

Montgomery County Employee Retirement Plans

Comprehensive Annual Financial Report



Employees' Retirement System Retirement Savings Plan Deferred Compensation Plan *(Trust Funds of Montgomery County, Maryland)*

**Fiscal Year 2019
July 1, 2018 – June 30, 2019**



Government Finance Officers Association

**Certificate of
Achievement
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Reporting**

Presented to

**Montgomery County
Employee Retirement Plans
Maryland**

For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended

June 30, 2018

Christopher P. Morill

Executive Director/CEO

Montgomery County Employee Retirement Plans

Comprehensive Annual Financial Report



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Fiscal Year 2019
July 1, 2018 – June 30, 2019

Prepared by Montgomery County Employee Retirement Plans
101 Monroe Street, 15th Floor
Rockville, Maryland 20850



MONTGOMERY COUNTY
EMPLOYEE RETIREMENT PLANS
Fiscal Year Ended June 30, 2019
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INTRODUCTION SECTION



OFFICES OF THE COUNTY EXECUTIVE

Marc Elrich
County Executive

Andrew W. Kleine
Chief Administrative Officer

October 29, 2019

Honorable County Executive and
Members of the Montgomery County Council

I am pleased to present to you the Comprehensive Annual Financial Report (CAFR) of the Montgomery County Employee Retirement Plans (Plans) for the fiscal year ended June 30, 2019. This annual report is designed to assist you in understanding the structure and current status of the Plans.

FORMAL TRANSMITTAL OF THE CAFR

This report was prepared pursuant to the provisions of Section 33-51(b) of the Montgomery County Code, 2004, as amended (Code), and includes the independent auditor's report, issued by the County Council's appointed independent public accounting firm. Responsibility for the accuracy of the presented data and the completeness and fairness of the presentation including all disclosures rests with the County. We believe the data, as presented, is accurate in all material respects; that it is presented in a manner designed to fairly set forth the fiduciary net position and the changes in the fiduciary net position of the Plans; and that all disclosures necessary to enable the reader to gain the maximum understanding of the financial affairs of the Plans have been included.

PROFILE OF THE RETIREMENT PLANS

History

The Employees' Retirement System (System) was established in 1965, as a cost-sharing, multiple-employer defined benefit pension plan providing benefits to the employees of the County and other agencies or political subdivisions who elect to participate. Participating agencies and subdivisions include the following: Montgomery County Revenue Authority; Housing Opportunities Commission of Montgomery County; Town of Chevy Chase; Strathmore Hall Foundation, Inc.; Washington Suburban Transit Commission; SkyPoint Federal Credit Union; and certain employees of the State Department of Assessments and Taxation; and the District Court of Maryland. The System is closed to employees hired on or after October 1, 1994, except public safety bargaining unit employees and Guaranteed Retirement Income Plan (GRIP) participants. The Montgomery County Council passed legislation in FY 2009 enabling the County to establish and maintain a GRIP, a cash balance plan that is part of the System, for employees. During FY 2010, eligible County employees who were members of the Retirement Savings Plan (RSP) were granted the option to elect to participate in the GRIP, to transfer their RSP member account balance to the GRIP, and to cease being a member of the RSP. There were 6,003 active members, including 2,254 in the GRIP, and 6,731 retirees and beneficiaries participating in the System as of June 30, 2019.

The RSP was established in 1994 as a cost-sharing multiple-employer defined contribution plan providing benefits to all non-public safety and certain public safety employees hired on or after October 1, 1994. Employees covered by the System may make an irrevocable decision to transfer to the RSP. At June 30, 2019, there were 3,380 active plan members.

The Deferred Compensation Plan (DCP) was established pursuant to Section 457 of the Internal Revenue Code, as amended. During FY 1999, in accordance with Federal legislation, the assets of the County Plan were placed in trust for the sole benefit of participants and their beneficiaries.

Benefit Provisions

The benefit provisions of the System are established by the Code. The System provides for normal service retirement and early service retirement benefits for members who attain age and service requirements. The System also provides options for disability and death benefits to eligible participants. Members are vested after five years of service.

The RSP provides for immediate vesting of employee contributions, and employer contributions are vested after three years of service or upon death, disability, or reaching retirement age.

Major Initiatives

During FY 2019, the Board expanded their resources to evaluate the impact of Environmental, Social and Governance (ESG) issues on System's assets. The Board joined the Coalition for Environmentally Responsible Economies (CERES), which is an investor network on climate risk and sustainability, to gain a better understanding of climate risk within the portfolio and the efforts being undertaken by peer institutional investors, investment managers and others. In addition, the Board conducted a survey in conjunction with their general investment consultant to benchmark the System's level of ESG adoption and integration relative to our institutional plan peers to ensure that the Board is undertaking best practices in this area.

In addition to the above initiatives, the Board continued to implement changes to the investment program which resulted in further diversification of the investment portfolio and better management of the System's risk. Toward this effort, new investments were approved in the following sectors: opportunistic, global equities, and private markets. The Board also allocated 5% of total fund assets to diversifying and directional hedge funds through a fund-of-one vehicle.

INFORMATION USEFUL IN ASSESSING THE RETIREMENT PLANS' ECONOMIC CONDITION

Financial Information

Accounting System and Reports

The Plans' financial statements have been prepared under the accrual basis of accounting. Contributions are recognized in the period in which the contributions are due. Benefits, refunds and distributions are recognized when due in accordance with the terms of the Plans.

Management's Discussion and Analysis

The Management's Discussion and Analysis (MD&A), found on pages 15 to 19 of this report, provides a brief analysis of the financial performance of the Plans and an introduction to the financial statements of the Plans for the year ended June 30, 2019.

Investments

Montgomery County has established a Board to be responsible for the investment management of the Plans' assets for the exclusive benefit of the members and participants. The Board consists of thirteen members appointed by the County Executive and confirmed by the County Council.

In overseeing the management of the assets of the Plans, the Board has developed sound and prudent investment policies. The Board believes an appropriate balance must be struck between risks taken and returns sought to ensure the long-term health of the defined benefit plan. The Board has adopted an investment policy that works to control the extent of downside risk to which the System is exposed while maximizing the potential for long-term increases in the value of assets. To achieve this objective, System assets are allocated to a broad array of investment sectors as follows: domestic equity 15.0 percent, international equity 12.4 percent, global equity 2.8 percent, high yield 9.9 percent, private equity 10.2 percent, credit opportunities 1.8 percent, directional hedge funds 1.0 percent, long duration and cash 14.4 percent, diversifying hedge funds 1.8 percent, public real assets 12.8 percent, private real assets 5.1 percent, and inflation indexed bonds 12.8 percent. For the twelve months ended June 30, 2019, the total time-weighted return achieved by the System's investments was a gain of 8.7 percent, compared to the gain recorded by the System's benchmark index of 7.8 percent and the actuarial assumed rate of return of 7.5 percent.

Section 33-125 of the Montgomery County Code authorizes the Board to establish for members of the RSP a diversified slate of mutual and commingled investment funds from which participants may select options. The Board has developed an investment policy outlining its oversight of the investment products offered.

The Board has also established a diversified slate of mutual and commingled funds for the County's Deferred Compensation Plan which offers a range of options from which participants may select. The Board has constructed an investment policy stipulating investment objectives and oversight by the Board.

Funding

The System's actuary uses a five-year smoothed market-related value to determine the actuarial value of assets. The smoothing prevents extreme volatility in employer contribution rates due to short-term fluctuations in the investment markets. For the June 30, 2019 valuation, the actuarial value of assets was \$4.3 billion and the aggregate actuarial liability was \$4.3 billion, resulting in a funded status ratio of 98.7%.

The Schedule of Changes in the Employers' net pension liability and related ratios, included as Required Supplementary Information in the Financial Section, expresses the System's fiduciary net position as a percentage of the total pension liability, providing one indication of the System's funding status on a going-concern basis. The actuary has determined that the present net asset base, expected future contributions, and investment earnings thereon, are sufficient to provide for full payment of future benefits under the entry-age normal actuarial cost method.

Internal Control Structure and Budgetary Controls

The Plans' management is responsible for maintaining internal accounting controls to provide reasonable assurance that transactions are properly authorized and recorded as necessary to permit preparation of financial statements in conformity with U.S. generally accepted accounting principles. We believe the internal controls in effect during the fiscal year ended June 30, 2019 adequately safeguard the Plans' assets and provide reasonable assurance regarding the proper recording of financial transactions. In addition, the Board, in conjunction with the Chief Administrative Officer, approves and actively monitors the annual budgets for each plan. Because the cost of internal controls should not exceed the anticipated benefits, the objective is to provide reasonable, rather than absolute, assurance that the financial statements are free of any material misstatement.

Independent Audit and Actuarial Certification

An independent auditor's report and actuarial certification are included in this report.

AWARDS AND ACKNOWLEDGEMENTS

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 Montgomery County Employee Retirement Plans for its comprehensive annual financial report for the fiscal year ended June 30, 2018. The Certificate of Achievement is a prestigious national award, recognizing conformance with the highest standards for preparation of state and local government financial reports. In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized comprehensive annual financial report, whose contents conform to program standards. Such a 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. The Montgomery County Employee Retirement Plans have received the Certificate of Achievement for the last nineteen consecutive years. We believe our current comprehensive annual financial report continues to meet the Certificate of Achievement program requirements, and we are submitting it to the GFOA.

Acknowledgements

The Plans' CAFR was prepared by the Montgomery County Employee Retirement Plans' staff in conjunction with staff support from the County's Department of Finance. I would like to express my appreciation to the employees who have worked hard throughout the year to ensure the successful operation of the Plans.

Respectfully submitted,



Andrew W. Kleine
Chief Administrative Officer
Plan Administrator

BOARD OF INVESTMENT TRUSTEES

Diane Wurdeman

Chair

Non-Bargaining Unit Representative

Term Expires March 2020

Vacant

Vice-Chair

Montgomery County

Director of Finance

Ex-Officio Member

Joseph F. Beach

Secretary

Public Representative

Term Expires March 2020

Jeffrey D. Buddle

Fire & Rescue Bargaining

Unit Designee

David J. Locke

Montgomery County Council

Representative

Term Expires March 2020

Richard S. Madaleno. Jr.

Montgomery County Director of

Management and Budget

Ex-Officio Member

Marlene Michaelson

Montgomery County Council

Executive Director

Ex-Officio Member

Gino Renne

OPT/SLT Bargaining

Unit Designee

Kelda J.C. Simpson

Police Bargaining

Unit Designee

Deborah Snead

Retired Employees

Representative

Term Expires March 2021

Brad Stelzer

Montgomery County Council

Representative

Term Expires March 2021

George Willie

Public Representative

Term Expires March 2020

Vacant

Montgomery County Director of

Human Resources

Ex-Officio Member

ADMINISTRATIVE ORGANIZATION

Professional Services

Actuary
Gabriel Roeder Smith & Company

Auditor
CliftonLarsonAllen LLP

Custodial Bank
The Northern Trust Company

Investment Consultants

Aberdeen Asset Management, Inc.

Franklin Park

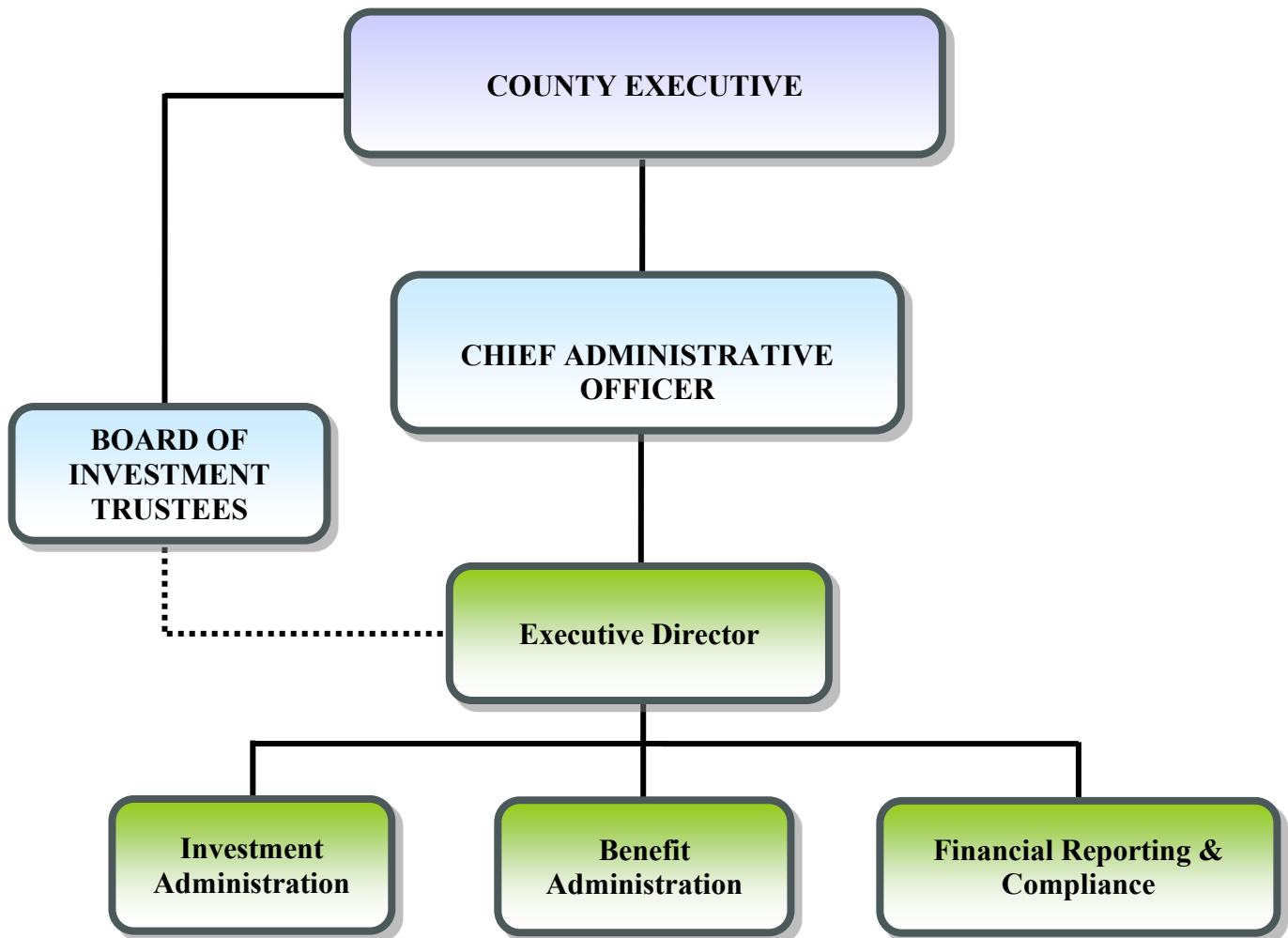
Wilshire Associates

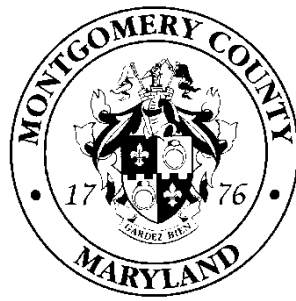
Investment Managers-Employees' Retirement System

Aberdeen Asset Management, Inc.	Adams Street Partners	AEW Partners
Altaris Capital Partners	Altus Capital Partners	Arrowstreet Capital
Atlas Capital Resources	Barings	Barrow, Hanley, Mewhinney & Strauss*
Bison Capital Partners	BlackRock Financial Management	Blackstone
Bridgewater Associates	BV Investment Partners	Carmel Partners
Castlelake	Center Rock Capital Partners	Chickasaw Capital Management
Clearlake Capital Group	CoreCommodity Management	Davidson Kempner
DW Healthcare Partners	Eagle Asset Management*	EMR Capital
EnerVest Ltd.	Federal Capital Partners	First Quadrant LP
Franklin Park	Greyrock Capital Group	Grosvenor Capital Management
Gryphon International*	Gryphon Partners	GQG Partners
Hampshire Companies	HarbourVest Partners	HBK Capital
Highclere International Investors LLP	Holocene	Homestead Capital
Hudson Bay Capital Management LP	J.F. Lehman & Company	Jennison Associates
JP Morgan Investment Management	Juniper Capital LP	K1 Investment Management, LLC
Kimmeridge	KPS Capital Partners, LP	Landmark Partners Inc.
LBA Realty	Levine Leichtman Capital Partners	Lime Rock Resources
Longpoint Realty Partners	Loomis Sayles & Co.	Los Angeles Capital Management
Luxor Capital Partners	Lyme Timber Company	Magna Hospitality Group
Marathon Asset Management LLP*	Mason Wells	Meridian Realty Partners
Mondrian Investment Partners Ltd.	Morgan Stanley	New Energy Capital
Nomura Asset Management	Odyssey Investment Partners	Pearlmark Real Estate Partners
PineBridge Investments LLC	Resource Land Holdings	Rhumblin Advisors*
Riverside Partners	Sands Capital Management*	Schroder Investment Management
Scopia Capital Management	Senator Investment Group	Siris Capital Group LLC
Sunstone Partners	TA Associates	TA Associates Realty LLC
Tailwater	Thoma Bravo	TimesSquare Capital Management*
WCM Investment Management*	Wellington Management*	Whitehorse Liquidity Partners
Wicks Group	WNG Capital	

* Public equity commission brokers are listed on page 60.

Montgomery County Employee Retirement Plans Administrative Organization Chart





FINANCIAL SECTION



INDEPENDENT AUDITORS' REPORT

The Honorable County Council of Montgomery County, Maryland
Board of Investment Trustees
Montgomery County Employee Retirement Plans
Rockville, Maryland

Report on the Financial Statements

We have audited the accompanying financial statements of the Montgomery County Employee Retirement Plans (the Plans), which comprise the statements of fiduciary net position as of June 30, 2019, and the related statements 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 fiduciary net position of the Plans as of June 30, 2019, and the respective changes in fiduciary net position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

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 the employers' net pension liability 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 financial statements that collectively comprise the Plans' financial statements. The schedules of administrative expenses and investment expenses, the statements of fiduciary net position and changes in fiduciary net position for the Employees' Retirement System, Retirement Savings Plan and the Deferred Compensation Plan (supplementary information) and the introduction, investment, actuarial, and statistical sections, as listed in the table of contents, are presented for purposes of additional analysis and are not a required part of the financial statements.

The supplementary information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. Such information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the supplementary information is fairly stated, in all material respects, in relation to the financial statements as a whole.

