	50,752,810	$	51,845,466

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

NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2017

NOTE 4. DEPOSITS AND INVESTMENTS

g. Commission Recapture Program

The System participates in a commission recapture program with the Frank Russell Company. This program allows the System to recapture a portion of the commissions paid to broker/dealers by investment managers who participate in the program. All trades are placed subject to the requirement for best execution. Earnings credited to commission recapture income for the fiscal year ended June 30, 2017 were $103.

NOTE 5. FAIR VALUE OF INVESTMENTS

The System categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. 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, 2017

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, 2017:

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

		Fair Value Measurements Using		
	June 30, 2017	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Investments by fair value level				
Debt securities				
Foreign, Municipal and U.S. Governments				
Government and Government Agency Debt	$ 58,209,908	-	58,209,908	-
Government State and Local Debt	7,108,437	-	7,108,437	-
Corporate Fixed Income Obligations				
Corporate Bonds	86,325,688	-	86,325,688	-
Asset Backed Securities	24,702	-	24,702	-
Bank Loans	862	-	862	-
Pooled Fixed Income				
Pooled Bond Funds	144,263,832	144,263,832	-	-
Convertibles				
Corporate Convertible Bonds	5,123,316	-	5,123,316	-
Total debt securities measured at fair value	301,056,745	144,263,832	156,792,913	-
Equity Securities				
Domestic and Foreign Equities				
Common Stock	478,495,417	478,495,417	-	-
Preferred Stock	10,946	-	-	10,946
Pooled Equity				
Pooled Equity Funds	544,645,649	544,645,649	-	-
Convertibles				
Convertible Equity	1,476,779	1,053,552	423,228	-
Total equity securities measured at fair value	1,024,628,792	1,024,194,618	423,228	10,946
Total investments by fair value level	$ 1,325,685,536	$ 1,168,458,450	$ 157,216,141	$ 10,946
Investments measured at the net asset value (NAV)				
Debt securities				
Pooled Fixed Income				
Pooled Bond Funds	426,463,250			
Total debt securities measured at the NAV	426,463,250			
Equity Securities				
Domestic and Foreign Equities				
Pooled Equity Funds	98,742,995			
Pooled Equity				
Pooled Equity Funds	241,280,263			
Total equity securities measured at the NAV	340,023,258			
Alternative Investments				
Private Equity				
Private Equity	62,639,056			
	62,639,056			
Real Estate Funds				
Real Estate	7,718,263			
Total alternative investments measured at the NAV	70,357,319			
Total investments measured at the NAV	836,843,827			
Total investments	$ 2,162,529,363			

NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2017

NOTE 5. FAIR VALUE OF INVESTMENTS

	June 30, 2017	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Debt Securities				
Pooled Fixed Income	$ 426,463,250	-	Daily	None
Total debt securities	426,463,250	-		
Equity Securities				
Domestic and Foreign Equities	98,742,995	-	Monthly	15 - 45 days
Global Pooled Equity	86,312,147	-	Monthly	15 - 45 days
Large Cap Domestic Equity	154,968,116	-	Daily	None
Total equity securities	340,023,258	-		
Alternative Investments				
Private Equity	62,639,056	93,000,000	N/A	N/A
Real Estate	7,718,263	1,400,000	N/A	N/A
Total alternative investments	70,357,319	94,400,000		
Total investments measured at the NAV	$ 836,843,827	94,400,000		

- *Unfunded Commitments.* The System has at June 30, 2017 committed to fund certain alternative investment partnerships in the amount of $253.0 million. Funding of $158.6 million has been provided leaving an unfunded commitment of $94.4 million.
- *Alternative Investments.* Real estate includes two funds, structured as limited partnerships, which invest primarily in land in the United States. Private Equity includes ten 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 Focused Funds.* Global Equity and Global Pooled Equity includes global equity funds that invest in both U.S. and non-U.S. equities, seeking quality companies that are attractively valued and have growth potential. Large Cap Domestic Equity includes funds that invest primarily in large cap domestic equity securities.
- *Fixed Income Focused Funds.* Aggregate Bond Index Tracking includes one fund that maintains a portfolio constructed to match or track the components of the Barclays Capital U.S. Aggregate Index.

NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2017

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 14, 2017 the date the financial statements were available to be issued. Events or transactions occurring after June 30, 2017, but prior to November 14, 2017 that provided additional evidence about conditions that existed at June 30, 2017, have been recognized in the financial statements for the year ended June 30, 2017. Events or transactions that provided evidence about conditions that did not exist at June 30, 2017, 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, 2017.

SCHEDULES OF REQUIRED SUPPLEMENTARY INFORMATION
June 30, 2017

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

	June 30, 2017	June 30, 2016	June 30, 2015	June 30, 2014
Total Pension Liability				
Service Cost	$ 56.5	$ 53.8	$ 54.8	$ 52.1
Interest	139.1	143.6	135.6	131.6
Changes in Benefits	-	-	-	-
Change in Assumptions	-	27.2	-	29.4
Differences between Expected and Actual Experience	(27.1)	(47.3)	(16.2)	(11.0)
Benefit Payments	(99.7)	(95.3)	(90.8)	(86.3)
Net Change in Total Pension Liability	$ 68.8	$ 82.0	$ 83.4	$ 115.8
Total Pension Liability - Beginning	$ 2,053.5	$ 1,971.5	$ 1,888.1	$ 1,772.3
Total Pension Liability - Ending	$ 2,122.3	$ 2,053.5	$ 1,971.5	$ 1,888.1
Plan Fiduciary Net Position				
Contributions - Employer	$ 51.8	$ 54.5	$ 58.2	$ 53.7
Contributions - Employee	12.7	12.3	12.2	11.9
Net Investment Income	246.3	(1.3)	37.3	304.2
Benefits Payments	(99.7)	(95.3)	(90.8)	(86.3)
Administravtive Expenses	(0.8)	(1.7)	(1.5)	(0.7)
Net Change in Plan Fiduciary Net Position	$ 210.3	$ (31.5)	$ 15.4	$ 282.8
Plan Fiduciary Net Position - Beginning	$ 1,963.5	$ 1,995.0	$ 1,979.6	$ 1,696.8
Plan Fiduciary Net Position - Ending	$ 2,173.8	$ 1,963.5	$ 1,995.0	$ 1,979.6
Net Pension Liability/ (Asset) - Ending	$ (51.5)	$ 90.0	$ (23.5)	$ (91.5)
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	102.4%	95.6%	101.2%	104.9%
Covered Employee Payroll	$ 236.5	$ 248.9	$ 243.5	$ 252.4
Net Pension Liability/ (Asset) as a Percentage of Covered Employee Payroll	-21.8%	36.2%	-9.7%	-36.3%

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

SCHEDULES OF REQUIRED SUPPLEMENTARY INFORMATION
June 30, 2017
Schedule of Employer Contributions
($ in millions)

Fiscal Year Ended	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Actuarially Determined Contribution	$ 51.8	$ 54.5	$ 58.2	$ 53.7	$ 48.0	$ 46.3	$ 43.2	$ 42.0	$ 37.1	$ 28.4
County Contributions in Relation to the Actuarially Determeined Contributions	51.8	54.5	58.2	53.7	48.0	46.3	43.2	42.0	37.1	28.4
Contribution Deficiency/ (Excess)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Contributions as a Percentage of Covered Emplyee Payroll	21.9%	21.9%	23.9%	22.6%	20.6%	20.7%	20.5%	19.9%	13.8%	12.6%

Notes to Schedule:

Valuation Date	June 30, 2015
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	7.25%
Amortization Growth Rate	3.75%
Inflation	3.75%
Salary Increases	3.75% plus merit/senority 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 asumed to be service-connected. RP-2000 Disabled Mortality with generational mortality improvements using Scale AA for disabled lives.

Schedule of Investment Returns

Fiscal Year Ended	2017	2016	2015	2014
Annual money-weighted rate of return, net of investment expense	12.7%	0.0%	1.9%	18.1%

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

SUPPLEMENTAL INFORMATION
JUNE 30, 2017

SCHEDULE OF ADMINISTRATIVE EXPENSES

Personnel Services		
Staff Salaries	$450,816	
Benefits	161,839	
Total Personnel Services		**$612,655**
Professional Services		**$124,158**
Office Expense		
Telephone	$ 2,616	
Postage and Shipping	1,762	
Printing	6,809	
Total Office Expense		**$ 11,187**
Education		
Manager Meetings	$ 4,658	
Conferences	20,127	
Subscriptions	3,060	
Total Education		**$ 27,845**
Miscellaneous		
Insurance	$ 48,528	
Supplies & Furniture	2,471	
Bank Fees	17,974	
Other Miscellaneous [1]	(47,917)	
Total Miscellaneous		**$ 21,056**
Total Administrative Expenses		**$796,901**

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

SUPPLEMENTAL INFORMATION
JUNE 30, 2017

SCHEDULE OF INVESTMENT & CONSULTANT EXPENSES

Investment Expenses	
Investment Manager Fees	$5,641,273
Custody Fees	211,987
Total Investment Expenses	**$5,853,260**
Other Consultant Expenses	
Total Other Consultant Expenses	**$ 958,297**