We also have previously audited, in accordance with auditing standards generally accepted in the United States of America, the Plans' financial statements for the year ended June 30, 2018, which are presented with the accompanying financials statements. That audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the Plans' financial statements as a whole. The statements of fiduciary net position as of June 30, 2018, and the related statements of changes in fiduciary net position for the year then ended, are presented for the purposes of additional analysis and are not a required part of the financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records

used to prepare the 2018 financial statements. The information has been subjected to the auditing procedures applied in the audit of those financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the statements of fiduciary net position as of June 30, 2018, and the related statements of changes in fiduciary net position for the year then ended are fairly stated in all material respects in relation to the financial statements from which they have been derived.

The introduction, investment, actuarial, and statistical sections, as listed in the table of contents, have not been subjected to the auditing procedures applied in the audit of the financial statements, and accordingly, we do not express an opinion or provide any assurance on them.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated October 29, 2019, on our consideration of the Plans' 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 Plans' 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 Plans' internal control over financial reporting and compliance.

A handwritten signature in black ink that reads "CliftonLarsonAllen LLP". The signature is written in a cursive, flowing style.

CliftonLarsonAllen LLP

Baltimore, Maryland
October 29, 2019

MANAGEMENT'S DISCUSSION AND ANALYSIS

INTRODUCTION

The following Management's Discussion and Analysis (MD&A) of the Montgomery County Employee Retirement Plans (Plans) financial performance provides an introduction to the financial statements of the Plans as of and for the year ended June 30, 2019. Since the MD&A is designed to focus on current activities, resulting changes and current known facts, it should be read in conjunction with the transmittal letter in the Introduction Section on page 4, and the financial statements, notes to the financial statements, required supplementary information, and other supplementary information which follow this discussion.

REQUIRED FINANCIAL STATEMENTS

The financial statements for the Plans have been prepared under the accrual basis of accounting in conformity with U.S. generally accepted accounting principles, promulgated by the Governmental Accounting Standards Board. The Statements of Fiduciary Net Position comprise the Plans' assets and liabilities and provide information about the nature and amount of investments, as well as the liabilities. The Statements of Changes in Fiduciary Net Position report the changes of the Plans' net position, measured by the additions by major sources and deductions by type. Comparative financial statements of the three plans are presented in the latter part of the financial section.

FINANCIAL ANALYSIS OF THE MONTGOMERY COUNTY EMPLOYEE RETIREMENT PLANS

Shown below is a condensed presentation of the net position of the Employees' Retirement System (ERS), Retirement Savings Plan (RSP), and Deferred Compensation Plan (DCP) at June 30:

Net Position (Millions)						
	ERS		RSP		DCP	
	2019	2018	2019	2018	2019	2018
Assets:						
Cash and investments	\$ 4,454.0	\$ 4,283.2	\$ 487.6	\$ 444.5	\$ 442.5	\$ 430.3
Receivables	22.6	24.2	1.8	1.7	1.1	1.1
Total assets	<u>4,476.6</u>	<u>4,307.4</u>	<u>489.4</u>	<u>446.2</u>	<u>443.6</u>	<u>431.4</u>
Liabilities	<u>160.0</u>	<u>158.1</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Total net position	<u>\$ 4,316.6</u>	<u>\$ 4,149.3</u>	<u>\$ 489.4</u>	<u>\$ 446.2</u>	<u>\$ 443.6</u>	<u>\$ 431.4</u>

Shown below is a condensed summary of the changes in net position of the ERS, RSP, and DCP for the years ended June 30:

Change in Net Position (Millions)						
	ERS		RSP		DCP	
	2019	2018	2019	2018	2019	2018
Additions:						
Employer contributions	\$ 86.6	\$ 93.1	\$ 20.5	\$ 20.3	\$ -	\$ -
Member contributions	29.6	29.0	12.0	10.8	23.2	20.6
Net investment income	317.9	340.1	27.1	36.6	25.8	43.1
Total additions	<u>434.1</u>	<u>462.2</u>	<u>59.6</u>	<u>67.7</u>	<u>49.0</u>	<u>63.7</u>
Deductions:						
Benefits	256.9	238.9	-	-	-	-
Refunds	6.8	4.6	16.1	15.4	36.8	22.7
Administrative expenses	3.1	2.9	0.3	0.3	-	-
Total deductions	<u>266.8</u>	<u>246.4</u>	<u>16.4</u>	<u>15.7</u>	<u>36.8</u>	<u>22.7</u>
Total change in net position	<u>\$ 167.3</u>	<u>\$ 215.8</u>	<u>\$ 43.2</u>	<u>\$ 52.0</u>	<u>\$ 12.2</u>	<u>\$ 41.0</u>

The following schedules provide a comparative summary and an analysis of each Plan's assets, liabilities and net position, at June 30:

Employees' Retirement System Net Position (Millions)			
	2019	2018	Percentage Change
Assets:			
Cash and investments	\$ 4,454.0	\$ 4,283.2	4.0 %
Receivables	22.6	24.2	(6.6)
Total assets	<u>4,476.6</u>	<u>4,307.4</u>	3.9
Liabilities:			
Benefits payable and other liabilities	10.2	5.2	96.2
Obligations under securities lending agreements	149.8	152.9	(2.0)
Total liabilities	<u>160.0</u>	<u>158.1</u>	1.2
Total net position	<u>\$ 4,316.6</u>	<u>\$ 4,149.3</u>	4.0 %

The table shown above reflects an increase of \$167.3 million, a 4 percent increase in the net position for the ERS during fiscal year (FY) 2019, due to the strong investment returns achieved by the Fund.

Retirement Savings Plan Net Position (Millions)			
	2019	2018	Percentage Change
Assets:			
Cash and investments	\$ 487.6	\$ 444.5	9.7 %
Receivables	1.8	1.7	5.9
Total net position	<u>\$ 489.4</u>	<u>\$ 446.2</u>	9.7 %

During FY 2019, the net position increased 9.7 percent to \$489.4 million due to net contributions and investment earnings during FY 2019.

Deferred Compensation Plan Net Position (Millions)			
	2019	2018	Percentage Change
Assets:			
Cash and investments	\$ 442.5	\$ 430.3	2.8 %
Receivables	1.1	1.1	-
Total net position	<u>\$ 443.6</u>	<u>\$ 431.4</u>	2.8 %

The net position of the DCP increased 2.8 percent to \$443.6 million during FY 2019. The change is due to a combination of increased contributions and distributions, and investment earnings during FY 2019.

ADDITIONS

The primary sources of additions for the Plans include member and employer (where applicable) contributions and investment income. The following tables compare the source and amount of additions for each Plan during FY 2019 and FY 2018.

Employees' Retirement System Contributions and Investment Income (Millions)			
	2019	2018	Percentage Change
Employer contributions	\$ 86.6	\$ 93.1	(7.0) %
Member contributions	29.6	29.0	2.1
Net investment income	317.9	340.1	(6.5)
	<u>\$ 434.1</u>	<u>\$ 462.2</u>	(6.1) %

The decrease in the employer contributions is due to the favorable experience related to the investment return and cost of living adjustments for retirees in the prior fiscal years versus the actuarial assumptions.

Net investment income decreased by 6.5 percent from FY 2018 due to the financial markets being stronger in FY 2018 versus FY 2019. This is compared to net investment income of \$340.1 million in FY 2018.

The net investment income for the ERS totaled \$317.9 million for FY 2019, comprised of \$249.0 million in net appreciation in fair value of investments, \$89.9 million in dividends and interest, \$1.3 million from securities lending activities, and \$22.3 million related to investment expenses.

Retirement Savings Plan Contributions and Investment Income (Millions)			
	<u>2019</u>	<u>2018</u>	<u>Percentage Change</u>
Employer contributions	\$ 20.5	\$ 20.3	1.0 %
Member contributions	12.0	10.8	11.1
Net investment income	27.1	36.6	(26.0)
	<u>\$ 59.6</u>	<u>\$ 67.7</u>	(12.0) %

The increase in member contributions in FY 2019 was due primarily to increased rollover contributions. The investment income was lower in FY 2019 versus FY 2018 due to the relatively stronger financial markets during FY 2018.

Deferred Compensation Plan Contributions and Investment Income (Millions)			
	<u>2019</u>	<u>2018</u>	<u>Percentage Change</u>
Member contributions	\$ 23.2	\$ 20.6	12.6 %
Net investment income	25.8	43.1	(40.1)
	<u>\$ 49.0</u>	<u>\$ 63.7</u>	(23.1) %

Member contributions to the DCP were \$23.2 million for FY 2019, an increase of 12.6 percent from the FY 2018 level due to increased rollover contributions compared to the prior fiscal year. Net investment income for the DCP totaled \$25.8 million in FY19 compared to an income of \$43.1 million in the previous fiscal year due to stronger financial markets in FY 2018.

DEDUCTIONS

The primary sources of deductions from the Plans include the payment of retiree and survivor benefits, participant refunds and distributions, and administrative expenses. The following tables show the use and amount of deductions for each plan during FY 2019 and 2018.

Employees' Retirement System Deductions by Type (Millions)			
	<u>2019</u>	<u>2018</u>	<u>Percentage Change</u>
Benefits	\$ 256.9	\$ 238.9	7.5 %
Refunds	6.8	4.6	47.8
Administrative expenses	3.1	2.9	6.9
	<u>\$ 266.8</u>	<u>\$ 246.4</u>	8.3 %

During FY 2019, benefits and refunds increased by \$18.0 million or 7.5 percent and \$2.2 million or 47.8 percent, respectively. Refunds increased primarily due to the number of participants electing distribution from GRIP plan. Administrative expenses increased by 6.9 percent primarily due to the increased personnel and professional costs in FY 2019.

Retirement Savings Plan Deductions by Type (Millions)			
	<u>2019</u>	<u>2018</u>	<u>Percentage Change</u>
Distributions	\$ 16.1	\$ 15.4	4.5 %
Administrative expenses	0.3	0.3	-
	<u>\$ 16.4</u>	<u>\$ 15.7</u>	4.5 %

The deductions related to the RSP are comprised of distributions and administrative costs. During FY 2019, distributions paid from the RSP increased by 4.5 percent from the FY 2018 level due to increased withdrawals. Administrative expenses remained at the same level as FY 2018.

Deferred Compensation Plan Deductions by Type (Millions)			
	<u>2019</u>	<u>2018</u>	<u>Percentage Change</u>
Distributions	<u>\$ 36.8</u>	<u>\$ 22.7</u>	62.1 %

During FY 2019, distributions paid from the DCP increased by 62.1 percent from the FY 2018 level due to large individual withdrawals made during FY 2019.

For additional information regarding this report, please contact the Board of Investment Trustees at 240-777-8220.

MONTGOMERY COUNTY EMPLOYEE RETIREMENT PLANS
STATEMENTS OF FIDUCIARY NET POSITION
JUNE 30, 2019

	Employees' Retirement System	Retirement Savings Plan	Deferred Compensation Plan
ASSETS			
Equity in County's pooled cash and investments	\$ 2,058,980	\$ 177,209	\$ -
Investments:			
Government and agency obligations	568,830,742	-	-
Municipal/Provincial obligations	8,921,548	-	-
Asset-backed securities	666,245	-	-
Corporate bonds	655,403,025	-	-
Commerical mortgage-backed securities	2,114,604	-	-
Common and preferred stock	1,633,312,048	-	-
Mutual and commingled funds	495,311,451	487,466,447	442,514,247
Short-term investments	203,643,284	-	-
Cash collateral received under securities lending agreements	149,833,263	-	-
Private real assets	218,561,490	-	-
Private equity/debt	515,390,370	-	-
Total investments	4,451,988,070	487,466,447	442,514,247
Dividend, interest, and other receivables	15,376,533	-	-
Contributions receivable	7,256,074	1,813,770	1,063,722
Total assets	4,476,679,657	489,457,426	443,577,969
LIABILITIES			
Payable for collateral received under securities lending agreements	149,833,263	-	-
Benefits payable and other liabilities	10,210,107	38,796	-
Total liabilities	160,043,370	38,796	-
Net position restricted for pensions	\$ 4,316,636,287	\$ 489,418,630	\$ 443,577,969

See accompanying notes to financial statements.

MONTGOMERY COUNTY EMPLOYEE RETIREMENT PLANS
 STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION
 FOR THE YEAR ENDED JUNE 30, 2019

	Employees' Retirement System	Retirement Savings Plan	Deferred Compensation Plan
ADDITIONS			
Contributions:			
Employer	\$ 86,584,479	\$ 20,511,483	\$ -
Members	29,628,822	12,022,808	23,244,334
Total contributions	<u>116,213,301</u>	<u>32,534,291</u>	<u>23,244,334</u>
Investment income	338,831,643	27,128,873	25,774,852
Less investment expenses	22,257,612	4,690	-
Net gain from investment activities	<u>316,574,031</u>	<u>27,124,183</u>	<u>25,774,852</u>
Income from securities lending	4,732,374	-	-
Less securities lending expenses	3,416,051	-	-
Net income from securities lending	<u>1,316,323</u>	<u>-</u>	<u>-</u>
Total additions	<u>434,103,655</u>	<u>59,658,474</u>	<u>49,019,186</u>
DEDUCTIONS			
Retiree benefits	193,421,574	-	-
Disability benefits	53,237,603	-	-
Survivor benefits	10,291,354	-	-
Refunds and distributions	6,760,028	16,066,232	36,856,901
Administrative expenses	3,064,250	324,856	-
Total deductions	<u>266,774,809</u>	<u>16,391,088</u>	<u>36,856,901</u>
Net increase	<u>167,328,846</u>	<u>43,267,386</u>	<u>12,162,285</u>
Net position restricted for pensions			
Beginning of year	<u>4,149,307,441</u>	<u>446,151,244</u>	<u>431,415,684</u>
End of year	<u>\$ 4,316,636,287</u>	<u>\$ 489,418,630</u>	<u>\$ 443,577,969</u>

See accompanying notes to financial statements.

MONTGOMERY COUNTY EMPLOYEE RETIREMENT PLANS

NOTES TO FINANCIAL STATEMENTS

YEAR ENDED JUNE 30, 2019

INTRODUCTION

The Montgomery County Employee Retirement Plans (Plans) are offered to Montgomery County (County) employees, as well as participating agencies, whose eligibility to participate is based on employment status and other factors. Each of the Plans as well as participating agencies described below was established under a separate section of the Montgomery County Code (Code). The accompanying notes summarize the significant accounting policies and plan provisions for each of the Plans, including the Employees' Retirement System, a defined benefit pension plan; the Retirement Savings Plan, a defined contribution plan; and the Deferred Compensation Plan, a plan established pursuant to Section 457 of the Internal Revenue Code.

EMPLOYEES' RETIREMENT SYSTEM - Defined Benefit Pension Plan

The Montgomery County Employees' Retirement System (System or Plan) is considered part of the County's financial reporting entity and is included in the County's basic financial statements as a pension and other employee benefit trust fund. The accompanying financial statements present only the operations of the System in conformity with accounting principles generally accepted in the United States of America (GAAP) applicable to public employee retirement systems. They are not intended to present fairly the financial position and results of operations of the entire County.

The Montgomery County Council passed legislation in FY 2009 enabling the County to establish and maintain a Guaranteed Retirement Income Plan (GRIP), a cash balance plan that is part of the Plan, for employees. During FY 2010 eligible County employees who were members of the Retirement Savings Plan (RSP) were granted the option to elect to participate in the GRIP and to transfer their RSP member account balance to the GRIP and cease being a member of the RSP.

A. Plan Description and Contribution Information

Plan Membership. At June 30, 2019, the date of the latest actuarial valuation, membership in the System consisted of:

	6,731
Retirees and beneficiaries receiving benefits	543
Terminated plan members entitled to but not yet receiving benefits	6,003
Active plan members	

Plan Administration. The System, a cost-sharing multiple-employer defined benefit pension plan, was established in 1965 and is sponsored by the County. Eight other agencies and political subdivisions have elected to participate. The System is closed to employees hired on or after October 1, 1994, except public safety bargaining unit employees and GRIP participants. All covered full-time employees of the County and participating agencies must become members of the System as a condition of employment. All covered career part-time employees of the County and participating agencies may become members on an individual basis.

Contributions. The System is a contributory plan with employees contributing a percentage of their base annual salary. Contribution rates range from 6 percent to 11.25 percent of regular earnings annually based on group classification and contributions earn interest at the rate of 4 percent per annum as specified under Section 33-39(b) of the Code. The County and each participating agency are required to contribute the remaining amounts necessary to fund the System using the actuarial basis as specified in Section 33-40 of the Code. Employee contributions for the Elected Officials' Plan are 4 percent of regular earnings.

The GRIP, as defined in Section 33-35 of the Code, requires non-public safety employees to contribute 4 percent of regular earnings up to the Social Security wage base and 8 percent above the Social Security wage base. Public safety employees are required to contribute 3 percent of regular earnings up to the Social Security wage base and 6 percent above the Social Security wage base. Section 33-40 of the Code requires the County and each participating agency to contribute 8 percent and 10 percent of regular earnings for non-public safety and public safety employees, respectively.

Benefit Provisions. Benefit provisions are established under the Code beginning with Section 33-35. All benefits vest at five years of service. There are different retirement groups within the System. Members enrolled before July 1, 1978, belong to either the optional non-integrated group or the optional integrated group. Members enrolled on or after July 1, 1978, belong to the mandatory integrated group. Within the groups are different retirement membership classes. The retirement group assigned depends upon the job classification of the member (i.e., non-public safety, police, fire, sheriffs and correctional staff). Normal and early retirement eligibility, the formula for determining the amount of benefit, and the cost of living adjustment varies depending upon the retirement group and retirement membership class. Normal retirement is a percentage of earnings multiplied by years of credited service. Earnings for optional non-integrated group members and optional integrated group members is defined as the high 12 months and for mandatory integrated plan members, the high 36 months. The percentage of earnings, the maximum years of credited service and the cost of living adjustment varies depending upon the retirement membership class and group. Members who retire early receive normal retirement benefits reduced by a minimum of 2 percent to a maximum of 60 percent depending on the number of years early retirement precedes normal retirement. The System provides options for disability and death benefits to eligible participants. Annual cost-of-living adjustments are provided to retirees and beneficiaries based on the percentage change in the Consumer Price Index.

Deferred Retirement Option Plans (DROP). Legislation enacted by the Montgomery County Council in November 1999 required the Chief Administrative Officer of the County to establish Deferred Retirement Option Plans, or DROP Plans, allowing any employee who is a member of a specified membership group or bargaining unit, and who meets certain eligibility requirements, to elect to “retire” but continue to work for a specified time period, during which pension payments are deferred. When the member’s participation in the DROP Plan ends, the member must stop working for the County, draw a pension benefit based on the member’s credited service and earnings as of the date that the member began to participate in the DROP Plan, and receive the value of the DROP Plan payoff. The assets held by the System pursuant to DROP Plans at June 30, 2019 were \$29,095,136.

For members of the GRIP, employee contributions and earnings thereon vest immediately and employer contributions and earnings thereon are vested after three years of service or upon death, disability, or reaching retirement age. At separation, a participant’s benefit is determined based upon the account balance which includes contributions and earnings.

B. Summary of Significant Accounting Policies

Basis of Accounting. The System’s financial statements have been prepared under the accrual basis of accounting. Member and employer contributions are recognized in the period in which the contributions are required to be made as specified under the County Code. Benefits and refunds are recognized when due in accordance with the terms of the Plan. The cost of administering the Plan is paid by the System.

Method Used to Value Investments. Investments are stated at fair value. The fair value for public securities is generally based on quoted market prices at June 30, 2019. Fair value for private investment funds, including private equity, private debt and private real assets, are determined using unit values supplied by the fund managers, which are based upon the fund managers’ appraisals of the funds’ underlying holdings. Such values involve subjective judgment and may differ from amounts which would be realized if such holdings were actually sold. The fair value of limited partnership investments are based on valuations of the underlying assets of the limited partnerships as reported by the general partner. Cash received as collateral on securities lending transactions and investments made with such cash are stated at fair value along with a related liability for collateral received.

Equity in County’s Pooled Cash and Investments. The System maintains its short-term cash with the County, which invests cash and allocates interest earned, on a quarterly basis to the System based on the System’s average daily balance of its equity in pooled cash. The County’s policy is to fully collateralize the cash maintained in the pool.

Accounting Changes. There were no new pronouncements adopted during the year ended June 30, 2019.

C. Net Pension Liability

The components of the net pension liability of the System as of June 30, 2019, were as follows:

Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a-b)	Plan Fiduciary Net Position as a % of Total Pension Liability (b/a)
\$4,369,179,024	\$4,316,636,287	\$52,542,737	98.80%

Additional information as of the latest actuarial valuation is as follows.

Valuation date	July 1, 2018
Measurement Date	June 30, 2019
Actuarial cost method	Individual Entry Age Normal
Amortization method for funding	Level percentage of payroll, separate closed period bases for Public Safety and GRIP, single closed period amortization base for non-Public Safety.
Amortization period for funding	For Public Safety and GRIP: Initial amortization period of 20 years for the base established July 1, 2015. Initial amortization period of 20 years for subsequent bases. For non-Public Safety: Single closed amortization period of 9 years established July 1, 2015. Average amortization period of 4.5 years for total ERS.
Asset valuation method	Market Value
Actuarial assumptions:	
Investment rate of return	7.50% per year
Projected salary increases depending on service	3.00%-10.75%
Cost-of-living (inflation rate) adjustments	2.50% on the benefit attributable to credited service earned prior to June 30, 2011. 2.20% on the benefit attribution to credited service earned on or after July 1, 2011, reflecting the 2.50% cap.
Post-retirement Increases	Consumer Price Index - by Group
Mortality rates after retirement	Pub-2010 Healthy Retiree Mortality Table (for General Employees), sex-distinct for healthy mortality. To provide a margin for future mortality improvements, generational mortality improvements from 2010 using projection scale MP-2018 was used.

An experience study was conducted in September 2019 for the period July 1, 2014 to July 1, 2018. The results of the experience study have been incorporated into the financial statements where applicable. An actuarial experience study is conducted every five years.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of geometric real rates of return for each major asset class included in the pension plan's target asset allocation as of June 30, 2019 (see the discussion of the System's investment policy) are summarized in the table on the next page:

Asset Class	Long-Term Expected Real Rate of Return
Domestic Equities	5.30 %
International Equities	5.80
Emerging Market Equities	5.80
Global Equities	5.75
Private Equity	7.63
Credit Opportunities	6.05
High Yield Bonds	4.20
Directional Hedge Funds	5.02
Long Duration Fixed Income	2.55
Cash	0.95
Diversifying Hedge Funds	3.90
Global ILs	2.85
Private Real Assets	7.06
Public Real Assets	5.02

Discount Rate. The discount rate used to measure the total pension liability was 7.5%. The projection of cash flows to determine the discount rate assumed that contributions from plan members will be made at the current contribution rate and contributions from the County and other participating agencies will be made at contractually required rates, actuarially determined. 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 long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of the Net Pension Liability to Changes in the Discount Rate. The following presents the net pension liability of the System calculated using the discount rate of 7.5%, as well as what the System's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.50%) or 1-percentage-point higher (8.50%) than the current rate:

	1% Decrease 6.50%	Current Discount Rate 7.50%	1% Increase 8.50%
Net pension liability	\$527,034,105	\$52,542,737	\$(346,718,468)

D. Trustees of the Plan

The County established a Board of Investment Trustees (Board) for the System to be responsible for the investment management of the System's assets for the exclusive benefit of the members. The Board consists of thirteen members appointed by the County Executive and confirmed by the County Council.

E. Investments

Section 33-61C of the Code, authorizes the Board to act with the care, skill, prudence and diligence under the circumstances that a prudent person acting in a similar capacity and familiar with the same matters would use to conduct a similar enterprise with similar purposes. The Code also requires that such investments be diversified so as to minimize the risk of large losses unless it is clearly not prudent to diversify under the circumstances. The Board has adopted an investment policy that works to control the extent of downside risk to which the System is exposed while maximizing the potential for long term increases in the value of assets. The overall investment policies do not address specific levels of credit risk, interest rate risk or foreign currency risk. The Board believes that risks can be managed, but not eliminated, by establishing constraints on the investment portfolios and by monitoring the financial markets, the System's asset allocation and the investment managers hired by the System. Each investment manager has a specific benchmark and investment guidelines appropriate for the type of investments they are managing.

The following was the Board's adopted asset allocation policy as of June 30, 2019:

Asset Class	Target Allocation
Domestic Equities	12.70 %
International Equities	10.00
Emerging Market Equities	2.50
Global Equities	2.80
Private Equity	12.00
Credit Opportunities	6.00
High Yield Bonds	6.00
Directional Hedge Funds	2.50
Total Growth	54.50
Long Duration Fixed Income	11.00
Cash	1.00
Diversifying Hedge Funds	2.50
Total Risk Mitigation	14.50
Global ILs	12.00
Private Real Assets	12.00
Public Real Assets	7.00
Total Real Assets/Inflation Protection	31.00
Total	100.00 %

Rate of Return. The annual money-weighted rate of return on pension plan investments, net of pension plan investment expenses, for FY 2019 was 8.05%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Fair Value Measurement. 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 or liabilities (level I measurements) and the lowest priority to unobservable inputs (level III measurements).

Level I— Unadjusted quoted prices for identical assets or liabilities in active markets.

Level II – Quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar assets or liabilities in markets are not active; and model-derived valuations in which all significant inputs are observable.

Level III – Valuations derived from valuation techniques in which significant inputs are unobservable.

Investments that are measured at fair value using the net asset value per share (or its equivalent) as a practical expedient are not classified in the fair value hierarchy. In instances where inputs used to measure fair value fall into different levels in the fair value hierarchy, fair value measurements in their entirety are categorized based on the lowest level input that is significant to the valuation. The System's assessment of the significance of particular inputs to these fair value measurements requires judgment and considers factors specific to each asset or liability. The table on the next page shows the fair value leveling of the System's investments.

		Fair Value Measurements Using		
		Quoted Prices in Active Markets for Identical Assets	Significant Other Observable Inputs	Significant Unobservable Inputs
	6/30/2019	Level I	Level II	Level III
Investments by fair value level				
Debt securities				
Government and agency obligations	\$ 205,090,919	\$ -	\$ 205,090,919	\$ -
Municipal/Provincial obligations	8,921,548	-	8,921,548	-
Asset-backed securities	666,245	-	666,245	-
Corporate bonds	647,332,260	-	646,103,917	1,228,343
Commercial mortgage-backed securities	2,114,604	-	2,114,604	-
Total debt securities	864,125,576	-	862,897,233	1,228,343
Equity securities				
Consumer goods	166,544,137	164,260,101	2,284,036	-
Energy	92,257,151	91,929,907	316,376	10,868
Financial services	115,728,267	115,641,768	-	86,499
Health care	114,159,349	114,159,349	-	-
Industrials	181,609,458	181,419,143	670	189,645
Information technology	142,318,403	142,299,208	162	19,033
Materials	41,010,141	41,006,586	-	3,555
Telecommunication services	59,197,401	59,197,401	-	-
Utilities	65,263,123	65,139,232	-	123,891
Real Estate	219,879,187	219,879,187	-	-
Total equity securities	1,197,966,617	\$ 1,194,931,882	\$ 2,601,244	\$ 433,491
Securities lending collateral fund	149,833,263	-	149,833,263	-
Total investments by fair value level	2,211,925,456	\$ 1,194,931,882	\$ 1,015,331,740	\$ 1,661,834
Investments measured at the net asset value (NAV)				
Commingled equity funds	439,105,338			
Commingled bond funds	372,436,181			
Commingled real asset funds	187,773,975			
Commingled funds (other)	5,508,619			
Hedge funds	219,839,652			
Fund-of-hedge funds	77,202,299			
Private real assets	218,561,490			
Private equity/debt	515,390,370			
Total investments measured at the NAV	2,035,817,924			
Investments measured at amortized cost				
Short-term investments	203,643,284			
Total investments measured at amortized cost	203,643,284			
Synthetic guaranteed investments contracts measured at contract value	601,406			
Total investments	\$ 4,451,988,070			
Investment derivative instruments:				
Foreign exchange contracts	87,702	-	87,702	
Total investment derivative instruments	\$ 87,702	\$ -	\$ 87,702	

Equity securities classified in Level I are valued using prices quoted in active markets for those securities.

Debt securities classified in Level II and Level III are valued using either a bid evaluation, or matrix pricing technique. Bid evaluations may include market quotations, yields, maturities, call features and ratings. Matrix pricing is used to value securities based on the securities relationship to benchmark quoted prices. Level II debt securities have non-proprietary information that was readily available to market participants, from multiple independent sources, which are known to be actively involved in the market. Level III debt securities use proprietary information or single source pricing. Equity securities classified in Level II are securities whose values are derived daily from associated traded securities. Equity securities classified in Level III are valued with last trade data having limited trading volume. Short-term investments are cash or cash equivalents and generally include investments in money market-type securities reported at cost plus accrued interest, which approximates market or fair value.

The valuation method for investments measured at the net asset value (NAV) per share, or equivalent, is presented in the table below.

Investments Measured at the NAV

	Fair Value	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Commingled equity funds	\$ 439,105,338	\$ -	Daily, Monthly	0-15 days
Commingled bond funds	372,436,181	-	Daily	1-2 days
Commingled real asset funds	187,773,975	-	Daily, Bi-weekly, Monthly	0-5 days
Commingled funds (other)	5,508,619	-	Daily	None
Hedge funds	219,839,652	-	Monthly, Quarterly	5-90 days
Fund-of-hedge funds	77,202,299	-	Quarterly	95 days
Private real assets	218,561,490	122,798,233	Not eligible	N/A
Private equity/debt	515,390,370	195,591,305	Not eligible	N/A
Total investments measured at the NAV	<u>\$ 2,035,817,924</u>	<u>\$ 318,389,538</u>		

Commingled Bond Funds, Equity Funds, Real Asset Funds and Other. Five bond funds, seven equity funds and three real asset funds are considered to be commingled in nature. The fair value of the investments in these types of funds has been determined using the NAV per share of the investments.

Hedge Funds. The fair value of the investments have been determined using the NAV per share of the funds. Six funds are categorized in this category. All funds in this category could be subject to varying degrees of redemption restrictions based on market conditions that may impact their underlying portfolios.

Fund-of-Hedge Funds. The fair value of this fund is based upon information provided by underlying hedge fund investments using the NAV per share of the funds. A fund-of-hedge funds provides additional opportunities in terms of manager access, investment structuring, and fees. These funds also could be subject to varying degrees of redemption restrictions based on market conditions that may impact their underlying portfolios.

Private Real Assets. The portfolio consists of thirty-three private real asset limited partnerships. Private real asset funds include U.S. real estate, oil and gas, timber, agriculture and other real asset investments. The fair value of these funds has been determined using the net asset values as of June 30, 2019. Net asset values one quarter in arrears plus current quarter cash flows are used when the most recent information is not available. These funds are not eligible for redemption. Distributions are received as underlying investments within the funds are liquidated, which on average can occur over a span of 5 to 10 years.

Private Equity/Debt. The portfolio consists of seventy-one private equity/debt limited partnerships. Private equity funds include buyout, turnaround, fund-of-funds, and growth equity investments. Private debt funds include distressed and structured equity investments. The fair value of these funds has been determined using the net asset values as of June 30, 2019. Net asset values one quarter in arrears plus current quarter cash flows are used when the most recent information is not available. These funds are not eligible for redemption. Distributions are received as underlying investments within the funds are liquidated, which on average can occur over a span of 3 to 10 years.

Interest Rate Risk. Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of the investment. The Board's investment policies and guidelines manage interest rate risk by establishing duration constraints on each fixed income manager's portfolio based on the duration of each manager's respective benchmark. Duration is a measure of interest rate risk based on a bond price's sensitivity to a 100-basis point change in interest rates. The greater the duration of a bond, or a portfolio of bonds, the greater its price volatility will be in response to a change in interest rates and vice-versa. Duration of eight would mean that, given a 100-basis point change up/down in rates, a bond's price would move down/up by 8 percent. As of June 30, 2019, the System's fixed income portfolio had the following sensitivity to changes in interest rates included in the table on the next page:

Type of Investment	Effective Duration in Years	Fair Value	Percentage of Portfolio
U.S. Government Obligations	17.61	\$ 203,159,830	14.10 %
Foreign Government Obligations	1.27	1,931,089	0.13
Commercial Mortgage-Backed Securities	2.93	2,114,604	0.15
Municipal/Provincial Obligations	12.92	8,921,548	0.62
Corporate Bonds	7.36	647,332,260	44.95
Asset-Backed Securities	7.84	666,245	0.05
Fixed Income Pooled Funds	N/A	372,436,181	25.86
Short-term Investments and Others *	N/A	203,643,284	14.14
Total Fixed Income Securities		\$ 1,440,205,041	100.00 %

*Short-term investments consist of U.S. Treasury and government sponsored securities, money market funds, commercial paper, certificates of deposit, repurchase agreements, asset backed securities, notes and bonds issued by U.S. corporations, and other allowable instruments that meet short-term maturity or average life, diversification, and credit quality restrictions.

Credit Risk/Concentration of Credit Risk. Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The Board's investment policies and guidelines limit the percentage of the total fund and individual manager's account which can be invested in fixed income securities rated below investment grade. In addition, the Board's investment policies and guidelines, for the majority of public fund managers, limit the percentage of each investment manager's account that may be allocated to any one security, position, issuer or affiliated issuer, to less than 5 percent of the fair value of the investment manager's account. The System does not have investments (other than those issued or explicitly guaranteed by the U.S. Government or pooled investments) in any one company that represents 5 percent or more of net assets.

The quality ratings of investments in fixed income securities as described by nationally recognized rating organizations as of June 30, 2019 are as follows:

Type of Investment	Quality Rating	Fair Value	Percentage of Portfolio
U.S. Government Obligations*	AAA	\$ 203,159,830	14.10 %
Foreign Government Obligations	AAA	527,351	0.03
	Unrated	1,403,738	0.10
Commercial Mortgage-Backed Securities	BB	1,155,700	0.08
	Unrated	958,904	0.07
Municipal/Provincial Bonds	AAA	1,379,202	0.10
	AA	5,975,229	0.41
	B	1,124,730	0.08
	BBB	336,986	0.02
	Unrated	105,401	0.01
Corporate Bonds	AAA	6,601,984	0.46
	AA	25,046,949	1.74
	A	107,490,593	7.46
	BBB	145,115,195	10.08
	BB	172,368,852	11.97
	B	131,743,714	9.15
	CCC	31,998,877	2.22
	CC	199,683	0.01
	C	185,875	0.01
	D	2,840,871	0.20
	Unrated	23,739,667	1.65
Asset-Backed Securities	AAA	666,245	0.05
Fixed Income Pooled Funds	Unrated	372,436,181	25.86
Short-term Investments and others	Unrated	203,643,284	14.14
Total Fixed Income Securities		\$ 1,440,205,041	100.00 %

*Obligations of the U.S. government or obligations explicitly guaranteed by the U.S. government are not considered to have credit risk and do not have purchase limitations.

Foreign Currency Risk. Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment. The Board's International Investing Policy's objective is to achieve long-term capital appreciation and current income by investing in diversified portfolios of non-U.S. equities and bonds. The System has indirect exposure to foreign currency risk as of June 30, 2019 as follows:

International Securities	Equity	Fixed Income	Short-term and Other	Total Non-U.S. Dollar
Euro	\$ 153,775,948	\$ -	\$ 102,077,187	\$ 255,853,135
Japanese yen	97,049,177	-	11,879,247	108,928,424
New Zealand dollar	845,946	-	95,477,490	96,323,436
Hong Kong dollar	47,112,946	-	15,066	47,128,012
British pound sterling	76,364,415	632,640	(30,349,756)	46,647,299
Swiss franc	24,035,863	-	5,014	24,040,877
Australian dollar	27,163,306	-	(4,152,136)	23,011,170
Danish krone	9,355,606	-	-	9,355,606
Mexican peso	8,226,271	73,896	-	8,300,167
South Korean won	5,932,943	-	-	5,932,943
Other Currencies	67,075,161	2,595,425	(181,308,282)	(111,637,696)
Total International Securities	<u>\$ 516,937,582</u>	<u>\$ 3,301,961</u>	<u>\$ (6,356,170)</u>	<u>\$ 513,883,373</u>

Derivatives. In accordance with the Board's Statement of Investment Policy and Objectives, the System regularly invests in derivative financial instruments in the normal course of its investing activities to manage exposure to certain risks within the fund. During FY 2019, the System invested directly in various derivatives including exchange-traded futures contracts, forward currency contracts, and swaps. Investment managers are prohibited from purchasing securities on margin or using leverage unless specifically permitted within the investment manager's guidelines. These investments generally contain market risk resulting from fluctuations in interest and currency rates. The credit risk of these investments is associated with the creditworthiness of the related parties to the contracts. The System could be exposed to risk if the counterparties to the contracts are unable to meet the terms of the contracts. The Board's Statement of Investment Policy and Objectives seeks to control this risk through counterparty credit evaluations and approvals, counterparty credit limits, and exposure monitoring procedures. In addition, the System has indirect exposure to market and credit risk through its ownership interests in certain mutual and commingled funds which may hold derivative financial instruments. The System is not a dealer, but an end-user of these instruments.