Investment Section

ARLINGTON
VIRGINIA

ARLINGTON COUNTY
EMPLOYEES' RETIREMENT SYSTEM

Investment Presentation Basis and Policy

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

Return data for the System was calculated by the custodian, Northern Trust, using time-weighted return methodology that was verified by the System's consultant, Ashford Consulting Group (ACG). 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, ACG 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	
Equities	*Russell 3000*	*40.0%*
	MSCI ACWI ex-US	*17.5%*
Fixed Income	*Barclays Universal*	*39.0%*
	Barclays TIPS	*1.5%*
Cash	*90 Day T-Bills*	*2.0%*
		100.0%

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

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

				Fiscal Year Ended June 30				
	10 Years	5 Years	3 Years	2013	2014	2015	2016	2017
<u>Investment Performance</u>								
Total Fund[1] (Benchmark)	5.8%	9.3%	5.0%	13.9%	18.4%	2.2%	0.3%	12.9%
Domestic Equities (Russell 3000)	5.8%	12.0%	6.0%	21.1%	22.2%	2.5%	0.7%	15.5%
Global Equities (MSCI AC World)		14.0%	7.9%	15.2%	31.6%	6.1%	-2.8%	26.8%
International Equities (MSCI AC World ex-US)	3.8%	8.7%	3.4%	15.7%	18.7%	-2.3%	-8.6%	23.6%
Fixed Income (Fixed Income)	5.4%	3.7%	2.4%	4.2%	7.3%	0.5%	4.1%	2.6%
<u>Benchmark Performance</u>								
Total Fund[2]	5.3%	8.2%	5.0%	10.7%	15.8%	2.6%	1.5%	11.1%
Russell 3000	7.3%	14.6%	9.1%	21.5%	25.2%	7.3%	2.1%	18.5%
MSCI AC World		10.5%	4.8%	16.6%	23.0%	0.7%	-3.7%	18.8%
MSCI AC World ex-US	1.1%	7.2%	0.8%	13.6%	21.8%	-5.3%	-10.2%	20.5%
Fixed Income[3]	4.7%	2.6%	2.7%	0.1%	5.2%	1.5%	5.8%	0.9%
CPI + 3.5% Annualized	5.2%	4.9%	4.5%	5.3%	5.6%	3.6%	4.5%	5.4%
Actuarial Assumed Rate of Return				7.5%	7.25%	7.25%	7.25%	6.75%

[1] *Includes cash and alternative investment performance though returns for these asset classes are not listed separately*

[2] *40% RU 3000, 17.5% MSCI AC World ex-US, 39% BC Universal, 1.5% BC TIPS & 2% 90 Day T-Bill*
Prior to 10/1/07, 43% RU 3000, 14% EAFE, 38% BC Aggregate & 5% 90 Day T-Bill

[3] *Weights fixed income benchmark components to 100%*

Investment Performance and Activity

Overview

The financial markets performed above expectations during fiscal year 2017, setting the stage for the System to outperform its primary investment objective for the year, while longer term results exceed or equal the Fund's objectives. Fiscal year 2017 started out with global equities rallying mostly due to continued accommodative monetary policies, more stable economic data and better than expected earnings reports. Performance was strong across regions, with international markets outperforming US equities. The Federal Reserve left rates unchanged in September while acknowledging improvement in the economy. US equity markets posted positive results in the fourth quarter as investors digested the election implications. The Federal Reserve opted to raise interest rates following its mid-December policy meeting. Global equities rallied at the beginning of 2017 due to an upswing in global economic data and signs of corporate earnings growth with international and emerging markets providing the highest returns. As anticipated, the Federal Reserve again raised rates following its mid-March policy meeting. Global equity markets were broadly positive in the second quarter supported by signs of strengthening global economic growth, better than expected corporate earnings and reduced political uncertainty in Europe. As was widely anticipated, the Federal Reserve continued on it path towards monetary policy normalization and raised its target rate in mid-June.

For the fiscal year ended June 30, 2017 the System gross return of 12.9% (net return of 12.7%) compared to a benchmark return of 11.1%. This performance is above the 12.4% median return of the TUCS Public Plan Universe, placing the System in the 33rd percentile (2nd Quartile) of public plans for the year. On a 3, 5 and 10-year basis, the System's performance exceeds or equals the benchmark net of fees and ranked in the 63rd, 42nd and 32nd percentiles, respectively.

The System's 1.8% outperformance relative to the overall policy benchmark for the fiscal year was primarily attributable to net active equity manager outperformance and an underweight allocation to fixed income. The table below summarizes key drivers of the System's benchmark relative performance.

	Policy Benchmark	Sector Allocation	Style Selection	Active Management	Total Fund
Investment Performance	**11.1%**	**1.2%**	**-0.8%**	**1.4%**	**12.9%**
Value Added or Lost					
Fixed Income		*0.7%*	*0.6%*	*0.0%*	
US Equity		*0.7%*	*-1.4%*	*1.1%*	
International Equity		*-0.4%*	*0.0%*	*0.3%*	
Other/Unallocated		*0.2%*	*0.0%*	*0.0%*	

Source: Ashford Consulting Group

As of June 30, 2017, the System was in compliance with its investment policy guidelines as follows:

- Fixed income investments and cash equivalents totaled 33.8% of assets.
- The market value of illiquid investments, including limited partnerships, plus remaining funding commitments, totaled 7.6% of assets.
- Derivative strategies were not in use.

Investment Activity and Details

From an investment perspective, the Board took action at several points during the year to manage the portfolio's risk/return profile in light of developments in the capital markets. Investment activity details by asset class are described more fully below.

Equity

As of June 30, 2017, the System had $1,365.4 million, or 62.9% of the fund, in publicly traded equity investments invested in seven actively managed mandates, three focused on domestic equities, one on international equities, and three on global equities. There were two index funds. Actively managed separate accounts totaled $810.4 million with the remaining $555.0 million held in pooled investment vehicles.

Activity during the year included actively managing equity risk exposure. Specifically, in the first quarter of FY 17, the Board terminated two active domestic equity managers, a natural resources mutual fund and trimmed an active global equity manager allocating the funds into equity and fixed income index funds. In the fourth quarter of FY 17, the Board terminated an active domestic equity manager and allocating the funds to an active large cap core manager. The Board also trimmed an equity index fund moving the funds to fixed income funds.

For the fiscal year ended June 30, 2017 the domestic equity allocation posted a 15.6% return, the international equity allocation posted a 23.7% return, and the global equity mandates returned 27.8%. The total equity allocation return was 18.7% for the year compared to a blended equity benchmark of 19.2%.

Fixed Income

As of June 30, 2017, the System held $733.3 million, or 33.8% of the fund, in fixed income securities and cash.

Activity during the year included the Board terminating a fixed income bond manager with the proceeds going to equity and fixed income index funds. Currently, the System utilizes the Vanguard Short Term Federal Fund or the Vanguard S&P 500 Index Fund as a source of operating funds for the year, withdrawing $35.5 million for these purposes.

For the fiscal year ended June 30, 2017, the fixed income investments posted a 2.6% return, in aggregate. This compares to a blended fixed income benchmark return of 0.9% for the same time period.

Alternative Investments

The alternative investment category includes real estate and private equity. The market value of these alternative investments, including limited partnerships, plus remaining funding commitments, totaled 7.6% of assets.

The System met its funding obligations to alternative investment managers during the year. At June 30, 2017, 63% of the System's total $253.0 million in commitments were funded.

The following table summarizes the alternative investments as of June 30, 2017:

(millons)	Total Commitment	Funded	Remaining Commitment
Liquid Realty Partners	$ 25.0	$ 23.6	$ 1.4
JFL Equity Investors IV	15.0	5.7	9.3
Franklin Park Venture 2015	15.0	5.5	9.5
Franklin Park Venture 2017	15.0	0.0	15.0
BVIP Fund VIII	15.0	11.0	4.0
BVIP Fund IX	15.0	0.0	15.0
Bison Fund V	15.0	0.0	15.0
Arsenal Real Estate	25.0	25.0	0.0
Altaris Health Partners III	15.0	9.0	6.0
Altaris Health Partners IV	15.0	0.0	15.0
Abbott ACE IV	50.0	48.3	1.7
Abbott ACE V	8.0	7.6	0.4
Abbott ACE VI	25.0	22.9	2.1
Total	$ 253.0	$ 158.6	$ 94.4