The notional or contractual amounts of derivatives indicate the extent of the System's involvement in the various types of derivative financial instruments and do not measure the System's exposure to credit or market risk and do not necessarily represent amounts exchanged by the parties. The amounts exchanged are determined by reference to the notional amounts and the other terms of the derivatives.

As permitted by the Board's policies, the System holds off-financial statement derivatives in the form of exchange-traded financial futures, and foreign currency exchange contracts.

Futures contracts are contracts in which the buyer agrees to purchase and the seller agrees to make delivery of a specified financial instrument at a predetermined date and price. Gains and losses on futures contracts are settled daily. Futures contracts are standardized and are traded on exchanges. The exchange assumes the risk that a counterparty will not pay. As of June 30, 2019, the System held 1,186 long US Treasury futures contracts with a fair value of \$228,421,008 and 867 short US Treasury futures contracts with a fair value of (\$112,886,531).

Foreign exchange contracts involve an agreement to exchange the currency of one country for the currency of another country at an agreed-upon price and settlement date. Foreign exchange contracts contain market risk resulting from fluctuations in currency rates. The credit risk is associated with the creditworthiness of the related parties to the contracts. As of June 30, 2019, the System held \$694,135,745 buy foreign exchange contracts and (\$694,048,043) sell foreign exchange contracts. The unrealized gain on the System's contracts was \$87,702.

Securities Lending. Board policy permits the System to lend its securities to broker-dealers and other entities (borrowers) for collateral that will be returned for the same securities in the future. The System's custodian is the agent in lending the System's securities for collateral of 102 percent for domestic and 105 percent for international securities. The custodian receives cash, securities or irrevocable bank letters of credit as collateral. All securities loans can be terminated on demand by either the System or the borrower. Cash collateral received from the borrower is invested by the lending agent, as an agent for the System, in a short-term investment pool in the name of the System, with guidelines approved by the Board. Such investments are considered a collateralized investment pool. The relationship between the maturities of the investment pool and the System's loans is affected by the maturities of securities loans made by other plan entities that invest cash collateral in the investment pool, which the System cannot determine. The System records a liability for the return of the cash collateral shown as collateral held for securities lending in the statement of fiduciary net position. The agent indemnifies the System by agreeing to purchase replacement securities, or return the cash collateral thereof, in the event a borrower fails to return loaned securities or pay distributions thereon. There were no such failures by any borrower during the fiscal year, nor were there any losses during the period resulting from a default of the borrower or lending agent.

As of June 30, 2019, the fair value of securities on loan was \$460,521,062. Cash received as collateral and the related liability of \$149,833,263 as of June 30, 2019, is shown on the Statement of Fiduciary Net Position. Securities received as collateral are not reported as assets since the System does not have the ability to pledge or sell the collateral securities absent borrower default. Securities lending revenues and expenses amounting to \$4,732,374 and \$3,416,051, respectively, have been classified with investment income and investment expenses, respectively, in the accompanying financial statements.

The following represents the balances relating to the securities lending transactions at June 30, 2019:

Securities Lent	Underlying Securities	Non-Cash Collateral Value	Cash Collateral Investment Value
Lent for Cash Collateral:			
Government Obligations	\$ 26,210,609	\$ -	\$ 26,733,731
Corporate Bonds	75,640,157	-	77,128,950
Equities	44,935,770	-	45,970,582
Lent for Non-Cash Collateral:			
Government Obligations	119,120,632	127,766,821	-
Corporate Bonds	8,856,755	9,465,599	-
Equities	185,757,139	197,855,810	-
Total	<u>\$ 460,521,062</u>	<u>\$ 335,088,230</u>	<u>\$ 149,833,263</u>

At year-end, the System has no credit risk exposure to borrowers because the amounts the System owes the borrowers exceeded the amounts the borrowers owe the System. The System is fully indemnified by its custodial bank against any losses incurred as a result of borrower default.

Custodial Credit Risk. Custodial credit risk is the risk that, in the event of the failure of the counterparty, the System will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. At June 30, 2019, there were no funds held by a counterparty that was acting as the System's agent in securities lending transactions.

F. Allocated Insurance Contract

On August 1, 1986, the County entered into an agreement with Aetna Life Insurance Company (Aetna) wherein Aetna accepted future responsibility for monthly payments to all members retired prior to January 1, 1986, in exchange for a lump sum payment. The County is liable for cost of living increases effective January 1, 1986, and later. Monthly payments made under this agreement have not been recognized in the System's financial statements.

G. Income Taxes

The Internal Revenue Service issued a determination letter in October 2016, which stated that the System and its underlying trust qualify under the applicable provisions of the Internal Revenue Code and are exempt from federal income taxes. In the opinion of the plan administrator, the System and its underlying trust have operated within the terms of the System and are qualified under the applicable provisions of the Internal Revenue Code.

RETIREMENT SAVINGS PLAN - Defined Contribution Pension Plan

The Montgomery County Retirement Savings Plan (Plan) is considered part of the County's financial reporting entity and is included in the County's basic financial statements as a pension and other employee benefit trust fund. The accompanying financial statements present only the operations of the Plan in conformity with GAAP. They are not intended to present fairly the financial position and results of operations of the entire County.

The Montgomery County Council passed legislation in FY 2009 enabling the County to establish and maintain a Guaranteed Retirement Income Plan (GRIP), a cash balance plan that is part of the Employees' Retirement System, for employees. During FY 2010, eligible County employees who were members of the Retirement Savings Plan (Plan) were granted the option to elect to participate in the GRIP and to transfer their Plan member account balance to the GRIP and cease being a member of the Plan.

A. Plan Description and Contribution Information

Membership. At June 30, 2019 membership in the Plan consisted of:

Active plan members	3,380
Inactive plan members	1,039

Plan Description. The Plan, a cost-sharing multiple-employer defined contribution plan, was established in 1994 and is sponsored by the County. Eight other agencies or political subdivisions have elected to participate. All non-public safety and certain public safety employees not represented by a collective bargaining agreement and hired on or after October 1, 1994 are covered by the Plan unless they elect to participate in the GRIP. Eligible employees covered by the Montgomery County Employees' Retirement System may make an irrevocable decision to transfer to this Plan.

Contributions. For fiscal year 2019, under Section 33-116 of the Code, the Plan required non-public safety employees to contribute 4 percent of regular earnings up to the Social Security wage base and 8 percent above the Social Security wage base. Public safety employees are required to contribute 3 percent of regular earnings up to the Social Security wage base and 6 percent above the Social Security wage base. Section 33-117 of the Code requires the County and each participating agency to contribute 8 percent and 10 percent of regular earnings for non-public safety and public safety employees, respectively. In accordance with IRS regulations and the County Code, \$200,000 in accumulated revenue was used to reduce employer contributions in FY 2019.

Benefit Provisions. Employee contributions and earnings thereon vest immediately and employer contributions and earnings thereon are vested after three years of service or upon death, disability, or reaching retirement age. Members are fully vested upon reaching normal retirement (age 62) regardless of years of service. At separation, a participant's benefit is determined based upon the account balance which includes contributions and investment earnings.

B. Summary of Significant Accounting Policies

Basis of Accounting. The Plan's financial statements have been prepared under the accrual basis of accounting. Member contributions are recognized in the period in which the contributions are required to be made as specified in the County Code. Benefits, refunds and distributions are recognized when due in accordance with the terms of the Plan. The cost of administering the Plan is paid by the County and participating agencies.

Method Used to Value Investments. Investments are stated at fair value. The fair value is based on net asset value or quoted market prices at June 30, 2019.

Equity in County's Pooled Cash and Investments. The Plan maintains its short-term cash with the County, which invests cash and allocates interest earned, on a quarterly basis to the Plan based on the Plan's average daily balance of its equity in pooled cash. The County's policy is to fully collateralize the cash maintained in the pool.

C. Trustees of the Plan

The County established a Board of Investment Trustees (Board) for the RSP to oversee the investment program. The Board consists of thirteen members appointed by the County Executive and confirmed by the County Council.

D. Investments

Section 33-125 of the Code authorizes the Board to establish a diversified slate of mutual and commingled investment funds from which participants may select an option. The Board exercises the Standard of Care as delineated in Section 33-61 of the Code. As of June 30, 2019, the fair value of the mutual and commingled investment funds was \$487,466,447, of which \$108,741,534 was invested in international mutual funds.

Fair Value Measurement. The Plan 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 or liabilities (level I measurements) and the lowest priority to unobservable inputs (level III measurements).

Level I— Unadjusted quoted prices for identical assets or liabilities in active markets.

Level II – Quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar assets or liabilities in markets are not active; and model-derived valuations in which all significant inputs are observable.

Level III – Valuations derived from valuation techniques in which significant inputs are unobservable.

Investments that are measured at fair value using the net asset value per share (or its equivalent) as a practical expedient are not classified in the fair value hierarchy. In instances where inputs used to measure fair value fall into different levels in the fair value hierarchy, fair value measurements in their entirety are categorized based on the lowest level input that is significant to the valuation. The Plan's assessment of the significance of particular inputs to these fair value measurements requires judgment and considers factors specific to each asset or liability. The table below shows the fair value leveling of the Plan's investments.

	6/30/2019	Fair Value Measurements Using		
		Quoted Prices in Active Markets for Level I	Significant Other Observable Inputs Level II	Significant Unobservable Inputs Level III
Investments by fair value level				
Equity securities - self directed	\$ 7,276,197	\$ 7,276,197	\$ -	\$ -
Total investments by fair value level	7,276,197	\$ 7,276,197	\$ -	\$ -
Investments measured at the net asset value (NAV)				
Commingled equity funds	77,676,219			
Commingled bond funds	11,548,149			
Commingled funds (other)	378,422,222			
Total investments measured at the NAV	467,646,590			
Commingled Fund - Synthetic guaranteed investments contracts measured at contract value	12,543,660			
Total investments	\$ 487,466,447			

Securities classified in Level I are valued using prices quoted in active markets for those securities.

The valuation method for investments measured at the net asset value (NAV) per share, or equivalent, is presented in the table below.

Investments Measured at the NAV

	Fair Value	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Commingled equity funds	\$ 77,676,219	\$ -	Daily	None
Commingled bond funds	11,548,149	-	Daily	None
Commingled funds (other)	378,422,222	-	Daily	None
Total investments measured at the NAV	<u>\$ 467,646,590</u>	<u>\$ -</u>		

Commingled Bond Funds, Equity Funds and Other Funds. Six bond funds and eleven equity funds are considered commingled in nature. Other commingled funds include eleven life cycle funds and one other fund. The fair value of the investments in these types of funds have been determined using the NAV per share of the investments.

E. Income Taxes

The Internal Revenue Service issued a determination letter in October 2016, which stated that the Plan and its underlying trust qualify under the applicable provisions of the Internal Revenue Code and are exempt from federal income taxes. In the opinion of the plan administrator, the Plan and its underlying trust have operated within the terms of the Plan and are qualified under the applicable provisions of the Internal Revenue Code.

DEFERRED COMPENSATION PLAN

During FY 2005, the Montgomery County Council passed legislation enabling the County to establish and maintain one or more additional deferred compensation plans for employees covered by a collective bargaining agreement. All County non-represented employees, those County represented employees who elected to participate, and employees who were retired at the time of transfer, continue to participate in the Montgomery County Deferred Compensation Plan administered by the County (the County Plan). County represented employees who elected and all represented employees hired after March 1, 2005 participate in the newly created Montgomery County Union Employees Deferred Compensation Plan (the Union Plan) administered by the bargaining units. The purpose of these Plans is to extend to employees deferred compensation plans pursuant to Section 457 of the Internal Revenue Code of 1986, as amended.

The accompanying financial statements present only the operations of the County Plan in conformity with GAAP. They are not intended to present fairly the financial position and results of operations of the entire County. The assets of the Union Plan are not included in the accompanying financial statements since neither the County nor the Board of Investment Trustees (Board) have fiduciary or other responsibility for the Union Plan except as required by federal law, including any regulation, ruling, or other guidance issued under law.

A. Plan Description and Contribution Information

Plan Description. During 1999, in accordance with Federal legislation, the assets were placed in Trust for the sole benefit of participants and their beneficiaries. Trust responsibilities for the County Plan are assigned to the Board. The Board has a third-party administrator contract to provide investment vehicles and administrative services to plan participants. Under the County Plan, contributions are sent to the providers for different types of investments as selected by the participants. A separate account, which reflects the monies deferred, investment of the monies, and related investment earnings is maintained for each participant by the third-party administrator. Withdrawals are made upon retirement, termination of employment, death, and/or in unforeseeable emergencies.

Plan Contributions. In accordance with Section 457 of the IRC, the Plan limits the amount of an employee's annual contributions to an amount not to exceed the lesser of \$18,500 in 2018 and \$19,000 in 2019 or 100% of the employee's eligible compensation. The Plan also provides certain catch-up contribution provisions for participants age 50 or older and for participants within three years of their normal retirement age. Amounts contributed by employees are deferred for federal and state income tax purposes until benefits are paid to the employees. Under Section 33-11 of the County Code, all eligible employees hired after July 1, 2008 are automatically enrolled in the Plan with a 1% contribution unless they elect out within 60 days from the date of hire. If they do not opt out of the Plan within 60 days from the date of hire, they begin making a contribution equivalent to 1% of their salary.

B. Summary of Significant Accounting Policies

Basis of Accounting. The County Plan's financial statements have been prepared under the accrual basis of accounting. Member contributions are recognized in the period in which the contributions are made. Distributions are recognized when paid in accordance with the terms of the County Plan, and administrative costs are recognized as incurred.

Method Used to Value Investments. Investments are stated at fair value. The fair value is based on net asset value or quoted market prices at June 30, 2019.

C. Trustees of the Plan

The County established a Board to oversee the investment program of the County Plan. The Board consists of thirteen members appointed by the County Executive and confirmed by the County Council.

D. Investments

The Board is required to establish a diversified slate of mutual and commingled funds from which participants may select investment options. The Board exercises the Standard of Care as delineated in Section 33-61 of the Code. As of June 30, 2019, the fair value of the mutual and commingled investment funds was \$442,514,247, of which \$63,153,689 was invested in international mutual funds.

Fair Value Measurement. The Plan 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 or liabilities (level I measurements) and the lowest priority to unobservable inputs (level III measurements).

Level I— Unadjusted quoted prices for identical assets or liabilities in active markets.

Level II – Quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar assets or liabilities in markets are not active; and model-derived valuations in which all significant inputs are observable.

Level III – Valuations derived from valuation techniques in which significant inputs are unobservable.

Investments that are measured at fair value using the net asset value per share (or its equivalent) as a practical expedient are not classified in the fair value hierarchy. In instances where inputs used to measure fair value fall into different levels in the fair value hierarchy, fair value measurements in their entirety are categorized based on the lowest level input that is significant to the valuation. The Plan's assessment of the significance of particular inputs to these fair value measurements requires judgment and considers factors specific to each asset or liability. The table below shows the fair value leveling of the Plan's investments.

		Fair Value Measurements Using		
		Quoted Prices in Active Markets for Identical Assets	Significant Other Observable Inputs	Significant Unobservable Inputs
		Level I	Level II	Level III
6/30/2019				
Investments by fair value level				
Self directed - various securities	\$ 11,588,762	\$ 11,588,762	\$ -	\$ -
Total investments by fair value level	11,588,762	\$ 11,588,762	\$ -	\$ -
Investments measured at the net asset value (NAV)				
Commingled equity funds	248,285,887			
Commingled bond funds	37,897,919			
Commingled funds (other)	95,273,735			
Total investments measured at the NAV	381,457,541			
Commingled Fund - Synthetic guaranteed investments contracts measured at contract value	49,467,944			
Total investments	\$ 442,514,247			

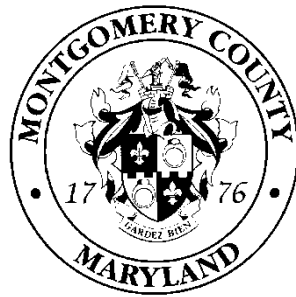
Securities classified in Level I are valued using prices quoted in active markets for those securities.

The valuation method for investments measured at the net asset value (NAV) per share, or equivalent, is presented in the table below.

Investments Measured at the NAV

		Unfunded	Redemption	Redemption
		Commitments	Frequency	Notice Period
Fair Value				
Commingled equity funds	\$ 248,285,887	\$ -	Daily	None
Commingled bond funds	37,897,919	-	Daily	None
Commingled funds (other)	95,273,735	-	Daily	None
Total investments measured at the NAV	\$ 381,457,541	\$ -		

Commingled Bond Funds, Equity Funds and Other Funds. Six bond funds and eleven equity funds are considered to be commingled in nature. Other commingled funds include eleven life cycle funds and one other fund. The fair value of the investments in these types of funds have been determined using the NAV per share of the investments.



REQUIRED SUPPLEMENTARY INFORMATION

Historical trend information about the Employees' Retirement System (System) defined benefit pension plan is presented below as required supplementary information. This information is intended to help users assess the System's funding status on a going-concern basis, assess progress made in accumulating assets to pay benefits when due, and make comparisons with other public employee retirement systems.

SCHEDULE OF CHANGES IN THE EMPLOYERS' NET PENSION LIABILITY AND RELATED RATIOS

Fiscal year ending June 30,	2019	2018	2017	2016	2015	2014
Total Pension Liability						
Service Cost	\$ 77,383,488	\$ 74,269,457	\$ 71,688,228	\$ 70,847,993	\$ 74,984,370	\$ 70,019,055
Interest on the Total Pension Liability	318,813,604	314,427,728	307,446,425	300,076,908	291,040,049	281,988,785
Benefit Changes	-	-	-	-	3,626,601	-
Difference between Actual and Expected Experience	(8,632,850)	(78,304,829)	(44,766,772)	(34,032,308)	602,431	-
Assumption Changes	(97,002,014)	-	-	-	(12,706,870)	-
Benefit Payments	(256,950,531)	(238,915,782)	(235,124,234)	(230,695,791)	(230,646,729)	(229,664,720)
Refunds	(6,760,028)	(4,624,066)	(6,473,277)	(5,887,137)	(2,874,357)	(4,329,834)
Net Change in Total Pension Liability	26,851,669	66,852,508	92,770,370	100,309,665	124,025,495	118,013,286
Total Pension Liability - Beginning	4,342,327,355	4,275,474,847	4,182,704,477	4,082,394,812	3,958,369,317	3,840,356,031
Total Pension Liability - Ending (a)	\$ 4,369,179,024	\$ 4,342,327,355	\$ 4,275,474,847	\$ 4,182,704,477	\$ 4,082,394,812	\$ 3,958,369,317
Plan Fiduciary Net Position						
Contributions - Employer	\$ 86,584,479	\$ 93,163,298	\$ 95,398,957	\$ 134,806,256	\$ 151,301,867	\$ 144,709,675
Contributions - Member	29,628,822	28,964,769	27,940,416	27,056,040	26,627,493	26,462,839
Net Investment Income	317,890,354	340,084,494	413,346,704	57,676,057	67,070,433	534,397,733
Benefit Payments	(256,950,531)	(238,915,782)	(235,124,234)	(230,695,791)	(230,646,729)	(229,664,720)
Refunds	(6,760,028)	(4,624,066)	(6,473,277)	(5,887,137)	(2,874,357)	(4,329,834)
Administrative Expenses	(3,064,250)	(2,870,683)	(3,185,769)	(3,014,055)	(2,684,560)	(2,953,807)
Net Change in Plan Fiduciary Net Position	167,328,846	215,802,030	291,902,797	(20,058,630)	8,794,147	468,621,886
Plan Fiduciary Net Position - Beginning	4,149,307,441	3,933,505,411	3,641,602,614	3,661,661,244	3,652,867,097	3,184,245,211
Plan Fiduciary Net Position - Ending (b)	\$ 4,316,636,287	\$ 4,149,307,441	\$ 3,933,505,411	\$ 3,641,602,614	\$ 3,661,661,244	\$ 3,652,867,097
Net Pension Liability - Ending (a) - (b)	52,542,737	193,019,914	341,969,436	541,101,863	420,733,568	305,502,220
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	98.80%	95.55%	92.00%	87.06%	89.69%	92.28%
Covered Payroll	\$ 476,619,112	\$ 467,974,450	\$ 444,274,516	\$ 427,622,475	\$ 418,728,584	\$ 402,899,096
Net Pension Liability as a Percentage of Covered Employee Payroll	11.02%	41.25%	76.97%	126.54%	100.48%	75.83%

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

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Fiscal Year Ended June 30	Actuarially Determined Contribution	Actual Contribution	Contribution Deficiency (Excess)	Covered Payroll	Actual Contribution as a % of Covered Payroll
2010	\$ 113,957,784	\$ 113,957,784	\$ -	\$ 431,226,155	26.43 %
2011	109,343,933	109,343,933	-	405,336,529	26.98
2012	107,855,595	107,855,595	-	398,460,248	27.07
2013	127,887,620	127,887,620	-	395,988,026	32.30
2014	144,709,675	144,709,675	-	402,899,096	35.92
2015	151,301,867	151,301,867	-	418,728,584	36.13
2016	134,806,256	134,806,256	-	427,622,475	31.52
2017	95,398,957	95,398,957	-	444,274,516	21.47
2018	93,163,298	93,163,298	-	467,974,450	19.91
2019	86,584,479	86,584,479	-	476,619,112	18.17

NOTES TO SCHEDULE OF EMPLOYER CONTRIBUTIONS

Valuation Date: July 1, 2017

Notes Actuarially determined contribution rates are calculated 24 months prior to the end of the fiscal year in which contributions are reported.

Methods and Assumptions Used to Determine Contribution Rates:

Actuarial Cost Method	Individual Entry Age Normal
Amortization Method	Level percentage of pay, separate closed period bases
Remaining Amortization Period	Initial amortization period of 20 years for the base established July 1, 2015. Initial amortization period of 20 years for subsequent bases. Average remaining amortization period of 8.3 years as of July 1, 2017.
Asset Valuation Method	5-year smoothed market
Inflation	2.75% per year
Salary Increases	3.25%-9.50%
Investment Rate of Return	7.50% per year
Retirement Age	Experience-based table of rates that are specific to the type of eligibility condition and years of service. Last updated for the 2015 valuation pursuant to an experience study of the period 2009-2014.
Mortality	RP-2014 Healthy Annuitant Mortality Table, sex-distinct for healthy mortality. Rates are set forward six years for the male disabled mortality and eight years for the female disabled mortality assumption. To provide a margin for future mortality improvements, generational mortality improvements from 2014 using projection scale MP-2014 was used.

Other Information:

Notes Effective July 1, 2015, a DROP was implemented for eligible uniformed correctional officers and sworn deputy sheriffs participating in Group E. Effective July 1, 2015, updated actuarial assumptions were used in the valuation, which first affect fiscal year 2017 contributions and are summarized above.

Amortization Period (beginning with the valuation as of July 1, 2015): For Public Safety and GRIP: Initial amortization period of 20 years for the base established July 1, 2015. Initial amortization period of 20 years for subsequent bases. For non-Public Safety: Single closed amortization period of nine years established July 1, 2015.

SCHEDULE OF INVESTMENT RETURNS

Fiscal year ending June 30	2019	2018	2017	2016	2015	2014
Annual money weighted rate of return, net of investment expenses	8.05%	8.60%	11.65%	1.42%	2.19%	16.95%

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

SCHEDULE OF ADMINISTRATIVE EXPENSES
EMPLOYEES' RETIREMENT SYSTEM
FOR THE YEAR ENDED JUNE 30, 2019

Personnel Services:

Salaries and wages	\$ 1,477,667
Retirement contributions	87,270
Insurance	128,749
Social security	99,077
Total personnel services	<u>1,792,763</u>

Professional Services:

Actuarial	202,506
Independent public accountants	32,920
Outside legal	84,337
Computer technical support	284,952
Total professional services	<u>604,715</u>

Benefit Processing:

Disbursement services	39,202
Recordkeeping services	123,031
Disability management	368,198
Total benefit processing	<u>530,431</u>

Due diligence and continuing education

27,709

Office Management:

Office equipment and supplies	108,632
Total office management	<u>108,632</u>

Total administrative expenses	<u>\$ 3,064,250</u>
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SCHEDULE OF INVESTMENT EXPENSES
EMPLOYEES' RETIREMENT SYSTEM
FOR THE YEAR ENDED JUNE 30, 2019

Investment Management Expenses:	
Aberdeen Asset Management Inc	\$ 70,724
Arrowstreet Capital	116,231
Barings	480,480
Barrow Hanley Mewhinney & Strauss LLC	505,138
BlackRock Financial Management	96,295
Bridgewater Associates	7,860,810
Chickasaw Capital Management LLC	263,362
CoreCommodity Management LLC	245,566
Eagle Asset Management	509,184
First Quadrant L.P.	300,000
Gryphon International Investment	710,738
Highclere International Investors LLP	598,699
Institutional Limited Partners Association	2,500
Jennison Associates LLC	553,017
JP Morgan Investment Management	327,358
Los Angeles Capital Management	370,463
Loomis Sayles	1,114,266
Marathon	877,492
Mondrian Investment Partners Ltd.	650,049
Morgan Stanley Investment Management Inc	328,287
Nomura Asset Management	1,018,366
RhumbLine Advisors	13,566
Sands Capital Management	658,398
Schroder Investment Management North America Inc.	384,613
TimesSquare	175,897
WCM	332,157
Wellington Management	590,200
Wellington Trust Company	689,992
The Northern Trust Company	483,012
Abel Noser Corp.	5,000
Aetna Life Insurance Company	2,405
Albourne America LLC	350,537
Ceres	1,150
Bloomberg Financial Systems	16,027
Aberdeen Asset Management, Inc.	581,879
Franklin Park	552,481
MSCI	11,500
Wilshire Associates	409,773
Total investment management expenses	<u>22,257,612</u>
Securities lending borrower rebates	3,184,095
Securities lending agent fees	<u>231,956</u>
Total securities lending expenses	<u>3,416,051</u>
Total investment expenses	<u>\$ 25,673,663</u>

EMPLOYEES' RETIREMENT SYSTEM
STATEMENTS OF FIDUCIARY NET POSITION
JUNE 30, 2019 AND 2018

	2019	2018
ASSETS		
Equity in County's pooled cash and investments	\$ 2,058,980	\$ 2,014,964
Investments:		
Government and agency obligations	568,830,742	535,053,176
Municipal/Provincial bonds	8,921,548	8,431,521
Asset-backed securities	666,245	700,355
Corporate bonds	655,403,025	657,342,966
Collateralized mortgage obligations	-	379,768
Commercial mortgage-backed securities	2,114,604	2,283,013
Common and preferred stock	1,633,312,048	1,718,906,869
Mutual and commingled funds	495,311,451	488,075,929
Short-term investments	203,643,284	106,196,816
Cash collateral received under securities lending agreements	149,833,263	152,967,307
Private real assets	218,561,490	198,112,470
Private equity/debt	515,390,370	412,741,287
Total investments	4,451,988,070	4,281,191,477
Dividend, interest, and other receivables	15,376,533	16,824,844
Contributions receivable	7,256,074	7,425,120
Total assets	4,476,679,657	4,307,456,405
LIABILITIES		
Payable for collateral received under securities lending agreements	149,833,263	152,967,307
Benefits payable and other liabilities	10,210,107	5,181,657
Total liabilities	160,043,370	158,148,964
Net Position restricted for pensions	\$ 4,316,636,287	\$ 4,149,307,441

EMPLOYEES' RETIREMENT SYSTEM
STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEARS ENDED JUNE 30, 2019 AND 2018

	2019	2018
ADDITIONS		
Contributions:		
Employer	\$ 86,584,479	\$ 93,163,298
Members	29,628,822	28,964,769
Total contributions	116,213,301	122,128,067
Investment Income:		
Net appreciation in fair value of investments	248,979,626	275,945,858
Dividends and interest	89,852,017	83,209,623
Total income from investment activities	338,831,643	359,155,481
Less investment expenses	22,257,612	20,576,087
Net income from investment activities	316,574,031	338,579,394
Income from securities lending	4,732,374	3,867,343
Less securities lending expenses	3,416,051	2,362,243
Net income from securities lending	1,316,323	1,505,100
Total additions	434,103,655	462,212,561
DEDUCTIONS		
Retiree benefits	193,421,574	178,267,822
Disability benefits	53,237,603	50,864,259
Survivor benefits	10,291,354	9,783,701
Refunds and distributions	6,760,028	4,624,066
Administrative expenses	3,064,250	2,870,683
Total deductions	266,774,809	246,410,531
Net increase in net position	167,328,846	215,802,030
NET POSITION RESTRICTED FOR PENSIONS		
Beginning of year	4,149,307,441	3,933,505,411
Ending of year	\$ 4,316,636,287	\$ 4,149,307,441

RETIREMENT SAVINGS PLAN
STATEMENTS OF FIDUCIARY NET POSITION
JUNE 30, 2019 and 2018

	2019	2018
ASSETS		
Equity in County's pooled cash and investments	\$ 177,209	\$ 591,684
Investments	487,466,447	443,877,730
Contributions receivable	<u>1,813,770</u>	<u>1,726,632</u>
Total assets	<u>489,457,426</u>	<u>446,196,046</u>
LIABILITIES		
Accrued expenses	<u>38,796</u>	<u>44,802</u>
Net position held in trust for pension benefits	<u>\$ 489,418,630</u>	<u>\$ 446,151,244</u>

RETIREMENT SAVINGS PLAN
STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEARS ENDED JUNE 30, 2019 AND 2018

	2019	2018
ADDITIONS		
Contributions:		
Employers	\$ 20,511,483	\$ 20,348,143
Members	<u>12,022,808</u>	<u>10,800,958</u>
Total contributions	<u>32,534,291</u>	<u>31,149,101</u>
Investment income	26,959,176	36,229,190
Other income - forfeitures	<u>169,697</u>	<u>336,228</u>
Net investment income	<u>27,128,873</u>	<u>36,565,418</u>
Less investment expenses	<u>4,690</u>	<u>4,968</u>
Total additions	<u>59,658,474</u>	<u>67,709,551</u>
DEDUCTIONS		
Distributions	16,066,232	15,386,970
Administrative expenses	<u>324,856</u>	<u>328,586</u>
Total deductions	<u>16,391,088</u>	<u>15,715,556</u>
Net increase	43,267,386	51,993,995
Net Position - beginning of year	<u>446,151,244</u>	<u>394,157,249</u>
Net Position - end of year	<u>\$ 489,418,630</u>	<u>\$ 446,151,244</u>

DEFERRED COMPENSATION PLAN
STATEMENTS OF FIDUCIARY NET POSITION
JUNE 30, 2019 AND 2018

	2019	2018
ASSETS		
Investments	\$ 442,514,247	\$ 430,321,129
Contributions receivable	<u>1,063,722</u>	<u>1,094,555</u>
Net position held in trust for pension benefits	<u><u>\$ 443,577,969</u></u>	<u><u>\$ 431,415,684</u></u>

DEFERRED COMPENSATION PLAN
STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION
FOR THE FISCAL YEARS ENDED JUNE 30, 2019 AND 2018

	2019	2018
ADDITIONS		
Contributions - members	\$ 23,244,334	\$ 20,574,411
Investment income	<u>25,774,852</u>	<u>43,153,596</u>
Total additions	<u>49,019,186</u>	<u>63,728,007</u>
DEDUCTIONS		
Distributions	<u>36,856,901</u>	<u>22,718,661</u>
Total deductions	<u>36,856,901</u>	<u>22,718,661</u>
Net increase	12,162,285	41,009,346
Net position - beginning of year	<u>431,415,684</u>	<u>390,406,338</u>
Net position - end of year	<u>\$ 443,577,969</u>	<u>\$ 431,415,684</u>



INVESTMENT SECTION

Employees' Retirement System

EMPLOYEES' RETIREMENT SYSTEM

INVESTMENT OVERVIEW

The Board of Investment Trustees (Board), and the investment staff, are responsible for the investment program for the \$4.3 billion Employees' Retirement System (the System) with the assets invested solely in the interests of its beneficiaries. It is a significant responsibility due to the majority of the average retiree's benefit coming from investment earnings on contributions from members, the County, and participating agencies.

Wilshire Associates, a national consulting firm, survey of public pension plans, reflects the median return among U.S. public pension plans over \$1 billion in size in FY 2019 was a gain of 6.0%, gross of fees. The System's return for the fiscal year was a gain of 8.7% gross of fees, ranking in the top 5% of the universe. The key drivers of the performance for the twelve-month period ending June 30, 2019 were the System's allocations to: long duration, global inflation linked bond holdings, and private market investments. The same study ranked the System's three-year return of 9.9% and the five-year return of 6.9% in the top quartile over both time periods. The System's ten-year return of 10.3% ranks in the top decile of the peer group universe. The gross return for the one-year period was above the performance benchmark established by the Board by 84 basis points, with returns for the three-year and five-year periods exceeding the performance benchmarks by 202 basis points and 133 basis points, respectively. Returns for the System are calculated on a time weighted basis (except where noted on page 54).

INVESTMENT POLICY AND OBJECTIVES

In the investment of public funds, adequate funding of employee retirement benefits at a reasonable and affordable cost is a paramount concern. An appropriate balance must be struck between risks taken and returns sought to ensure the long term health of the System. The Board has adopted an investment policy that works to control the extent of downside risk to which the System is exposed while maximizing the potential for long term increases in the value of assets.

Specific investment objectives include:

- To realize the actuarial assumed rate of return of 7.5 percent.
- To manage portfolio risk so as to limit potential downside fluctuations in the value of the total System assets.
- To realize as high a rate of total return as possible consistent with the above.

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

- Allocate System assets to a broad array of investment sectors and strategies.
- Maintain the asset allocation in compliance with the Board's rebalancing policy (+/- 5.0% for major asset classes and +/- 1.5% to 3.0% for sub-asset classes).
- Monitor the individual investment managers' market value to ensure compliance with the Board's Statement of Investment Policy and the Manager Funding Policy.
- Evaluate the performance of all investment managers against their specific performance and style objectives, assigned risk, and the returns achieved by other similar managers.
- Analyze the System's overall risk exposure and modify investments through rebalancing when necessary.

The funded status of the System was 98.8% at June 30, 2019. Additional information on the results of the actuarial valuation as of June 30, 2019 is detailed on page 61 to 79 of the report.

SIGNIFICANT ACTIONS IN 2019

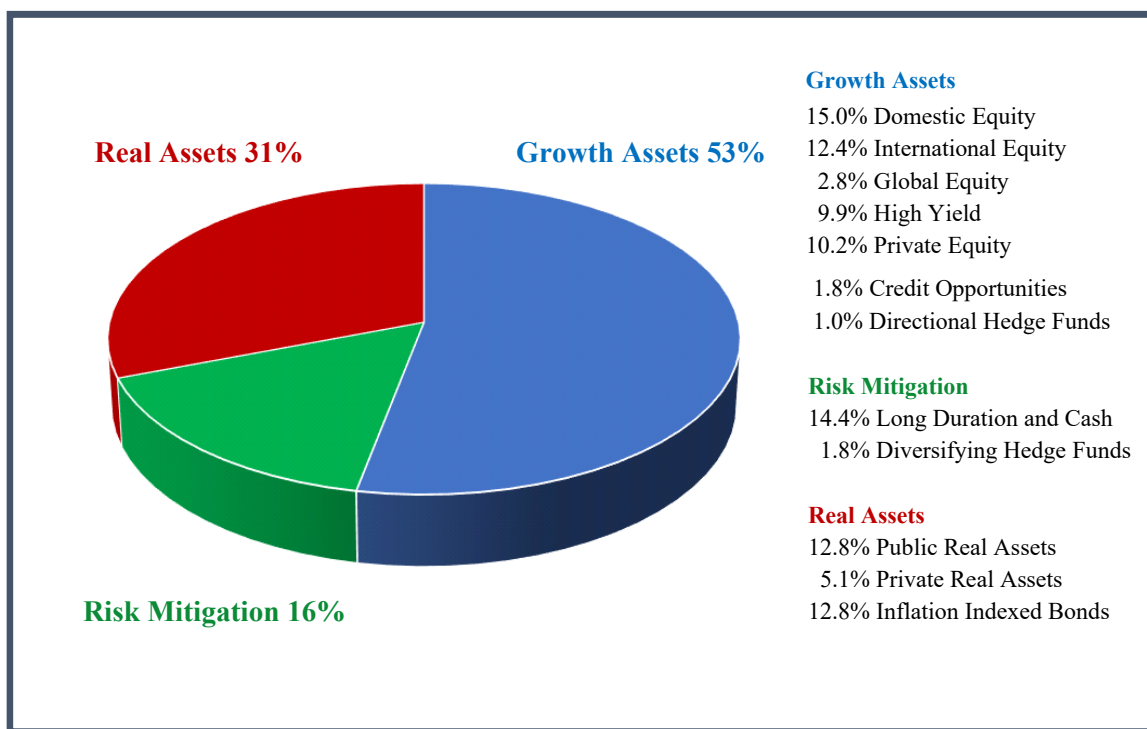
During FY 2019, the Board expanded their resources to evaluate the impact of Environmental, Social and Governance (ESG) issues on System assets. The Board joined the Coalition for Environmentally Responsible Economies (CERES), which is an investor network on climate risk and sustainability, to gain a better understanding of climate risk within the portfolio and the efforts being undertaken by peer institutional investors, investment managers and others. In addition, the Board conducted a survey in conjunction with their general investment consultant to benchmark the System's level of ESG adoption and integration relative to our institutional plan peers to ensure that the Board is undertaking best practices in this area.