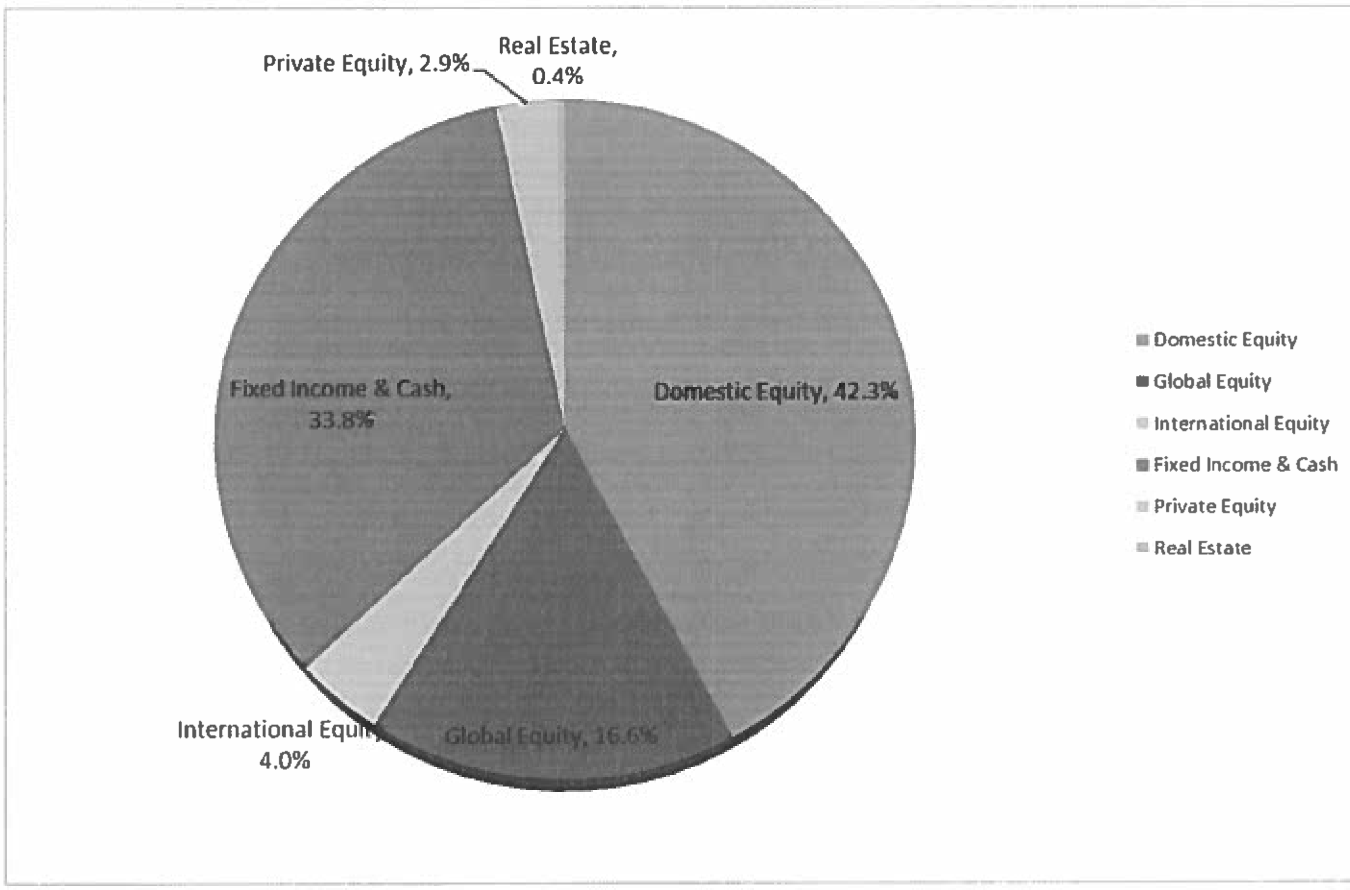
The System's remaining commitments to these alternative investments total $1.4 million for real estate and $93.0 million for private equity. The System made $13.8 million in contributions and received $16.2 million in distributions for a net cash flow of $2.4 million for the fiscal year. The System has sufficient liquid assets to meet the funding commitments.

These alternative investments combined for a 10.8% return for the fiscal year.

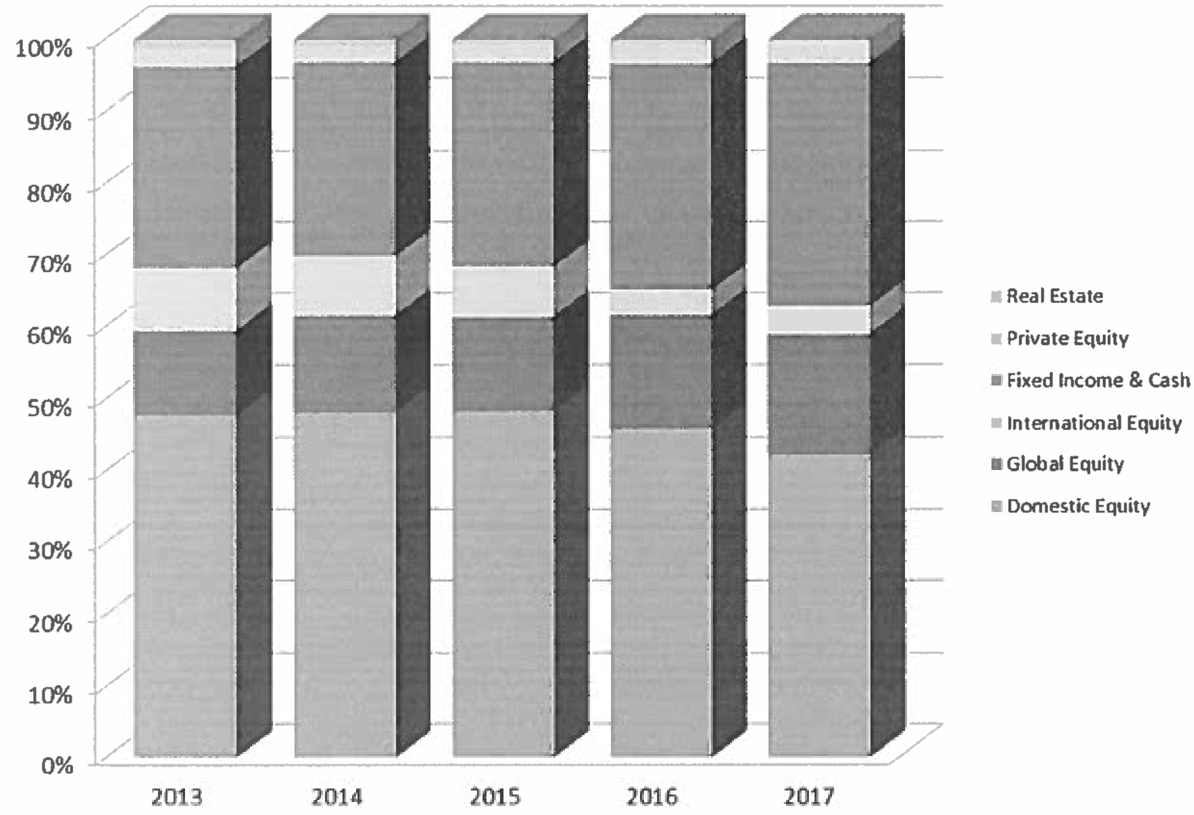
Arlington County Employees' Retirement System
Asset Allocation
(As of June 30, 2017)

In an effort 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, 2017. The chart and table on page 44 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)	2013	2014	2015	2016	2017
Domestic Equity	$811.4	$953.7	$964.2	$900.0	$918.2
Global Equity	$196.2	$263.7	$258.1	$308.1	$360.9
International Equity	$149.1	$166.2	$141.9	$70.3	$86.3
Fixed Income & Cash	$475.0	$532.2	$565.5	$617.8	$736.1
Private Equity	$44.5	$46.2	$49.5	$53.1	$62.7
Real Estate	$19.2	$16.0	$13.8	$12.5	$7.7
	$1,695.4	$1,978.0	$1,993.0	$1,961.8	$2,171.9
Domestic Equity	47.9%	48.3%	48.3%	45.9%	42.3%
Global Equity	11.6%	13.4%	13.0%	15.7%	16.6%
International Equity	8.8%	8.4%	7.1%	3.6%	4.0%
Fixed Income & Cash	28.1%	26.8%	28.4%	31.5%	33.8%
Private Equity	2.6%	2.3%	2.5%	2.7%	2.9%
Real Estate	1.1%	0.8%	0.7%	0.6%	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.

Arlington County Employees' Retirement System
Investment Managers and Assignments
(As of June 30, 2017)

Manager	Assignment	Fiscal Year Retained
Domestic Equities		
AJO	Large Cap Core	2017
Harvest Advisors	MLP	2015
Northern Trust	Russell 1000 Value Index	2015
The Vanguard Group	Large Cap Core	2009
The Vanguard Group	Large Cap Dividend	2011
International and Global Equities		
Baillie Gifford	Global Large Cap	2007
Kiltearn	Global Value	2014
Sanderson Asset Management	International Value	2011
T. Rowe Price	Global Large Cap	2010
Alternatives		
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
JFL Equity Partners	Private Equities	2016
Liquid Realty Partners	Secondary Real Estate	2004
Fixed Income and Cash		
Loomis Sayles	Global Fixed Income	1989
Northern Trust	Cash Equivalents	2014
Northern Trust	Core Bonds	2014
T. Rowe Price	Bank Loans	2011
The Vanguard Group	Short Term Bonds	2010