In addition to the above initiatives, the Board continued to implement changes to the investment program which resulted in further diversification of the investment portfolio and better management of the System's risk. Toward this effort, new investments were approved in the following sectors: opportunistic, global equities, and private markets. The Board also allocated 5% of total fund assets to diversifying and directional hedge funds through a fund-of-one vehicle. The following pages reflect comments on the investment portfolio and were prepared by the Board of Investment Trustees Staff.

ASSET ALLOCATION

The Board's asset allocation policy buckets or groups assets into the following categories based on their risk/return attributes and correlation to each other: growth, risk mitigation, and real assets. This provides a clear outline of the risk and diversification of the System's assets based on exposures to the economic factors of growth and inflation.

The pie chart below notes the grouping of the assets within the buckets. The Board's allocation within each bucket seeks to maximize returns and minimize risk.



The Board and Staff believe that a well-diversified portfolio will serve the Trust well over the long-term to manage the overall risk of the portfolio. Shown below is the description of each category:

- Growth - provides returns associated with the economic growth of underlying global economies.
- Risk mitigation - provides protection against negative growth shocks by offering a reliable income stream through the yield component. This yield also provides some protection against a deflationary environment, characterized by falling interest rates.
- Real assets - provide some level of protection against an inflationary environment, as well as additional diversification to the total portfolio through a differentiated income stream generate by owning tangible hard assets.

The risk/return characteristics of the System are evaluated on a periodic basis through annual asset allocation reviews. Asset/liability studies are prepared every 3 years. The goal of these reviews is to formulate an Asset Allocation Policy which maximizes return while minimizing overall risk through the most efficient combination of acceptable asset classes under the prudent person standard.

Investments in private markets are generally less liquid than investments in public markets and are typically implemented via periodic commitments to funds. As a result, actual allocations to private markets may deviate from their strategic targets for extended periods. Under/overweights to private markets are invested in public market securities with the most similar risk/return characteristics as a short-term proxy for the private asset classes.

Shown on the next page is the annualized investment returns as of June 30, 2019 for all asset classes.

INVESTMENT PERFORMANCE – ANNUALIZED RETURNS – JUNE 30, 2019

	1 Year
Total Fund Time-Weighted Returns	
MCERS	8.7 ^A %
Policy Benchmark	7.8
Domestic Equities	
MCERS	7.8
Russell 3000 Benchmark	9.0
International Equities	
MCERS	(1.0)
Custom International Equity Benchmark	0.5
Global Equities	
MCERS	13.4
MSCI All Country World Benchmark	5.7
Private Equities	
MCERS	24.2 ^{A,B}
Investible Russell 3000 + 300 Bpts Benchmark	12.2 ^B
High Yield	
MCERS	6.1
ICE BofAML U.S. HY Constrained Benchmark	7.6
Credit Opportunities	
MCERS	5.1 ^{A,B}
Investible ICE BofAML U.S. HY Const. + 300 Bpts	8.2 ^B
Directional Hedge Funds	
MCERS	3.2
HFR FoF Strategic Benchmark	0.0
Long Duration	
MCERS	14.0
BC U.S. Gov't/Credit Long Benchmark	13.8
Diversifying Hedge Funds	
MCERS	1.3
HFR FoF Conservative Benchmark	2.1
Public Real Assets	
MCERS	4.6
Custom Public Real Asset Benchmark	3.8
Private Real Assets	
MCERS	4.7 ^{A,B}
CPI + 500 Bpts Benchmark	6.7 ^B
Global Inflation Indexed Bonds	
MCERS	11.5
Custom ILB Benchmark	9.6

Return data for the System was calculated on a time weighted basis (except where noted). Returns shown are provided by various System vendors. Valuations are based on published national securities exchange prices, where available, and all valuations are reconciled between the various investment managers and the custodian bank. Returns are gross of fees paid to investment managers except where noted.

A: Returns utilize lagged valuations for private equity, credit opportunities and private real assets fund-of-funds.

B: Returns computed on dollar-weighted basis and may or may not be net of investment management fees.

GROWTH INVESTMENTS

PUBLIC EQUITY

The market value of the total Public Equity Portfolio as of June 30, 2019 represented approximately 30.5% of the System assets, split between Domestic Equity at 15.0%, International Equity at 12.4%, and Global Equity at 2.8%. The Domestic Equity Portfolio underperformed the Russell 3000 Benchmark by 1.21% for the one year ending June 30, 2019. U.S. equity markets rallied strongly during the fiscal year making it difficult for active managers to outperform the benchmark indexes. After a strong start at the beginning of the year, the equity markets experienced a sharp decline on concerns of an economic slowdown due to additional rate increases by the Fed. In addition, the uncertainty about the outcome of U.S. China trade negotiations weighed on the markets. However, the markets rallied strongly in subsequent quarters when it became clear that the Fed would not be hiking rates and left the door open for the next rate move to be a cut. Equity prices responded positively to the Fed's softening monetary policy and the markets advanced strongly, resulting in performance in the second half in a fiscal year coming in the strongest in 24 years.

As of June 30, 2019, the International Equity Portfolio was allocated as follows: 61.2% EAFE, 19.0% emerging markets, and 19.8% small capitalization stocks. The International Equity Portfolio underperformed the custom international equity benchmark by 1.51% for the fiscal year ending June 30, 2019. Within developed international markets, European equities continued to be impacted by the uncertainty surrounding Brexit and the ongoing global trade tensions. While the developed international markets were stronger than the other markets during the market decline at end of 2018, they failed to keep up with the subsequent rally due to the weakness in the economies of Japan, Germany, and the UK. Emerging markets were impacted by the U.S. China trade war escalations, along with disappointing earnings and economic data in China. Among the larger emerging markets, Brazil and Russia rallied strongly, while India failed to keep pace, and China declined during the fiscal year.

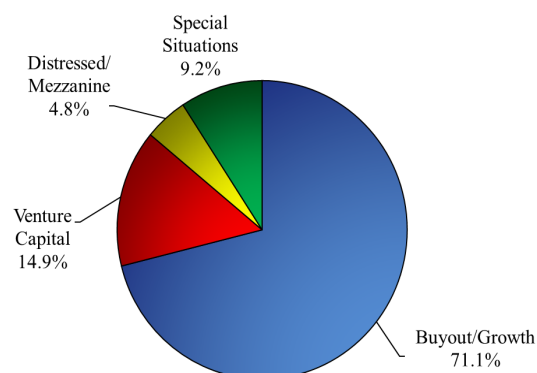
EQUITY: TOP 15 HOLDINGS

The top 15 holdings in the Public Equity Portfolio comprised 3.03% of ERS assets at June 30, 2019. In comparison to the top 15 holdings at June 30, 2018, VISA, Amazon, AIA, Alibaba, Netflix, and Vonovia remained while American Tower, ServiceNow, Williams Co., Promotora Y Operadora de Infracom, Crown Castle, Eqty Resdntl, Avalonbay Cmnty, Atlantica Yield and Novartis were added.

Equity	Shares	Fair Value
VISA	70,870	\$ 12,299,489
AMAZON	5,701	10,795,585
AMERICAN TOWER	51,164	10,507,539
AIA GROUP	951,206	10,257,806
ALIBABA GROUP	56,872	9,636,960
SERVICENOW	33,255	9,130,825
NETFLIX	23,640	8,683,445
WILLIAMS CO	295,237	8,278,445
PROMOTORA Y OPERADORA DE INFRACOM	778,346	7,727,287
CROWN CASTLE INTL CORP	58,187	7,584,675
VONOVIA	157,020	7,510,204
EQTY RESDNTL	91,964	7,034,068
AVALONBAY CMNTYS	33,747	6,908,017
ATLANTICA YIELD	291,902	6,617,418
NOVARTIS	71,686	6,558,350

PRIVATE EQUITY

The System began investing in private equity in 2003 to achieve returns greater than those available in the public equity markets and to gain exposure to diversified alpha sources. At June 30, 2019, the Private Equity Portfolio represented 10.2% of the System assets with approximately 81.9% of the dollars committed having been called. On a long-term basis, the Private Equity program seeks to outperform the Russell 3000 Index by 3.0%. System returns are calculated on a dollar-weighted or internal-rate-of-return (IRR) basis, and the annualized return since inception (2003) through June 30, 2019 was 11.6%. By comparison, the dollar-weighted return for the Russell 3000 Index plus 3.0% for the same period was



12.5%. The return from 2009, when the System moved from fund-of-funds to a direct program, is 21.9% as of June 30, 2019 compared to the 16.0% return of the Russell 3000 plus 3.0% benchmark.

Compared to the prior fiscal year, U.S. buyout investment activity was down both in terms of invested capital as well as the number of deals. While the number of buyout funds raised during the fiscal year increased by 23%, the amount of capital raised decreased by 16% from \$293.6 billion to \$246.8 billion due to a decrease in mega funds coming to market. Buyout exit activity was slightly down for the year based on the number of deals but exit value was moderately positive. For U.S. buyouts, EV/EBITDA buyout multiples increased slightly from 11.3x to 11.5x and leverage levels held constant at 5.8x. U.S. venture investment activity continued its downward trend this year with pullbacks in both the number and size of deals. Venture IPO activity saw an 11% increase relative to the prior fiscal year.

CREDIT OPPORTUNITIES

The System began investing a portion of its portfolio in credit opportunities in 2014 to target higher yielding securities and further diversify the portfolio. The market value of the Credit Opportunities Portfolio as of June 30, 2019 represented 1.8% of System assets. Approximately 70% of the total committed capital has been called. On a dollar weighted, or IRR basis, the annualized return since inception is 8.9%, outperforming the benchmark index, the ICE BofA Merrill Lynch U.S. High Yield Constrained Index plus 3.0%, by 0.6%.

Strong demand from investors, seeking yield oriented assets in a low global interest rate and return environment, has strongly contributed to the proliferation of private debt funds in the institutional investment marketplace. Assets under management (“AUM”) and dry power, or uncalled capital commitments from limited partners, continue to sit at all-time highs. Direct lending strategies dominate the fundraising market in the asset class, with the majority of new capital being raised by North American domiciled funds. The MCERS’ Credit Opportunities Portfolio primarily consists of managers who focus on lending to privately held middle-market companies in need of less dilutive forms of growth capital.

HIGH YIELD

The System invests a portion of its portfolio in U.S. high yield securities which are designed to provide a higher cash coupon than government bonds and investment grade corporate securities. High yield bonds also have less sensitivity to interest rate risk than lower yielding fixed income securities with similar maturity dates. The market value of the high yield portfolio as of June 30, 2019 represented 9.9% of the total Fund. During the fiscal year, the System’s high yield portfolio returned 6.1%, underperforming the ICE BofA Merrill Lynch U.S. High Yield Constrained Index of 7.6%, due to a relatively higher exposure to CCC rated securities which underperformed the broader high yield market.

U.S. high yield securities performed well during the fiscal year primarily due to a backdrop of relatively strong domestic growth and falling interest rates. High yield spreads, or the difference in current yield between a high yield security and Treasury bonds of a similar maturity, rose modestly during the year and finished at 4.1% as of June 30, 2019. The high yield default rate sits near historical lows at 1.5%, or 200 bps behind the long-term average of 3.5%.

DIRECTIONAL HEDGE FUNDS

A portion of the portfolio is invested in growth oriented absolute return strategies (hedge funds) through direct funds and a fund-of-one vehicle to enhance risk adjusted and absolute returns. The combined market value of the investments as of June 30, 2019 represented 1.0% of System assets.

The System’s directional hedge fund performance of 3.2% outperformed the HFRI Fund-of-Funds Strategic Index’s return of 0.0% for the one-year period as of June 30, 2019 due to exposure to event driven hedge funds which posted strong returns. Equity hedge funds (especially those with a higher net exposure) experienced a

challenging environment in Q4 2018, given the broad based sell-off in risk assets, and were the primary reason for the index's flat return in FY 2019.

RISK MITIGATION INVESTMENTS

LONG DURATION

Long duration securities are held to reduce the volatility of the System's portfolio and to provide a measure of downside protection in the event of a slowing economic environment. The market value of the long duration portfolio as of June 30, 2019 represented 11.2% of total System assets. During the fiscal year, the long duration portfolio returned 14.0%, outperforming the benchmark's return by 0.2%.

During the fiscal year, long duration bonds were the best performing asset class for the System. The U.S. Treasury yield curve continued to flatten with long bond yields experiencing significant drops due to slowing global growth, persistent deflationary pressures, and rising geopolitical conflicts. Credit spreads in long duration remain tight, as corporate bonds have only been more expensive than Treasuries in their long-term history approximately 25% of the time.

As of June 30, 2019, the yield on the 10-year Treasury stood at 2.0%, or 84 bps lower than the same period one year earlier.

Fixed Income: Top 15 Holdings

Fifteen Largest Fixed Income Holdings	Interest Rate	Maturity Date	Fair Value
United States Treasury Bonds	4.4 %	May 15, 2040	\$ 40,125,963
United States Treasury Bonds	2.5	February 15, 2045	21,567,635
United States Treasury Bonds	2.9	May 15, 2043	18,407,911
United States Treasury Bonds	2.5	February 15, 2046	17,751,740
United States Treasury Bonds	2.8	August 15, 2047	16,538,627
United States Treasury Bonds	2.9	August 15, 2045	13,455,935
United States Treasury Bonds	2.5	May 15, 2046	11,458,354
United States Treasury Bonds	4.6	February 15, 2040	10,512,941
United States Treasury Bonds	3.0	May 15, 2047	8,990,265
United States Treasury Bonds	2.3	August 15, 2027	7,377,076
United States Treasury Bonds	3.0	May 15, 2045	5,656,791
Bank of America	6.0	October 15, 2036	4,954,324
United States Treasury Bonds	2.8	August 15, 2047	4,652,008
United States Treasury Bonds	2.8	November 15, 2047	4,033,293
Goldman Sachs	3.5	November 16, 2026	3,654,852

DIVERSIFYING HEDGE FUNDS

Investments are held in diversifying hedge funds strategies through direct funds and a fund-of-one vehicle to enhance risk adjusted returns and reduce volatility of the System's portfolio. The market value of the diversifying investments as of June 30, 2019 represented 1.8% of System assets.

The System's diversifying hedge fund performance of 1.3% trailed the HFRI Fund-of-Funds Conservative Index's return of 2.1% for the one-year period as of June 30, 2019 primarily due to the underperformance of long biased equity funds which posted negative returns in Q4 2018. Relative Value and Global Marco funds

posted strong performance, as a rise in financial market volatility led to more attractive opportunities to generate positive returns.

REAL ASSETS INVESTMENTS

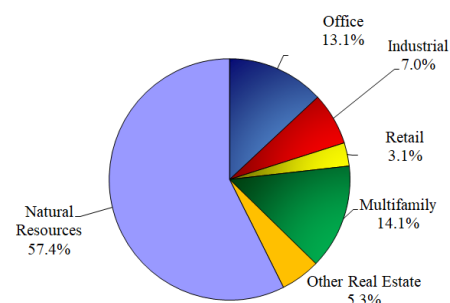
PUBLIC REAL ASSETS

The System began investing in Public Real Assets in January 2009 to further diversify the portfolio, reduce risk, and provide a hedge against inflation. The market value of the Public Real Assets Portfolio as of June 30, 2019 represented approximately 12.8% of System assets and was allocated as follows: 34.2% global real estate securities, 33.8% commodities, and 32.0% listed infrastructure.

Prices of listed global real estate advanced due to lower interest rates. The commodity sector declined due to concerns over slowing global growth and trade disputes. Infrastructure securities rose for the recent fiscal year due to strong gains in the communications tower sector and the defensive utilities sector. For the fiscal year, the Public Real Asset Portfolio outperformed the custom benchmark by 0.78%.

PRIVATE REAL ASSETS

Private real estate and natural resources were added to the portfolio in 2006 to attain real returns less correlated with the broad public securities markets. Returns are computed on a dollar-weighted or internal rate-of-return basis, and from inception (2006) to June 30, 2019 the investments generated an annualized gain of 5.7%. By comparison, the dollar-weighted return for the benchmark CPI + 5.0% for the same period was a gain of 6.7%. The Private Real Assets Portfolio comprised 5.1% of the Fund at June 30, 2019 with approximately 79% of the dollars committed called. The return from 2009, when the System moved to a direct program, through June 30, 2019 is 10.2% compared to the 6.7% return of the benchmark, CPI + 5.0%.



During the fiscal year, U.S. real estate transaction activity increased slightly while capitalization rates were relatively unchanged as policymakers refined their view on interest rates and the perspective on the global economy moving forward. Domestic energy investments continued to grow, although, the oil rig count has come down and is dramatically lower than the highs of 2014. The U.S. crude production has increased to all-time record levels as producers have increased efficiency. U.S. farmland asset values are being pressured due to declining net income levels as a result of lower agriculture prices and higher farm sector debt levels.

GLOBAL INFLATION INDEXED BONDS

Inflation-indexed bonds provide protection against inflation risk, as well as a globally diversified return stream to assist in managing volatility. The Inflation-Indexed Bond Portfolio represented 12.8% of System assets at June 30, 2019. The Portfolio, which also includes an absolute return fund overlay, returned 11.5% during the fiscal year, outperforming the custom benchmark's return of 9.6%.

During the fiscal year, global real yields fell and inflation linked bond prices rose primarily due to a global shift to a more accommodative monetary policy and investor concerns over weakening global growth as a result of escalating global trade tensions. In addition, the Portfolio's absolute return fund overlay performed strongly, returning 2.0% for the one-year period ended June 30, 2019.

Inflation-Indexed Bonds - Country Exposures		
United States	45	%
United Kingdom	20	
Canada	10	
France	10	
Germany	7	
Sweden	5	
Australia	3	

INVESTMENT MANAGERS

The diversified investment structure as of June 30, 2019 is reflected in the following table, which lists System managers by asset class and style.

Public Equity		Investment Style	
Domestic Equity			
Barrow, Hanley, Mewhinney & Strauss	Large Cap Value		
Eagle Asset Management	Small Cap Growth		
JP Morgan Investment Management*	Large Cap Core Plus		
Los Angeles Capital Management*	Large Cap Alpha		
RhumbLine Advisors	Russell 1000 Index		
Sands Capital Management	Large Cap Growth		
Wellington Management	Small Cap Value		
International Equity			
GQG Partners	Emerging Markets		
Gryphon Int'l Investment Corp.	EAFE		
Highclere Int'l Investors LLP*	Small Cap		
Marathon Asset Management LLP	EAFE		
Mondrian Investment Partners Ltd*	Emerging Markets		
TimesSquare	Small Cap		
Wellington Management	EAFE		
Global Equity			
Arrowstreet Capital*	Global		
WCM Investment Management	Global		
Private Real Assets		Investment Style	
Aberdeen*	Fund-of-Funds		
AEW Partners*	Real Estate		
Carmel Partners*	Real Estate		
EMR Capital*	Mining		
EnerVest, Ltd.*	Energy		
Federal Capital Partners*	Real Estate		
Hampshire Companies*	Real Estate		
Homestead Capital*	Agriculture		
Juniper Capital*	Energy		
Kimmeridge Energy*	Energy		
LBA Realty*	Real Estate		
Lime Rock Resources*	Energy		
Longpoint Realty*	Real Estate		
Lyme Timber Company*	Timber		
Magna Hospitality Group*	Real Estate		
Meridian Realty Partners*	Real Estate		
Pearlmark Real Estate Ptrs*	Real Estate		
Resource Land Holdings*	Diversified Natural Resources		
TA Associates Realty LLC*	Real Estate		
Tailwater Capital*	Energy		
Public Real Assets		Investment Style	
Barings	Real Estate		
BlackRock Financial Mgt.*	Commodities		
Chickasaw Capital Management	MLPs		
CoreCommodity Mgt.*	Commodities		
Morgan Stanley*	Infrastructure		
Wellington Management*	Commodities		
Private Debt		Investment Style	
Bison Capital Partners*	Structured Equity		
Castlelake*	Distressed		
Clearlake Capital Group*	Distressed		
Greyrock Capital Group*	Structured Equity		
Levine Leichtman Capital Partners*	Structured Equity		
New Energy Capital Partners*	Structured Equity		
PineBridge Investments*	Structured Equity		
WNG Capital*	Special Assets		
Whitehorse Liquidity Partners *	Structured Equity		
Directional Hedge Funds		Investment Style	
Davidson Kempner Capital Management*	Event Driven		
Blackstone*	Fund-of-One		
Luxor Capital Partners*	Event Driven		
Senator Investment Group*	Event Driven		
Diversifying Hedge Funds		Investment Style	
Blackstone*	Fund-of-One		
Grosvenor Capital Management*	Fund-of-Funds		
HBK Capital Management*	Relative Value		
Hudson Bay Capital Mgmt*	Relative Value		
Holocene Advisors*	Equity Long/Short		
Scopia Capital Management*	Equity Long/Short		
Private Equity		Investment Style	
Adams Street Partners*	Fund-of-Funds		
Altaris Capital Partners*	Buyout		
Altus Capital Partners*	Buyout		
Atlas Capital Resources*	Turnaround		
BV Investment Partners*	Growth Equity		
Clearlake Capital Group*	Turnaround		
DW Healthcare Partners*	Buyout		
Franklin Park*	Fund-of-Funds		
HarbourVest Partners*	Fund-of-Funds		
J.F. Lehman & Company*	Buyout		
K1 Investment Mgmt.*	Growth/Buyout		
KPS Capital Partners*	Turnaround		
Landmark Partners*	Fund-of-Funds		
Mason Wells*	Buyout		
Odyssey Inv. Partners*	Buyout		
Riverside Partners*	Buyout		
Siris Capital Group*	Buyout		
Sunstone Partners*	Growth Equity		
TA Associates*	Growth Equity		
Thoma Bravo*	Buyout		
Wicks Group*	Buyout		
High Yield		Investment Style	
Loomis Sayles & Co.	High Yield		
Nomura Asset Management	High Yield		
Long Duration		Investment Style	
Jennison Associates	Long Duration		
Schroder Investment Mgt.	Long Duration		
Global Inflation-Indexed Bonds		Investment Style	
Bridgewater Associates*	Passive		
Foreign Currency		Investment Style	
First Quadrant LP*	Foreign Currency		

* Pooled Funds

A complete list of the portfolio holdings are available upon request. Please contact the Board of Investment Trustees at 240-777-8220.

PUBLIC EQUITY COMMISSIONS

January 1, 2018 Through December 31, 2018

Brokers	Shares Traded	Total Commissions	Commissions per Share
UBS AG London Branch	3,737,559	\$ 7,170	\$ 0.002
Society Generale London Branch	1,622,165	23,430	0.014
Goldman Sachs	1,575,533	29,760	0.019
HSBC Bank PLC	1,517,496	5,700	0.004
J.P. Morgan Securities	1,507,315	15,470	0.010
Credit Suisse Securities (Europe)	1,481,453	6,680	0.005
Merrill Lynch International	1,320,324	10,110	0.008
Deutsche Bank AG	1,297,954	2,930	0.002
SG Securities (HK)	1,273,017	9,800	0.008
Citigroup Global Markets	1,088,933	5,750	0.005
Other Brokers	15,460,424	223,720	0.014
Total	31,882,173	\$ 340,520	\$ 0.011

INVESTMENT SUMMARY

	June 30, 2019 Fair Value	Percent of Total Value	June 30, 2018 Fair Value	Percent of Total Value
Government and agency obligations	\$ 568,830,742	13.2 %	\$ 535,053,176	13.0 %
Municipal/Provincial obligations	8,921,548	0.2	8,431,521	0.2
Asset-backed securities	666,245	0.0	700,355	0.0
Corporate bonds	655,403,025	15.2	657,342,966	15.9
Collateralized mortgage obligations	-	0.0	379,768	0.0
Commercial mortgage-backed securities	2,114,604	0.1	2,283,013	0.1
Common and preferred stock	1,633,312,048	38.0	1,718,906,869	41.6
Mutual and commingled funds	495,311,451	11.5	488,075,929	11.8
Short-term investments	203,643,284	4.7	106,196,816	2.6
Private real assets	218,561,490	5.1	198,112,470	4.8
Private equity/debt	515,390,370	12.0	412,741,287	10.0
Total	\$ 4,302,154,807	100.0 %	\$ 4,128,224,170	100.0 %

Cash collateral received under securities lending agreements is not included in the investment summary shown above.



ACTUARIAL SECTION
Employees' Retirement System

October 17, 2019

Ms. Linda Herman
Executive Director
Montgomery County Employee Retirement Plans
101 Monroe Street, 15th Floor
Rockville, Maryland 20850

Dear Linda:

At your request, we have performed an actuarial valuation for funding purposes, and a separate actuarial valuation for accounting purposes, of the Montgomery County Employees' Retirement System ("System") as of July 1, 2019. The purpose of the funding actuarial valuation, which is performed annually, is to determine the funding status and annual contribution requirements of the System. The actuarial valuations were performed specifically at your request and are intended for use by the System and Montgomery County ("County") and those designated by the System and the County. This report may be provided to parties other than the System and County only in its entirety and only with the permission of the System and County. GRS is not responsible for unauthorized use of this report.

Funding Objective

The funding objective for the System is to collect employer and employee contributions sufficient to pay the benefits of the Montgomery County Employees' Retirement System when due and to achieve a funded ratio of 100 percent at the end of the amortization period. The total contribution rate is equal to the normal cost rate plus amortization of the unfunded liability as a level percentage of payroll. The unfunded liability as of July 1, 2015 (and in each future year) for the closed Non-Public Safety groups (Groups A and H) is amortized over a single closed period of 9 years (5 years remaining at the actuarial valuation as of July 1, 2019, to amortize the total unfunded liability). The unfunded liability as of July 1, 2015 for the open Non-Public Safety group (Group J), Public Safety groups (Groups E, F, and G) and GRIP was amortized over a closed period of 20 years (16 years remaining at the actuarial valuation as of July 1, 2019) and the unfunded liability bases established in each subsequent year are amortized over separate 20-year closed periods. The single equivalent amortization period for the System in total as of July 1, 2019 is 4.5 years. This funding policy is consistent with generally accepted actuarial standards for the funding of retirement systems. The total contribution rate minus the average employee contribution rate equals the County contribution rate. The funding actuarial valuation as of July 1, 2019 establishes the County contribution rate for the fiscal year beginning July 1, 2020.

Actuarial Assumptions and Methods

The actuarial cost method used in this valuation is the same as the method used in the prior actuarial valuation. The actuarial cost method utilized by the System for both non-GRIP and GRIP members is the individual Entry-Age Normal method. The objective of this method is to finance the benefits of the System as a level percentage of payroll over the members' careers. Any Unfunded Actuarial Accrued

Liability (UAAL) under this method is separately financed. All actuarial gains and losses under this method are reflected in the UAAL. The actuarial assumptions used in the actuarial valuation are based on an experience review covering the period July 1, 2014 to July 1, 2018 and were first adopted for use beginning with the actuarial valuation as of July 1, 2019.

The actuarial assumptions and methods used, including the economic and demographic assumptions, the actuarial cost method and asset method, meet the parameters set forth in the Actuarial Standards of Practice issued by the Actuarial Standards Board for the funding of public sector pension plans and are set by the County as authorized under Montgomery County Code. Actuarial assumptions and actuarial methods required under GASB Statement Nos. 67 and 68 were used in the preparation of the accounting disclosures and schedules required by GASB Statement Nos. 67 and 68.

Benefit Provisions

There have been no plan changes reflected in the actuarial valuation as of July 1, 2019 since the actuarial valuation at July 1, 2018.

Participant Data

A total of 6,003 active members (excluding DRSP and DROP) were included in the actuarial valuation as of July 1, 2019. Between the 2018 and 2019 actuarial valuations, the number of active employees decreased by 1 member. The average annual actuarial valuation pay (excluding DRSP and DROP) increased by 1.9 percent, from \$77,944 to \$79,397 between the 2018 and 2019 actuarial valuation. The number of benefit recipients (including DRSP and DROP) increased from 6,615 to 6,731, or 1.8 percent, since the last actuarial valuation. The average monthly benefit increased by 2.4 percent, from \$3,219 to \$3,295.

Aetna Contract

There is a group of retirees who have benefits that are insured by Aetna. The total benefit amounts reported for these members in the actuarial valuation report include the insured benefit amount. The actuarial liabilities calculated in the actuarial valuation report exclude the value of the insured benefits. The liabilities for these members that are included in the actuarial valuation are for the cost of living adjustments provided and are paid by the Montgomery County Employees' Retirement System.

Actuarial Valuation Assets

On a market value basis, the Plan assets had an investment return of approximately 8.05 percent (net of investment expenses). Recognition of investment gains during fiscal years ending 2017, 2018 and 2019 were partially offset by recognition of the fiscal year end 2015 and 2016 investment losses. The net investment gains resulted in an estimated net asset rate of return of 6.46 percent on an actuarial value of assets basis, which compares to the assumed rate of return of 7.50 percent.

Reliance on Others

The actuarial valuation was based upon information furnished by the County Staff, concerning benefits provided by the Montgomery County Employees' Retirement System, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We checked for internal

and year-to-year consistency, but did not audit the data. We are not responsible for the accuracy or completeness of the information provided by the County Staff.

The trend data in the Financial Section and the schedules and other data in this Section are prepared by County Staff with our input.

Accounting Schedules under GASB Statement Nos. 67 and 68

The total pension liability (actuarial accrued liability) is based on an actuarial valuation date of July 1, 2018, with results projected to July 1, 2019, assuming no liability gains and losses, under the Entry Age Normal actuarial cost method. A single discount rate of 7.50 percent, which is the same rate that is used in the funding actuarial valuation, was used to measure the total pension liability. All other assumptions and methods used in the funding actuarial valuation for calculation of the actuarial accrued liabilities as of July 1, 2019 were used in the GASB Statement Nos. 67 and 68 actuarial valuation for calculation of the total pension liability for fiscal year ending June 30, 2019.

The net pension liability is measured as the total pension liability, less the amount of the pension plan's fiduciary net position (market value of assets) as of June 30, 2019.

Certification

To the best of our knowledge the information contained in this report is accurate and fairly presents the actuarial position of the Montgomery County Employees' Retirement System as of the valuation date of July 1, 2019, based on the data and actuarial techniques described above and applicable sections of the County Code. All calculations have been made in conformity with generally accepted actuarial principles and practices, and all actuarial assumptions used in this report are reasonable for the purposes of this actuarial valuation and meet the parameters set forth in the Actuarial Standards of Practice issued by the Actuarial Standards Board. Lance J. Weiss and Amy Williams are Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of the actuary's assignment, the actuary did not perform an analysis of the potential range of such future measurements in this report.

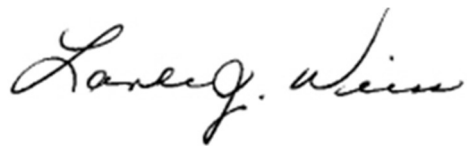
This actuarial valuation assumed the continuing ability of the plan sponsor to make the contributions necessary to fund this plan. A determination regarding whether or not the plan sponsor is actually able to do so is outside our scope of expertise and was not performed.

This report should not be relied on for any purpose other than the purpose stated.

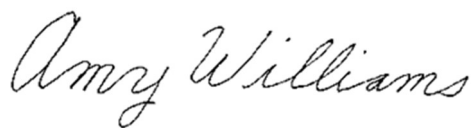
The signing actuaries are independent of the plan sponsor.

Respectfully submitted,

Gabriel, Roeder, Smith & Company

A handwritten signature in cursive script, reading "Lance J. Weiss".

Lance J. Weiss, E.A., M.A.A.A., F.C.A.
Senior Consultant and Team Leader

A handwritten signature in cursive script, reading "Amy Williams".

Amy Williams, A.S.A., M.A.A.A., F.C.A.
Senior Consultant

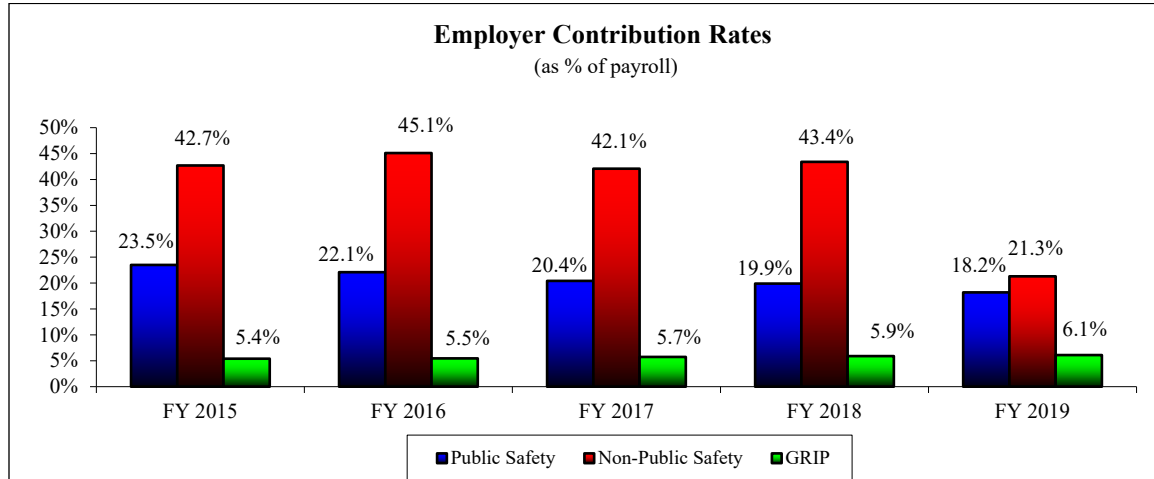
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SUMMARY OF VALUATION RESULTS EMPLOYEES' RETIREMENT SYSTEM

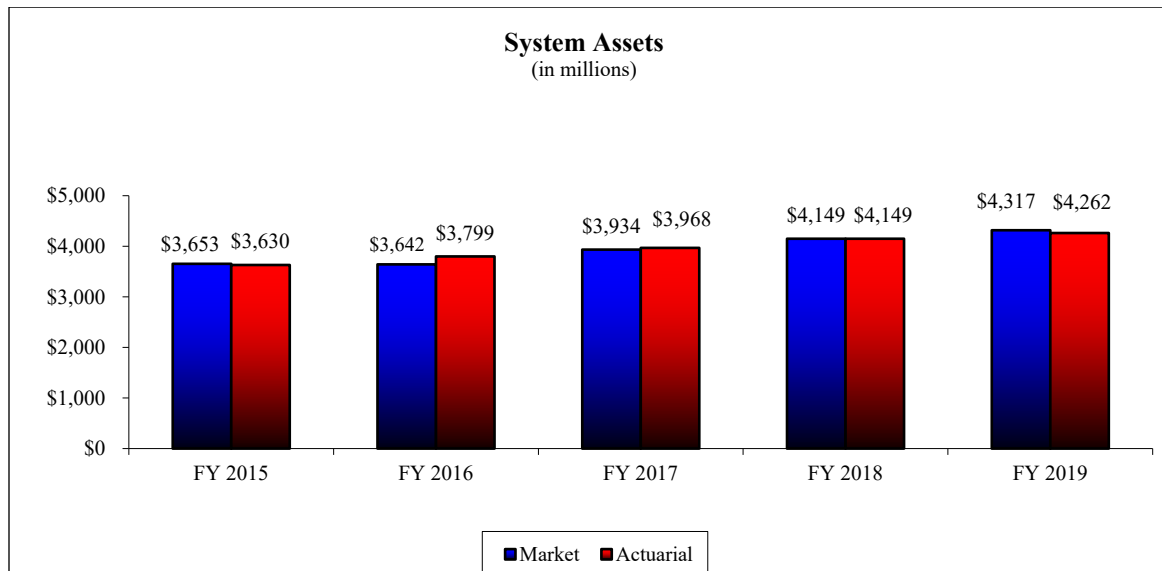
A. Overview

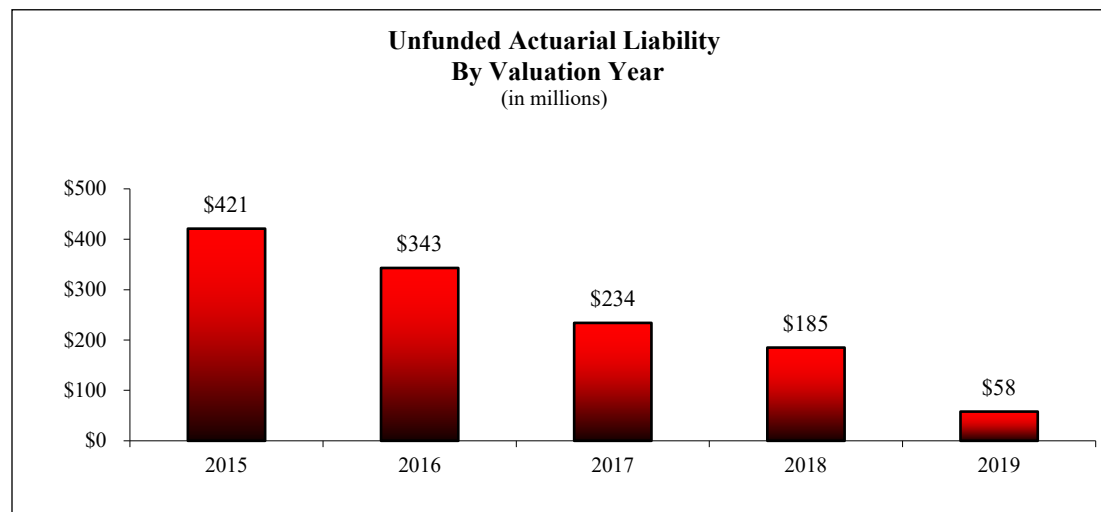
This report presents the results of our June 30, 2019 actuarial valuation of the Montgomery County Employees' Retirement System.