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

Equities	Shares	Market Value ($)	% of Fund
ENERGY TRANSFER	784,271	15,139,187	0.70%
AMAZON COM INC	13,320	12,893,760	0.59%
ALIBABA	82,063	11,562,677	0.53%
TENCENT HLDGS LIMITED	275,600	9,856,916	0.45%
FACEBOOK	64,138	9,683,555	0.45%
TESLA	25,840	9,344,002	0.43%
ALPHABET INC	10,115	9,213,655	0.42%
ENTERPRISE PRODUCTS	328,322	8,890,960	0.41%
ILLUMINA INC	33,699	5,847,450	0.27%
MPLX LP	135,077	4,509,234	0.21%
WILLIAMS PARTNERS	111,043	4,453,935	0.21%
BAIDU	23,309	4,169,048	0.19%
CTRIP	74,776	4,027,435	0.19%
INTUITIVE SURGICAL	4,279	4,002,448	0.18%
BUCKEYE PARTNERS	61,556	3,935,275	0.18%
HDFC	44,550	3,874,513	0.18%
INDITEX	95,455	3,659,161	0.17%
AIA	487,800	3,564,871	0.16%
KERING	10,237	3,481,727	0.16%
PLAINS ALL AMERICAN	127,476	3,401,335	0.16%
MERCK	50,424	3,231,674	0.15%
SALESFORCE	37,232	3,224,291	0.15%
WORKDAY	32,987	3,199,739	0.15%
NVIDIA CORP	21,237	3,070,021	0.14%
SM INVESTMENT CORP	185,624	2,953,945	0.14%
Equities Total		**151,190,814**	**6.96%**

Fixed Income	Face Value ($)	Market Value ($)	% of Fund
UNITED STATES TREASURY	38,180,000	38,038,757	1.75%
CANADA	11,520,000	8,739,171	0.40%
PULTE HOMES INC	5,090,000	5,163,075	0.24%
ALBERTSONS INC	5,300,000	5,138,888	0.24%
MEX BONOS	752,000	4,556,966	0.21%
NEW SOUTH WALES	5,445,000	4,279,841	0.20%
USW CORP	3,505,000	3,334,517	0.15%
NEW ZEALAND	4,455,000	3,326,847	0.15%
ROYAL BANK OF CANADA	3,230,000	3,216,059	0.15%
APPLE	3,210,000	3,175,704	0.15%
SOCIETE GENERALE	2,805,000	3,144,699	0.14%
GENERAL MOTORS	3,185,000	3,124,797	0.14%
WEYERHAEUSER CO	2,085,000	2,724,045	0.13%
CHESAPEAKE ENERGY	2,575,000	2,411,363	0.11%
TENET HEALTHCARE	2,420,000	2,386,075	0.11%
MORGAN STANLEY	2,570,000	2,329,812	0.11%
SANTANDER	2,000,000	2,143,756	0.10%
CNETURY LINK	2,165,000	2,013,450	0.09%
BRAZIL	5,905,000	1,891,600	0.09%
ENLINK MIDSTREAM	1,890,000	1,866,400	0.09%
DELL	1,805,000	1,827,563	0.08%
TOBACCO SETTLEMENT	2,000,000	1,741,640	0.08%
SPRINT	1,535,000	1,706,260	0.08%
XL CAPITAL	1,420,000	1,696,937	0.08%
AMERICAN AIRLINES	1,509,236	1,571,417	0.07%
Fixed Income Total		**$ 111,549,639**	**5.14%**

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

Arlington County Employees' Retirement System
Schedule of Broker Commissions

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

The System participates in a commission recapture program with Frank Russell Company. This program allows the System to recapture a portion of the commissions paid to broker/dealers by investment managers who participate in the program. All trades are placed subject to the requirement for best execution. Earnings credited to commission recapture income for the fiscal year ended June 30, 2017, were $103. T. Rowe Price participated in the program during the year.

Commissions paid on all trades totaled $319,724 and the average commission rate paid was 0.7 cents per share. The following is a list of brokers who received commissions of $10,000 or more during fiscal 2017. A complete schedule of all commissions paid is available from the Retirement Office.

Broker	Number of Shares	Total Commission	Commission Per Share ($ per share)
Merrill Lynch	5,533,944	86,515	0.016
Themis	3,595,648	44,946	0.013
Morgan Stanley	1,940,142	16,464	0.008
UBS	1,207,914	13,299	0.011
Deutsche	4,368,770	12,319	0.003
Citibank	1,317,409	11,443	0.009
JP Morgan	887,094	10,445	0.012

Actuarial Section

ARLINGTON
VIRGINIA

ARLINGTON COUNTY
EMPLOYEES' RETIREMENT SYSTEM

CHEIRON *Classic Values, Innovative Advice.*

Via Electronic Mail

October 19, 2017

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 (CAFR) 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, 2017, 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 21.0% of pay for the 2017-18 plan year, which meets the funding objective for this fiscal year.

The County's contribution appropriated for the fiscal year ended June 30, 2017 was determined based on the results of the June 30, 2015 valuation. The County's contribution rate was 20.3% of pay, which equated to contributions of $51.8 million.

As of June 30, 2017, the System's actuarial liability was 102.7% funded based on the Actuarial Value of Assets. The actuarial liability was 102.4% funded based on the Market 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, 2014 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 2008 to June 2013. Concurrent with the June 30, 2016 valuation, the Board elected to decrease the investment assumption from 7.25% to 6.75% and both the general wage and inflation assumption from 3.75% to 3.00%.

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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: 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 CAFR, 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 CAFR based on the June 30, 2017 actuarial valuation.

- Summary of Actuarial Assumptions and Methods
- Schedule of Active Member Valuation Data
- Solvency Test
- Retirement Allowances Added to and Removed from Rolls
- Analysis of Financial Experience

All other supporting schedules in the Actuarial Section of the CAFR 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, 2017 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 CAFR based on the June 30, 2017 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.

CHEIRON

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

I 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

I hereby certify that, to the best of my knowledge, 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 which are consistent with the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board. 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 a credentialed actuary, I 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. I am not an attorney 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

CHEIRON

Actuarial Assumptions, Methods and Summary of Valuation Results

Valuation Method and Asset Value

An actuarial valuation is performed annually. At June 30, 2017, the date of the actuarial valuation used for fiscal year 2017 reporting, the market value of System assets was $2,173.8 million compared to $1,963.5 million in assets at June 30, 2016.

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, 2017 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, 2017 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, 2017 was $2,180.3 million, which is 100.3% 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 ($58.0) million as of June 30, 2017 due to actuarial value of assets being larger than the Actuarial Liability.

The table below summarizes, at June 30, 2017, the actuarial liabilities, both funded and unfunded, by employee type and for the total System.

	Liabilities (in millions of $)			
	General	School	Uniformed	Total
Present Value of Future Benefits				
Active Members	$767.6	$4.5	$641.9	$1,414.0
Retired Members and Beneficiaries	527.0	80.0	372.9	979.9
Disabled Members	31.3	1.1	91.9	124.3
Vested Deferred Members	31.0	0.7	10.8	42.5
DROP Members	68.4	0.3	69.6	138.3
Total	$1,425.3	$86.6	$1,187.1	$2,699.0
Normal Cost Rate	13.1%	0.0%	31.4%	N/A
Present Value of Future Payroll	$1,771.1	$0.0	$673.9	$2,445.0
Present Value of Future Employer Costs	$232.0	$0.0	$211.6	$443.6
Present Value of Future Member Contributions	$76.1	$0.0	$57.0	$133.1
Actuarial Liability	$1,117.2	$86.6	$918.5	$2,122.3
Actuarial Value of Assets	$1,149.3	$86.6	$944.4	$2,180.3
Unfunded Actuarial Liability	($32.1)	$0.0	($25.9)	($58.0)

Source: June 30, 2017 Actuarial Report- Table III-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, 2017 Actuarial Valuation reflects the County's contribution rate of 21.0% for fiscal year 2019. This contribution rate is comprised of a normal cost rate of 18.1% and a 20-year amortization of the increase in liabilities associated with the benefit changes of 2.9%. 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 2019 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 2019:

	Employer Contribution Rate as a Percentage of Payroll	
	General	Uniformed
Normal Cost	17.1%	38.9%
Member Contribution Rate	4.0%	7.5%
Employer Normal Cost	13.1%	31.4%
Expense Loading as Percentage of Payroll	0.4%	0.4%
County Normal Cost Plus Expenses	13.5%	31.8%

Source: June 30, 2017 Actuarial Report- Table IV-1 and Table IV-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, 2017, the date of the actuarial valuation, was 3,576, a small increase from 3,566 at June 30, 2016.

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, 2014 valuation. Concurrent with the June 30, 2016 valuation, the Board elected to decrease the discount rate, general wage and inflation assumptions.

During the fiscal year 2017, the financial markets performed above expectation. The actual net investment return, on a market value basis, was approximately 12.7% which is more than the prior year's actuarial rate of return assumption of 6.75% for that period. The market value of System assets increased $210.3 million in 2017. On an actuarial basis, System assets increased $135.9 million.

On the liability side, the System had a $68.8 million increase in actuarial liabilities. Normal annual liability growth of $95.9 million and a reduction of $27.1 million due to the System's actual experience combine to account for the change.

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, 2014 actuarial valuation. Concurrent with the June 30, 2016 valuation, the Board elected to decrease the investment return from 7.25% to 6.75% and the inflation and general wage inflation assumptions from 3.75% to 3.00% to reflect future expectations. 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** 0.4%
   7. **Annual Rate of Merit/Seniority Salary Increase (in addition to 3, applied on a multiplicative case)**

Service	General	Uniformed	School
0	4.15%	6.50%	5.75%
5	3.65	5.12	4.65
10	3.15	4.07	3.55
15	2.75	3.18	2.45
20	2.45	2.80	1.35
25	2.00	2.80	1.35
30	2.00	2.80	1.35
35	2.00	2.80	1.35

   8. **Changes in Economic Assumptions since Last Valuation**

      None

2. **<u>Demographic Assumptions – General Members</u>**

1. **Death Rates**

   a. Active Members – RP-2000 Combined Mortality with generational mortality improvements using Scale AA, no deaths assumed to be service-connected.

   b. Healthy Retirees and Beneficiaries – RP-2000 Combined Mortality projected with generational mortality improvements using Scale AA.

   c. Disabled Retirees – RP-2000 Disabled Mortality projected with generational mortality improvements using Scale AA.

2. **Disability Rates**

	Chapter 21		Chapter 46	
Age	Male	Female	Male	Female
22	.00108	.00010	.00041	.00021
27	.00108	.00013	.00047	.00026
32	.00157	.00018	.00056	.00036
37	.00241	.00023	.00086	.00046
42	.00389	.00030	.00128	.00062
47	.00641	.00045	.00205	.00093
52	.01041	.00083	.00353	.00170
57	.01500	.00170	.00522	.00298
62	.01500	.00483	.00846	.00697

45% (Chapter 21) or 40% (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	.2000	.1750
1	.1500	.1750
2	.1000	.1500
3	.0925	.1000
4	.0850	.0900
5	.0775	.0800
6	.0700	.0700
7	.0625	.0600
8	.0550	.0500
9	.0475	.0375
10	.0400	.0250
11	.0325	.0250
12	.0250	.0250
13	.0200	.0175
14	.0200	.0175
15	.0200	.0175
16	.0200	.0175
17	.0200	.0175
18	.0200	.0175
19	.0200	.0175
20	.0200	.0100
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

	Male		Female	
Age	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	.05	.20
51	.05	.20
52	.05	.20
53	.05	.20
54	.05	.20
55	.05	.20
56	.05	.20
57	.05	.20
58	.05	.20
59	.05	.20
60	.05	.20
61	.05	.20
62	N/A	.20
63	N/A	.20
64	N/A	.20
65	N/A	.20
66	N/A	.20
67	N/A	.20
68	N/A	.20
69	N/A	.20
70	N/A	1.00

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

No changes

3. Demographic Assumptions – Uniformed Members

1. Death Rates

a. Active Members – RP-2000 Combined Mortality with generational mortality improvements using Scale AA; 50% of deaths assumed to be service connected.

b. Healthy Retirees and Beneficiaries – RP-2000 Combined Mortality with generational mortality improvements using Scale AA.

c. Disabled Retirees – RP-2000 Disabled Mortality with generational mortality improvements using Scale AA.

2. Disability Rates

	Chapter 21		Chapter 46	
Age	Male	Female	Male	Female
22	.00225	.00300	.00101	.00135
27	.00375	.00500	.00169	.00225
32	.00600	.00800	.00270	.00360
37	.00975	.01300	.00439	.00585
42	.01350	.01800	.00608	.00810
47	.01800	.02400	.00810	.00108
52	.02250	.03000	.01013	.01350
57	.00000	.00000	.00861	.01148
62	.00000	.00000	.00810	.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	.1000	.4000
1	.0875	.2000
2	.0750	.1250
3	.0625	.0500
4	.0500	.0500
5	.0375	.0500
6	.0250	.0500
7	.0150	.0500
8	.0150	.0500
9	.0150	.0150
10	.0150	.0500
11	.0150	.0500
12	.0150	.0500
13	.0150	.0100
14	.0150	.0100
15	.0150	.0100
16	.0150	.0100
17	.0150	.0100
18+	.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

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

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

Chapter 46 Actives

	Male		Female	
Age	Early	Unreduced	Early	Unreduced
49	.03	.25	.03	.25
50	.03	.24	.03	.24
51	.03	.23	.03	.23
52	N/A	.22	NA	.22
53	N/A	.21	NA	.21
54	N/A	.20	NA	.20
55	N/A	.19	NA	.19
56	N/A	.18	NA	.18
57	N/A	.17	NA	.17
58	N/A	.16	NA	.16
59	N/A	.15	NA	.15
60	N/A	1.00	NA	1.00

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

Vested Former Members

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

5. **Family Composition**

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

6. **Unused Sick Leave**

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

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

   None

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

   1. **Death Rates**

      a. Active Members – RP-2000 Combined Mortality with White Collar Adjustment with generational mortality improvements using Scale BB; no deaths assumed to be service connected.

      b. Healthy Retirees and Beneficiaries – RP-2000 Combined Mortality with White Collar Adjustment with generational mortality improvements using Scale BB.

      c. Disabled Retirees – RP-2000 Disabled Mortality with generational mortality improvements using Scale AA.

2. Disability Rates

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

3. Termination Rates

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

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

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

4. Retirement Rates

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

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

5. Family Composition

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

6. Unused Sick Leave

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

7. Change Since Last Valuation - School

None

Funding Method

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

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

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

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

Asset Valuation Method

For purposes of the valuation, assets are valued at an "actuarial value." The actuarial value is used in order to smooth the fluctuations that would occur if market values were used. The specific technique adopted sets the Actuarial Value of Assets by projecting forward each of the four previous years' market values to the valuation date using actual cash flows (contributions less benefit payments and expenses) and assuming the Fund returned the actuarial assumption: 7.5% for years between 2011 and 2014 and 7.25% for years between 2014 and 2016 and 6.75% thereafter. The four projected market values plus the current market value are averaged to determine the Actuarial Value of Assets. The Board opted to limit the Actuarial Value of Assets to be no less than 80% of the Market Value of Assets, but not greater than 120% of the Market Value of Assets.

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

Summary of Plan Provisions

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

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

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

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

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

Early retirement is available with a reduction in benefits.

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

Retirement benefits are vested after 5 years of service.

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

Ordinary disability benefits are available after five years of service.

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

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

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

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

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

Early retirement is available with a reduction in benefits.

Retirement benefits are vested after 5 years of service.

Ordinary disability benefits are available after five years of service.

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

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

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

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

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

1. 2.5% x years of creditable service prior to January 4, 2009 x new average final salary *plus* 2.7% x years of creditable service on/after January 4, 2009 x new average final salary, OR

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

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

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

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

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

Additional Information

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

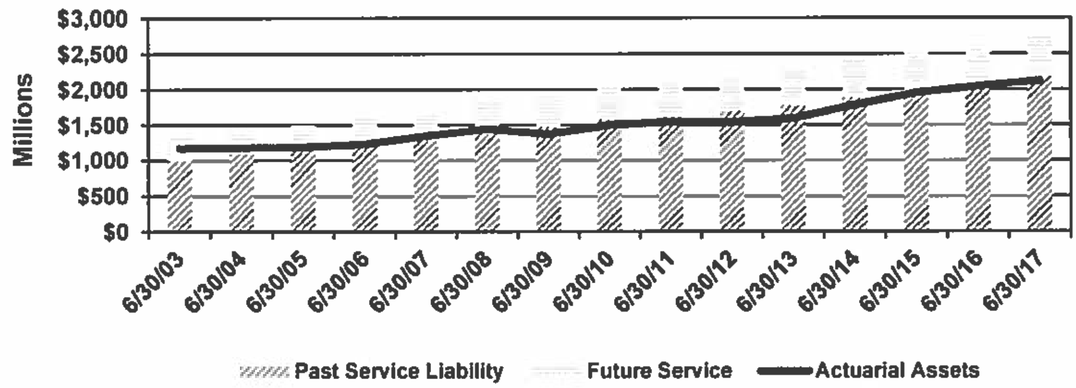
A Deferred Retirement Option Program (DROP) was added effective January 1, 2002, for all Chapters. DROP is a voluntary program that provides a way for employees to continue to work for the County in their present or a similar capacity, earn a salary, and receive a portion of their retirement benefits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

Trends

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

Chart A illustrates the System's assets and liabilities. At June 30, 2017, the ratio of actuarial assets to liabilities is 102.7%, up from 99.6% in the prior year's Actuarial Valuation due primarily to continued recognition of deferred investment gains and favorable liability experience.

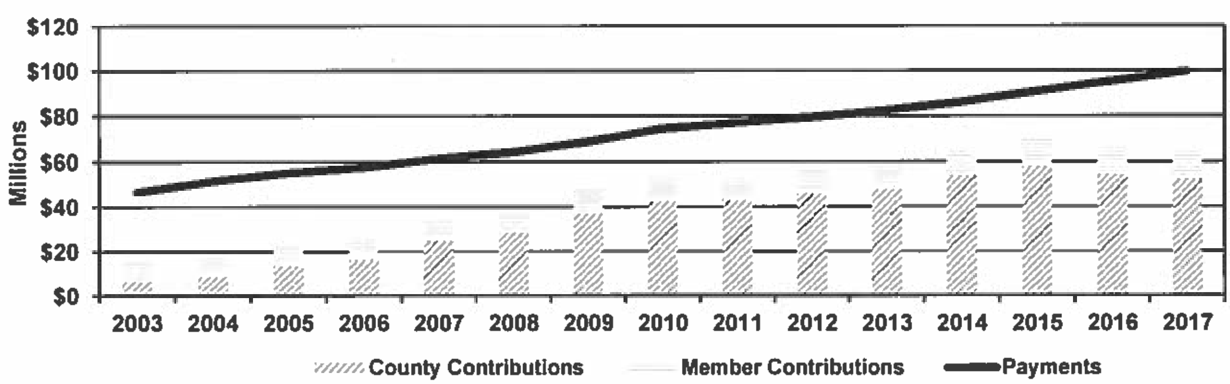
Chart A: ASSETS / LIABILITIES



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)

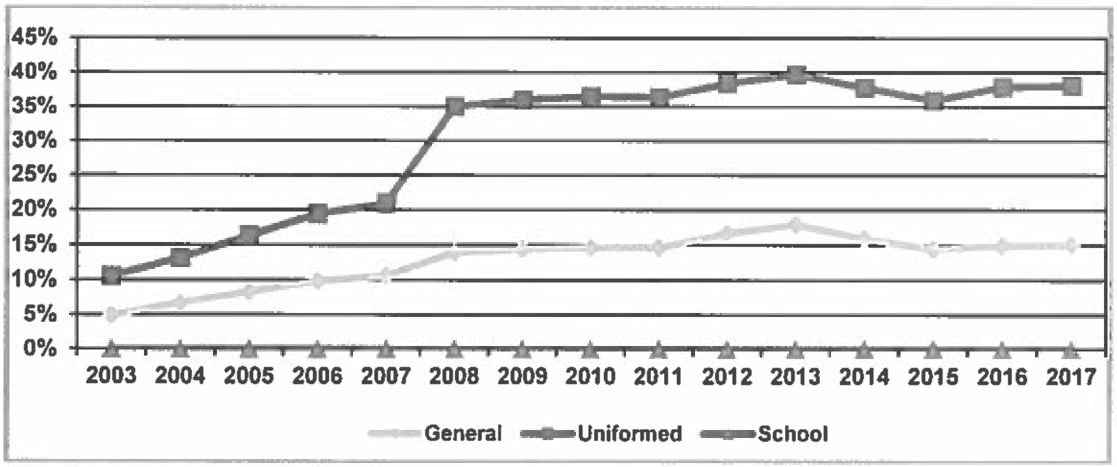


Source: Actuarial Reports- Assets, Table II-1

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

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

Chart C: COUNTY CONTRIBUTION RATE



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

Schedule of Active Member Valuation Data

Group	Plan	Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
General Employees						
	Chapter 21	6/30/2017	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	6/30/2017	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%
School Board Employees						
	Chapter 35	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%
Uniformed Employees						
	Chapter 21	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	6/30/2017	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
SOLVENCY TEST

All $ amounts are millions

	Aggregate Accrued Liability For:					Portion of Accrued Liabilities Covered by Value of Assets		
	(1)	(2)	(3)					
Valuation Date	Active Employee Contrib.	Inactive* Employees	Active Employer Contrib.	Actuarial Liability	Actuarial Value of Assets	(1)	(2)	(3)
6/30/2008	$ 185.9	$ 701.4	$ 493.2	$ 1,380.5	$1,449.2	100%	100%	114%
6/30/2009	216.1	799.4	458.5	1,474.0	1,375.8	100%	100%	79%
6/30/2010	247.8	871.2	461.1	1,580.1	1,503.7	100%	100%	83%
6/30/2011	286.5	885.5	451.4	1,623.4	1,548.1	100%	100%	83%
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%

** Retirees, beneficiaries and vested deferred members*

Source: June 30, 2017 Actuarial Report - Accounting Information, Table V-5

ANALYSIS OF FINANCIAL EXPERIENCE

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

Type of Activity	2012	2013	2014	2015	2016	2017
Investment Income	$ (102.4)	$ (36.7)	$ 92.3	$ 61.9	$ (18.0)	$ 35.1
Combined Liability Experience	24.1	10.9	11.0	16.2	47.3	27.1
Gain (or Loss) During Year from Financial Experience	$ (78.3)	$ (25.8)	$ 103.3	$ 78.1	$ 29.3	$ 62.2
Non-Recurring Items	0.0	0.0	(29.4)	0.0	(27.2)	0.0
Compositive Gain (or Loss) During Year	$ (78.3)	$ (25.8)	$ 73.9	$ 78.1	$ 2.1	$ 62.2

RETIREMENT ALLOWANCES ADDED TO AND REMOVED FROM ROLLS

		Added to Rolls		Removed from Rolls		On Rolls at Year End		%	Average
Plan	Year Ended	No.	Annual Allowances	No.	Annual Allowances	Year-End Total	Annual Allowances	Increase Allowance	Annual Allowance
Chapter 21	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	6/30/2017	15	$181,889	40	$287,778	868	$9,094,361	(1.2%)	$10,477
	6/30/2016	17	$147,917	33	$265,282	893	$9,200,250	(1.3%)	$10,303
	6/30/2015	18	$196,276	55	$329,093	909	$9,317,615	(1.4%)	$10,250
	6/30/2014	13	$243,621	43	$238,283	946	$9,450,432	0.1%	$9,990
	6/30/2013	15	$285,716	29	$182,049	976	$9,445,094	1.1%	$9,677
	6/30/2012	18	$236,125	49	$240,554	990	$9,341,427	(0.0%)	$9,436
Chapter 46	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

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 Assets reflect payments made to and by the System and the impact on net assets
- Contribution Analysis by source
- Schedules of Average Benefit Payments present the average monthly benefit, by chapter
- Schedules of Retired Members by Type of Benefit identify number of retirees by retirement type for each chapter

ACTIVE EMPLOYEE MEMBERSHIP IN RETIREMENT SYSTEM

AS OF JUNE 30, 2017

	CHAPTER			TOTAL
GROUP	21	35	46	MEMBERSHIP
General County	4	0	2,625	2,629
Deputy Sheriffs	0	0	211	211
Firefighters	0	0	295	295
Police Officers	1	0	329	330
School	1	17	93	111
TOTALS	6	17	3,553	3,576

HISTORY OF ACTIVE EMPLOYEE MEMBERSHIP IN RETIREMENT SYSTEM

JUNE 30, 2017

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
CHAPTER 21										
General County	56	31	17	14	14	9	8	6	4	4
Police Officers	10	3	3	2	1	1	1	1	1	1
Firefighters	11	2	1	1	1	0	0	0	0	0
Deputy Sheriffs	0	0	0	0	0	0	0	0	0	0
School	12	7	6	3	3	3	3	1	1	1
TOTAL	89	43	27	20	19	13	12	8	6	6
CHAPTER 35										
School	108	87	86	65	56	43	34	28	23	17
General County	3	3	1	1	0	0	0	0	0	0
TOTAL	111	90	87	66	56	43	34	28	23	17
CHAPTER 46										
General County	2,373	2,425	2,487	2,504	2,525	2,520	2,535	2,563	2,607	2,626
Police Officers	454	329	323	333	345	336	347	345	339	329
Firefighters	299	291	277	282	302	293	294	278	283	295
Deputy Sheriffs	276	205	208	203	210	205	204	199	204	211
School	200	187	172	167	153	140	128	112	104	93
TOTAL	3,602	3,437	3,467	3,489	3,535	3,494	3,508	3,497	3,537	3,554
GRAND TOTAL	3,802	3,570	3,581	3,575	3,610	3,550	3,554	3,533	3,566	3,577

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 2017

Chapters 21 & 46	SERVICE RETIREMENTS	DEFFERED RETIREMENT OPTION PLAN (DROP)	ORDINARY DISABILITY	SERVICE CONNECTED DISABILITY	TOTAL
General County	54	50	3	1	108
Deputy Sheriffs	7	3			10
Firefighters	3	8		1	12
Police Officers	4	10			14
School	9	3	1		13
TOTAL	**77**	**74**	**4**	**2**	**157**

Chapter 35	SERVICE RETIREMENTS	DEFFERED RETIREMENT OPTION PLAN (DROP)	ORDINARY DISABILITY	SERVICE CONNECTED DISABILITY	TOTAL
General County	1				1
School	12	1			13
TOTAL	**13**	**1**	**0**	**0**	**14**

HISTORY OF RETIREMENTS GRANTED
YEAR ENDED JUNE 30

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
CHAPTERS 21 & 46										
Service Retirements	50	51	98	42	49	73	74	81	74	77
DROP	39	95	53	36	54	49	52	68	67	74
Ordinary Disability	2	1	1	4	0	2	4	4	4	4
Service Connected Disability	9	6	8	1	12	3	4	4	2	2
	100	153	160	83	115	127	134	157	147	157
CHAPTER 35										
Service Retirements	26	14	16	20	12	14	12	14	13	13
DROP	1	0	0	0	2	0	0	0	0	1
Ordinary Disability	1	0	0	0	0	0	0	0	0	0
	28	14	16	20	14	14	12	14	13	14
GRAND TOTAL	**128**	**167**	**176**	**103**	**129**	**141**	**146**	**171**	**160**	**171**

SUMMARY OF MONTHLY RETIREMENT ALLOWANCES
RETIREES AND SURVIVORS
AS OF JUNE 30, 2017

	Service Retirements		DROP		Ordinary Disability		Service Connected Disability		Total	
CHAPTER 21	#	Amount	#	Amount	#	Amount	#	Amount	#	Amount
General County	653	$1,816,118	2	$8,471	13	$33,644	20	$52,308	688	$1,910,541
Deputy Sheriffs	21	$81,315	0	$0	0	$0	5	$9,959	26	$91,274
Firefighters	145	$533,497	0	$0	1	$882	48	$156,799	194	$691,178
Police Officers	200	$745,685	0	$0	5	$7,413	38	$128,745	243	$881,843
School	129	$236,360	0	$0	6	$10,266	5	$8,836	140	$255,462
TOTAL	1,148	$3,412,975	2	$8,471	25	$52,205	116	$356,647	1,291	$3,830,298
CHAPTER 46										
General County	1,046	$1,579,742	128	$347,246	46	$45,116	36	$89,994	1,256	$2,062,098
Deputy Sheriffs	83	$276,211	11	$65,419	2	$1,513	19	$60,127	115	$403,270
Firefighters	70	$321,084	19	$113,924	0	$0	44	$184,402	133	$619,410
Police Officers	97	$375,087	26	$159,244	0	$0	26	$98,648	149	$632,979
School	227	$139,947	5	$10,217	23	$10,603	0	$0	255	$160,767
TOTAL	1,523	$2,692,071	189	$696,050	71	$57,232	125	$433,171	1,908	$3,878,524
CHAPTER 35										
General County	35	$24,725	0	$0	0	$0	0	$0	35	$24,725
School	838	$731,340	1	$2,209	29	$13,075	0	$0	868	$746,624
TOTAL	873	$756,065	1	$2,209	29	$13,075			903	$771,349
GRAND TOTAL	3,544	$ 6,861,111	192	$ 706,730	125	$ 122,512	241	$ 789,818	4,102	$ 8,480,171

HISTORY OF MONTHLY RETIREMENT ALLOWANCES
YEAR ENDED JUNE 30

($ in thousands)	2008		2009		2010		2011		2012	
TYPE	#	Amount	#	Amount	#	Amount	#	Amount	#	Amount
Service	2,922	$4,067	2,967	$4,317	3,069	$4,717	3,118	$4,796	3,240	$5,342
DROP	100	$370	153	$560	164	$580	192	$583	127	$399
Ordinary Disability	158	$125	151	$123	148	$126	126	$119	141	$124
Service Connected Disability	264	$694	267	$737	266	$775	267	$774	256	$759
TOTAL	3,444	$5,256	3,538	$5,737	3,647	$6,198	3,703	$6,272	3,764	$6,624

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

ADDITIONS & DEDUCTIONS

YEAR ENDED JUNE 30

(millions)	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
ADDITIONS										
Contribution Total	40.2	47.8	53.7	53.8	57.3	59.4	65.6	70.4	66.7	64.5
Employer	30.0	37.1	42.9	43.2	46.3	48.0	53.7	58.2	54.4	51.8
Employee	10.2	10.7	10.8	10.6	11.0	11.4	11.9	12.2	12.3	12.7
Net Investment Income	(73.9)	(222.8)	146.2	287.7	3.8	203.6	304.9	37.4	(1.3)	247.3
Income & Appreciation	(68.8)	(219.5)	149.9	292.4	8.0	208.7	310.7	45.6	5.7	252.9
Less Investment Expense	(5.7)	(3.3)	(3.8)	(4.9)	(4.4)	(5.3)	(5.9)	(8.4)	(7.2)	(5.9)
Security Lending	0.6		0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.3
TOTAL ADDITIONS	(33.7)	(175.0)	199.9	341.5	61.1	263.0	370.5	107.7	65.4	311.8
DEDUCTIONS										
Benefit Payments	61.9	66.7	72.3	74.9	77.4	81.5	85.3	88.9	94.0	98.7
Normal Retirement	29.2	31.7	34.6	36.9	41.1	45.3	47.9	50.4	53.0	57.8
Early Retirement	16.2	16.2	16.4	16.6	16.6	16.5	16.7	16.7	16.7	16.9
Death in Service					0.1	0.1	0.1	0.1	0.1	0.2
Duty Disability Retirement	8.2	8.7	9.3	9.1	9.0	9.2	9.3	9.4	9.7	9.3
Ordinary Disability	1.5	1.5	1.5	1.5	1.5	1.5	1.4	1.4	1.5	1.4
Survivor Payments	2.7	2.9	3.1	3.4	3.5	3.7	3.8	4.1	4.4	4.6
DROP	3.8	5.4	7.2	6.7	5.2	4.7	5.6	6.4	6.7	8.0
Other	0.3	0.3	0.3	0.7	0.4	0.4	0.4	0.4	1.9	0.5
Refunds	1.6	1.3	1.4	1.3	1.5	1.1	1.0	1.8	1.3	0.9
Administrative Expenses	0.8	0.8	0.8	0.8	0.8	1.0	1.4	1.5	1.7	1.8
TOTAL DEDUCTIONS	64.3	68.8	74.5	77.0	79.7	83.6	87.7	92.2	97.0	101.4

PLAN NET ASSETS

YEAR ENDED JUNE 30

At Market (millions)	2008	2009	2010	2011	2012
Beginning	$1,487.8	$1,389.8	$1,146.0	$1,271.4	$1,535.8
Additions	(33.6)	(175.0)	199.9	341.5	61.1
Deductions	64.3	68.9	74.6	77.0	79.7
Net Change	(97.9)	(243.8)	125.4	264.4	(18.5)
Year End	$1,389.9	$1,146.0	$1,271.4	$1,535.8	$1,517.3

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

CONTRIBUTION ANALYSIS
YEAR ENDED JUNE 30

(Dollars in millions)	Group	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Estimated Covered Payroll		$242.2	$224.1[1]	$220.8[1]	$224.5[1]	$225.2[1]	$222.6[1]	$231.2[1]	$231.2[1]	245.94[1]	252.58[1]
Employer Contribution: *(% of Payroll)*	A, D	9.8%	.6%/13.9%[2]	14.4%	14.2%	14.2%	14.6%	16.6%	17.9%	15.9%	14.4%
	B, C	19.4%	.9%/35.0%[2]	35.5%	35.5%	36.5%	36.4%	38.4%	39.7%	37.8%	35.9%
	E	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Employer Contribution		$30.0	$37.1	$42.9	$43.2	$46.3	$48.0	$53.7	$58.2	$54.4	$51.8
Employee Contribution: *(% of Payroll)*											
Chapter 21	A,D	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
	B	6.6%	6.6%	6.6%	6.6%	6.6%	6.6%	6.6%	6.6%	6.6%	6.6%
	C	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%
Chapter 35	E	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Chapter 46	A, D	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
	B, C	5.0%	5.0%/7.5%[2]	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%
	E	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Employee Contribution		$10.2	$10.7	$10.8	$10.5	$11.0	$11.4	$11.9	$12.2	$12.3	$12.7
Employer/Employee Contribution		2.9	3.5	4.0	4.1	4.2	4.2	4.5	4.8	4.4	4.1
Unfunded Actuarial Liability		$0.0	$0.0	$98.2	$76.4	$75.3	$151.2	$106.1	$20.2	$9.1	($58.0)

Group Key

(A) General Employees
(B) Uniformed Employees
(C) Managers - Uniformed
(D) School Board Employees - Non VRS
(E) School Board Employees - VRS

[1] Under new payroll definition which excludes overtime
[2] Prior to January 4, 2009/After January 4, 2009

PARTICIPANT AND INVESTMENT DATA AND RATIO
YEAR ENDED JUNE 30

	2012	2013	2014	2015	2016	2017
Participant Data						
Active Employees	3,610	3,550	3,554	3,533	3,566	3,576
Deferred Vested Members	326	358	500	548	559	584
Retirees	3,764	3,833	3,882	3,945	3,909	4,004
Retirees as a % of Active Employees	104.3%	108.0%	109.2%	111.7%	109.6%	112.0%
Retirement Benefits Paid (millions)	$77.4	$81.4	$85.3	$88.9	$94.0	$98.7
Average Benefit Payment ($/month)						
Chapter 21	$2,599	$2,671	$2,756	$2,831	$2,898	$2,967
Chapter 35 (Supplement)	$771	$793	$813	$832	$846	$854
Chapter 46[1]	$1,559	$1,659	$1,741	$1,842	$1,952	$2,033
Investment Data						
Net Assets, Market Value (millions)	$1,517.3	$1,696.8	$1,979.6	$1,995.0	$1,963.5	$2,173.8
Ratio: Net Assets/ Benefits Paid	19.6	20.8	23.2	22.4	20.9	22.0

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

SCHEDULE OF AVERAGE BENEFIT PAYMENTS
CHAPTER 21 EMPLOYEES

Uniform & General Employees Hired Before 2/8/81	Years of Credited Service					
	5-9	10-14	15-19	20-24	25-29	30+
Period 7/1/10 to 6/30/11						
Average of Final Monthly Salaries	$0	$3,054	$0	$0	$9,555	$6,320
Average Monthly Benefit	$0	$1,130	$0	$0	$6,670	$4,633
Number of Current Retirees	0	1	0	0	1	5
Period 7/1/11 to 6/30/12						
Average of Final Monthly Salaries	$1,157	$0	$0	$3,786	$0	$7,086
Average Monthly Benefit	$166	$0	$0	$2,084	$0	$5,265
Number of Current Retirees	1	0	0	2	0	1
Period 7/1/12 to 6/30/13						
Average of Final Monthly Salaries	$1,116	$0	$3,810	$0	$0	$7,644
Average Monthly Benefit	$269	$0	$1,906	$0	$0	$5,420
Number of Current Retirees	1	0	1	0	0	6
Period 7/1/13 to 6/30/14						
Average of Final Monthly Salaries	$2,413	$2,515	$3,066	$5,942	$0	$0
Average Monthly Benefit	$462	$691	$1,373	$2,870	$0	$0
Number of Current Retirees	3	3	1	2	0	0
Period 7/1/14 to 6/30/15						
Average of Final Monthly Salaries	$0	$0	$3,279	$3,378	$0	$4,535
Average Monthly Benefit	$0	$0	$1,406	$1,333	$0	$2,954
Number of Current Retirees	0	0	1	2	0	4
Period 7/1/15 to 6/30/16						
Average of Final Monthly Salaries	$0	$0	$4,880	$0	$0	$5,791
Average Monthly Benefit	$0	$0	$2,158	$0	$0	$4,053
Number of Current Retirees	0	0	1	0	0	1
Period 7/1/16 to 6/30/17						
Average of Final Monthly Salaries	$0	$2,899	$0	$0	$0	$0
Average Monthly Benefit	$0	$775	$0	$0	$0	$0
Number of Current Retirees	0	1	0	0	0	0

SCHEDULE OF AVERAGE BENEFIT PAYMENTS
CHAPTER 35 EMPLOYEES

School Board and DHS Hired Before 2/8/81	Years of Credited Service					
	5-9	10-14	15-19	20-24	25-29	30+
Period 7/1/10 to 6/30/11						
Average of Final Monthly Salaries	$1,347	$0	$0	$0	$7,112	$8,646
Average Monthly Benefit	$67	$0	$0	$0	$1,314	$1,900
Number of Current Retirees	1	0	0	0	4	15
Period 7/1/11 to 6/30/12						
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
Period 7/1/12 to 6/30/13						
Average of Final Monthly Salaries	$0	$0	$0	$6,682	$6,991	$8,376
Average Monthly Benefit	$0	$0	$0	$1,344	$1,481	$1,868
Number of Current Retirees	0	0	0	1	3	10
Period 7/1/13 to 6/30/14						
Average of Final Monthly Salaries	$0	$0	$8,044	$8,021	$0	$8,244
Average Monthly Benefit	$0	$0	$1,369	$1,314	$0	$1,829
Number of Current Retirees	0	0	1	4	0	7
Period 7/1/14 to 6/30/15						
Average of Final Monthly Salaries	$1,609	$3,691	$3,926	$0	$4,003	$8,349
Average Monthly Benefit	$94	$385	$772	$0	$684	$1,814
Number of Current Retirees	4	1	2	0	1	6
Period 7/1/15 to 6/30/16						
Average of Final Monthly Salaries	$1,456	$2,838	$8,044	$0	$0	$9,363
Average Monthly Benefit	$81	$235	$926	$0	$0	$1,904
Number of Current Retirees	5	3	1	0	0	4
Period 7/1/16 to 6/30/17						
Average of Final Monthly Salaries	$1,273	$1,434	$3,838	$0	$5,436	$8,696
Average Monthly Benefit	$84	$160	$643	$0	$1,624	$1,944
Number of Current Retirees	3	2	2	0	2	5

SCHEDULE OF AVERAGE BENEFIT PAYMENTS
CHAPTER 46 EMPLOYEES

All Employees Hired On or after 2/8/81	Years of Credited Service						
	2-4	5-9	10-14	15-19	20-24	25-29	30+
Period 7/1/10 to 6/30/11							
Average of Final Monthly Salaries	$0	$4,048	$5,840	$5,394	$5,656	$8,178	$4,703
Average Monthly Benefit	$0	$650	$1,167	$1,395	$2,416	$5,077	$3,254
Number of Current Retirees	0	16	16	7	17	15	1
Period 7/1/11 to 6/30/12							
Average of Final Monthly Salaries	$8,758	$4,615	$4,589	$4,918	$5,723	$7,519	$7,127
Average Monthly Benefit	$557	$570	$1,075	$1,321	$2,367	$4,358	$4,920
Number of Current Retirees	2	12	16	16	27	19	10
Period 7/1/12 to 6/30/13							
Average of Final Monthly Salaries	$4,520	$4,451	$4,894	$5,711	$5,588	$7,333	$6,514
Average Monthly Benefit	$253	$670	$1,189	$1,581	$2,364	$4,348	$3,813
Number of Current Retirees	3	21	17	24	23	32	9
Period 7/1/13 to 6/30/14							
Average of Final Monthly Salaries	$3,037	$5,835	$5,345	$5,736	$6,351	$6,827	$8,878
Average Monthly Benefit	$135	$1,026	$1,105	$1,419	$2,746	$3,676	$4,436
Number of Current Retirees	3	31	16	17	20	37	6
Period 7/1/14 to 6/30/15							
Average of Final Monthly Salaries	$2,972	$5,676	$5,498	$6,205	$6,513	$6,651	$8,878
Average Monthly Benefit	$180	$799	$1,382	$1,820	$2,852	$3,723	$4,468
Number of Current Retirees	1	22	30	18	26	46	10
Period 7/1/15 to 6/30/16							
Average of Final Monthly Salaries	$0	$4,645	$5,052	$6,520	$7,031	$7,114	$7,491
Average Monthly Benefit	$0	$528	$964	$1,947	$3,473	$4,291	$4,528
Number of Current Retirees	0	26	26	13	16	51	27
Period 7/1/16 to 6/30/17							
Average of Final Monthly Salaries	$5,887	$5,741	$6,619	$5,974	$6,134	$7,267	$7,033
Average Monthly Benefit	$399	$733	$1,623	$1,910	$2,723	$4,279	$4,647
Number of Current Retirees	1	23	24	22	21	46	19

SCHEDULE OF RETIRED MEMBERS BY TYPE OF BENEFIT
CHAPTER 21 EMPLOYEES
YEAR ENDED JUNE 30, 2017

Chapter 21

		Type of Retirement								Spousal Benefit Option			
Amount of Monthly Benefit	Number of Retirees	1	2	3	4	5	6	7	8	Opt1	Opt2	Opt3	Opt4
Deferred													
$1 - 250	20	14	3	2			1			20			
251 - 500	55	27	8	16			4			51	4		
501 - 750	47	15	5	21			4		2	42	1	1	3
751 - 1,000	58	10	6	28	2	5	4		3	56	1	1	
1001 - 1,250	71	20	11	31	2	2	4		1	63	6		2
1,251 - 1,500	52	8	9	31		2	2			47	3		2
1,501 - 1,750	66	18	13	21	4	6	2		2	55	10	1	
1,751 - 2,000	59	16	13	15	9	2	1		3	51	5	1	2
Over 2,000	863	516	183	45	99	8	7	2	3	455	273	61	74
Totals	1,291	644	251	210	116	25	29	2	14	840	303	65	83

Type of Retirement

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

Spousal Option Selected

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

SCHEDULE OF RETIRED MEMBERS BY TYPE OF BENEFIT
CHAPTER 35 EMPLOYEES
YEAR ENDED JUNE 30, 2017

Chapter 35

Amount of Monthly Benefit	Number of Retirees	Type of Retirement 1	2	3	4	5	6	7	8	Sposual Benefit Options Opt1	Opt2	Opt3	Opt4
Deferred	28						28			28			
$1 - 250	126	47	43	8		10	17		1	120	2		4
251 - 500	142	59	47	24		8	2		2	136	2	2	2
501 - 750	135	49	60	15		7	3		1	117	8	1	9
751 - 1,000	147	40	98	5		2	2			111	17	7	12
1001 - 1,250	162	40	111	6		1	4			134	14	4	10
1,251 - 1,500	95	37	55			1	2			79	5	4	7
1,501 - 1,750	46	36	8				2			37	3	1	5
1,751 - 2,000	30	24	6							26	2	1	1
Over 2,000	20	19					1			17	1		2
Totals	931	351	428	58	0	29	61	0	4	805	54	20	52

Type of Retirement

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

Spousal Option Selected

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

SCHEDULE OF RETIRED MEMBERS BY TYPE OF BENEFIT
CHAPTER 46 EMPLOYEES
YEAR ENDED JUNE 30, 2017

Chapter 46

		Type of Retirement								Spousal Benefit Options			
Amount of Monthly Benefit	Number of Retirees	1	2	3	4	5	6	7	8	Opt1	Opt2	Opt3	Opt4
Deferred	556						556			556			
$1 - 250	167	51	77	7		12	17	1	2	153	7		7
251 - 500	178	81	44	16		11	22	1	3	151	13		14
501 - 750	192	88	43	15		12	29	4	1	148	22	6	16
751 - 1,000	157	85	33	6	1	12	16	3	1	124	16	4	13
1001 - 1,250	149	76	22	12	3	11	11	12	2	99	29	8	13
1,251 - 1,500	126	77	26	6	2	5	3	5	2	85	21	4	16
1,501 - 1,750	103	67	15	6	2	5	1	5	2	76	18	2	7
1,751 - 2,000	102	71	14	2	3	2		9	1	64	27	1	10
Over 2,000	636	292	60	13	114	1	5	149	2	336	210	43	47
Totals	2,366	888	334	83	125	71	660	189	16	1,792	363	68	143

Type of Retirement

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

Spousal Option Selected

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