The major findings of the valuation are summarized in the following charts:

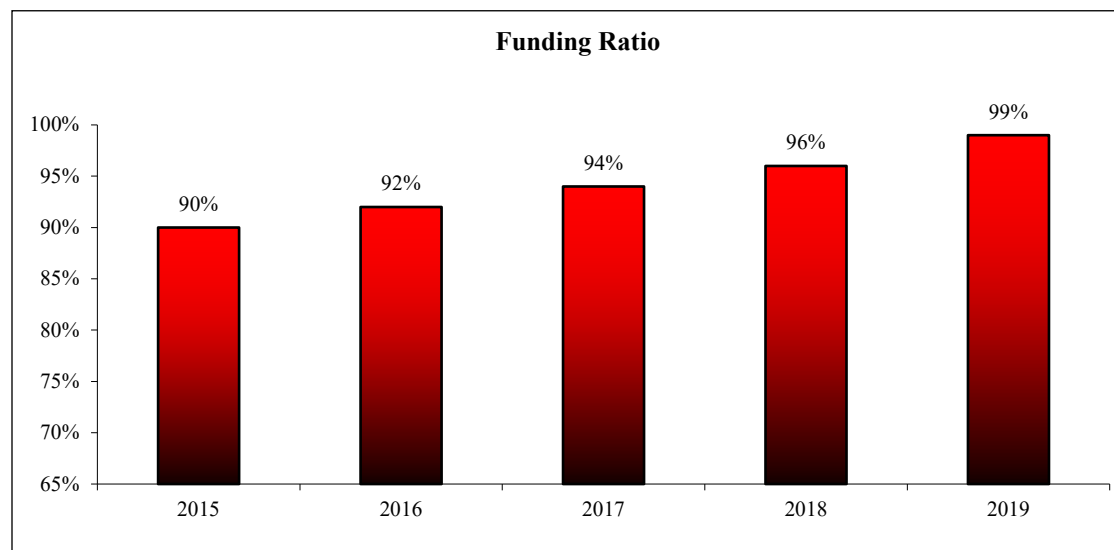


The change in the employer contribution rate in FY 2019 was due to actual System experience versus actuarial assumptions.





The unfunded actuarial liability decreased in FY 2019 primarily due to deferred asset gains and lower than expected cost of living increases for retired members.



The ratio of actuarial assets to the actuarial accrued liability has improved primarily due to the factors noted above.

B. Summary of Results

	<u>July 1, 2018</u>	<u>July 1, 2019</u>
Actuarial Liability		
a. Active Members	\$1,433,472,176	\$1,392,815,876
b. Retired Members and Beneficiaries	2,865,281,220	2,887,696,340
c. Vested Former Members	<u>35,543,402</u>	<u>39,648,856</u>
d. Total	<u>\$4,334,296,798</u>	<u>\$4,320,161,072</u>
Valuation Assets	\$4,149,354,330	\$4,261,996,413
Unfunded Actuarial Accrued Liability	\$184,942,468	\$58,164,659
Normal Cost		
a. Gross Normal Cost	\$80,558,188	\$80,740,747
b. Anticipated Employee Contributions	<u>\$26,349,166</u>	<u>\$26,754,202</u>
c. County Normal Cost (a -b)	<u>\$54,209,022</u>	<u>\$53,986,545</u>
Amortization Payment	\$27,714,338	\$11,116,117
County Contribution Required at Date Shown	\$81,923,360	\$65,102,662
County FY 2019/FY 2020 Contribution (as a % of covered payroll)		
Public Safety Employees	19.88%	18.18%
Non-Public Safety Employees	43.38%	21.28%
Guaranteed Retirement Income Plan	5.93%	6.10%

C. Valuation Highlights

1. System Assets

As of June 30, 2019, the System had assets, valued at market, of \$4.317 billion, as compared to \$4.149 billion at June 30, 2018. The increase of \$167 million was attributable to the following:

- a. An increase of \$116 million from employer and employee contributions;
- b. An increase of \$318 million from investment gain;
- c. A decrease of \$267 million due to the payment of benefits to System participants and administrative expenses.

When measured on an actuarial basis, System assets were \$4.317 billion at June 30, 2019, and \$4.149 billion at June 30, 2018. The asset valuation method smooths the fluctuations generated by intermittent market gains and losses. This method phases-in investment gains and losses arising during and after the 1994 fiscal year over a five-year period from the date established. Effective July 1, 1997, the calculation of the actuarial value of assets was changed to exclude the present value of estimated accrued contributions.

2. System Liabilities

The Unfunded Actuarial Liability decreased by \$127 million, from \$185 million at July 1, 2018, to \$58 million at July 1, 2019, as follows:

Unfunded Actuarial Liability at beginning of year	\$	184,942,468
Unfunded Actuarial Liability at end of year		58,164,659
Decrease in Unfunded Actuarial Liability	\$	<u>126,777,809</u>

The decrease in Unfunded Actuarial Liability for the year ended June 30, 2019, is comprised of the following:

Increase due to gain on actuarial value of assets	\$	(42,453,998)
Decrease due to demographic gain and other factors		147,490,348
Decrease due to amortization payment and contributions		<u>21,741,459</u>
Decrease in Unfunded Actuarial Liability	\$	<u>126,777,809</u>

3. System Contributions

Contributions to the System include a “normal cost” rate which covers the portion of projected liabilities related to service of members. In addition, an amortization payment is made to fund the unfunded liability related to changes made to benefits in previous years which are being funded over a specific period of time.

The increase/decrease in the employer contribution rate is attributable to the following:

	Non-Public Safety (non-GRIP)		Public Safety (non-GRIP)		GRIP	
Employer contribution rate - June 30, 2018	38.69	%	20.16	%	5.93	%
Increase due to gain on actuarial value of assets	5.31		0.78		0.05	
Increase/decrease due to actuarial gains & losses	(3.66)		(1.19)		0.08	
Increase/decrease due to plan changes	0.00		0.00		0.00	
Increase/decrease due to assumption and method changes	<u>(19.06)</u>		<u>(1.58)</u>		<u>0.04</u>	
Employer contribution rate - June 30, 2019	<u>21.28</u>	%	<u>18.17</u>	%	<u>6.10</u>	%

4. Membership

The active membership of the System decreased from 6,004 at June 30, 2018 to 6,003 at June 30, 2019. The System was closed to all new employees hired after October 1, 1994, except public safety, bargaining unit employees and GRIP participants. Inactive members, including retirees and beneficiaries, increased from 6,615 at June 30, 2018 to 6,731 at June 30, 2019 and the number of former members with vested rights increased from 489 to 543.

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS EMPLOYEES' RETIREMENT SYSTEM

A. Funding Method

The funding method used for the System's valuation is the "Individual Entry-Age Normal" actuarial cost method. The objective of this method is to finance the benefits of the System as a level percentage of payroll over the members' careers. The normal cost for each individual active member, payable from the date of employment to the date of retirement, is sufficient to accumulate the value of the member's benefit at the time of retirement. Each annual normal cost is a constant percentage of the member's year by year projected covered pay. An *actuarial liability* is calculated at the valuation date as the present value of benefits allocated to service prior to that date. The *Unfunded Actuarial Liability* at the valuation date is the excess of the actuarial liability over the assets of the System.

B. Actuarial Value of Assets

The actuarial value of assets is used for purposes of determining the County's contribution to the System. The asset adjustment method dampens the volatility of asset values that could occur because of short term fluctuations in market conditions. Use of an asset smoothing method is consistent with the long term nature of the actuarial valuation process. Assets are valued at market value but with a phase-in of investment gains and losses arising after July 1, 1994, over a 5-year period. The gains and losses are net of expenses. Effective July 1, 1997, the calculation of the actuarial value of assets does not include the present value of accrued contributions.

**ACTUARIAL ASSUMPTIONS AND METHODS
EMPLOYEES' RETIREMENT SYSTEM**

A. Demographic Assumptions

1. Mortality

MP-2018 Employee and Healthy Annuitant (non-disabled)									
Age	Pre-Retirement Future Life Expectancy (years) in 2019		Post-Retirement Future Life Expectancy (years) in 2019		Age	Pre-Retirement Future Life Expectancy (years) in 2019		Post-Retirement Future Life Expectancy (years) in 2019	
	Male	Female	Male	Female		Male	Female	Male	Female
20	70.83	73.49	68.17	70.49	65	24.09	26.50	21.48	23.46
25	65.55	68.17	62.81	65.08	70	19.29	21.51	17.10	19.02
30	60.26	62.87	57.44	59.68	75	14.75	16.73	13.13	14.95
35	54.98	57.59	52.07	54.29	80	10.51	12.21	9.68	11.33
40	49.71	52.32	46.72	48.92	85	6.93	8.32	6.87	8.25
45	44.46	47.08	41.42	43.59	90	4.77	5.81	4.77	5.81
50	39.25	41.87	36.21	38.33	95	3.43	4.05	3.43	4.05
55	34.11	36.70	31.11	33.18	100	2.49	2.83	2.49	2.83
60	29.05	31.58	26.18	28.20	105	1.88	2.06	1.88	2.06

2. Rates of Termination of Employment (prior to retirement eligibility)

Years of Service	Non-Public Safety and GRIP		Public Safety			
	Male	Female	Group E and J		Group F and G	
	Male	Female	Male	Female	Male	Female
0	11.50%	12.00%	16.00%	16.00%	7.00%	10.50%
1	9.00	11.00	10.00	14.00	4.00	5.00
2	8.50	9.00	6.00	12.00	3.50	4.50
3	6.50	8.00	5.00	10.00	3.00	4.00
4	6.00	7.50	5.00	8.00	2.50	3.50
5	5.50	6.50	5.00	6.00	2.25	3.00
6	5.00	5.50	5.00	4.00	2.00	2.75
7	4.50	4.50	5.00	4.00	1.75	2.50
8	4.00	3.50	4.00	4.00	1.50	2.00
9	4.00	3.00	3.00	3.00	1.25	1.75
10	3.00	2.75	2.00	2.00	1.00	1.00
11	3.00	2.75	1.50	1.00	0.75	0.75
12	3.00	2.75	1.00	1.00	0.50	0.50
13	3.00	2.75	1.00	1.00	0.25	0.25
14	3.00	2.75	1.00	1.00	0.25	0.25
15-19	2.50	2.50	1.00	1.00	0.25	0.25
20+	2.00	2.00	1.00	1.00	0.25	0.25

Vested participants that terminate are assumed to elect the option with the greater present value:

- 1) A refund of their accumulated contributions with interest or
- 2) A deferred benefit.

3. Disability

Annual Disabilities per 1,000 Members										
Age	Non-Public Safety Employees				Public Safety Employees					
	Group A and H		Group J		Group E		Group F		Group G	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
20	0	0	0	0	0	0	1	1	1	1
25	0	0	1	1	1	1	1	2	2	2
30	1	0	1	1	1	1	2	5	3	6
35	1	1	2	2	2	2	4	8	5	9
40	2	1	3	4	3	4	6	15	8	16
45	3	2	6	8	6	8	11	28	15	31
50	5	3	11	10	11	10	19	37	27	41
55	8	3	15	11	15	11	27	39	38	43
60	8	3	15	11	15	11	27	39	38	43

4. Deaths

Age	Disabled Mortality Future Life Expectancy (years) in 2019	
	Male	Female
20	65.87	68.44
25	60.64	63.08
30	55.40	57.75
35	50.18	52.47
40	44.98	47.26
45	39.84	42.12
50	34.81	37.06
55	29.91	32.13
60	25.17	27.43
65	20.71	22.97
70	16.58	18.80
75	12.80	14.91
80	9.55	11.31

5. Rates of Retirement

Age	Non Public Safety		GRIP	
	Under 30 Years of Service	30 Years of Service & Over	Under 15 Years of Service	15 Years of Service & Over
45 – 49	2.0%	2.0%	0.0%	0.0%
50 – 54	3.0	12.5	0.0	0.0
55	6.0	15.0	3.0	3.0
56	6.0	15.0	3.0	3.0
57	6.0	15.0	4.5	5.0
58	6.0	15.0	4.5	6.0
59	6.0	15.0	4.5	6.5
60	11.0	18.0	4.5	7.0
61	13.0	18.0	4.5	7.5
62	14.0	18.0	7.0	15.0
63	11.0	18.0	7.0	15.0
64	11.0	18.0	10.0	15.0
65	15.0	18.0	13.0	20.0
66	22.0	25.0	13.0	20.0
67-68	20.0	20.0	13.0	25.0
69	20.0	20.0	13.0	30.0
70	30.0	35.0	25.0	50.0
71	30.0	35.0	25.0	50.0
72-74	30.0	35.0	30.0	50.0
75	100.0	100.0	100.0	100.0

Age	Public Safety			Group F			Group G		
	Group E and J Under 25 Years of Service	25 Years of Service & Over	26 Years of Service & Over	Under 25 Years of Service	25 Years of Service	26 Years of Service & Over	Under 20 or 21 - 24 Years of Service	20 Years of Service	25 Years of Service & Over
Under 42	3.5%	3.5%	3.5%	2.5%	20.0%	10.0%	2.5%	10.0%	2.5%
42 – 44	3.5	3.5	3.5	2.5	20.0	10.0	5.0	10.0	5.0
45	3.5	8.0	8.0	2.5	20.0	10.0	5.0	10.0	7.5
46	3.5	8.0	8.0	3.0	20.0	10.0	5.0	10.0	7.5
47	3.5	8.0	8.0	4.0	20.0	10.0	5.0	10.0	7.5
48	3.5	8.0	8.0	4.0	20.0	10.0	5.0	10.0	10.0
49	5.0	20.0	20.0	4.0	20.0	10.0	10.0	10.0	10.0
50	7.5	20.0	20.0	8.0	20.0	18.0	10.0	15.0	10.0
51	7.5	20.0	20.0	8.0	20.0	18.0	10.0	15.0	17.5
52	7.5	20.0	20.0	8.0	20.0	18.0	12.5	20.0	20.0
53	7.5	20.0	20.0	8.0	25.0	20.0	12.5	20.0	20.0
54	7.5	20.0	20.0	12.0	25.0	20.0	12.5	20.0	20.0
55 – 56	15.0	30.0	30.0	12.0	40.0	35.0	15.0	40.0	30.0
57	15.0	30.0	30.0	15.0	40.0	35.0	15.0	40.0	30.0
58-59	15.0	30.0	30.0	15.0	40.0	35.0	15.0	40.0	40.0
60 – 62	15.0	30.0	30.0	20.0	70.0	50.0	30.0	40.0	40.0
63-64	15.0	30.0	30.0	25.0	70.0	50.0	30.0	40.0	40.0
65	50.0	50.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

6. Sick Leave Credit

Service credit is increased by 2.6% for Group A employees, 2.2% for Group E and J employees, 4.4% for Group F employees, 2.9% for Group G employees, and 1.6% for Group H employees to account for additional credit from unused sick leave. Sick leave is capped at 2 years.

7. Marital assumption

80% of active participants are assumed to be married. Women are assumed to be three years younger than their spouses.

B. Economic Assumptions

1. Investment Return: 7.50% compound per annum
2. Cost-of-Living Increases: 2.50% on credited service earned prior to June 30, 2011. 2.20% on credited service earned on or after July 1, 2011, reflecting the 2.50% cap
3. Increase in Social Security Wage Base: 3.00% compound per annum
4. Expense load: Assumed administrative expenses are based on 105% of the average of the administrative expenses over the past three years. For FY 2021 this figure is \$3,192,200.
5. Salary Increase: Merit and promotional increases assumed to be based on service as shown below:

Non-Public							
Service	Safety*	Service	Group E	Service	Group F	Service	Group G
1	6.75%	1	9.50%	1	7.75%	1	10.75%
2	5.75	2	9.25	2	7.50	2	9.25
3	5.25	3	8.00	3	7.25	3	7.75
4	5.25	4	6.75	4	7.00	4	7.25
5	5.25	5	6.25	5	6.75	5 – 10	6.75
6-8	5.00	6-7	5.75	6	5.75	11-15	5.25
9-10	4.75	8	5.25	7-8	5.50	16-20	4.25
11-15	4.25	9-15	4.75	9-10	5.00	21-29	3.25
16-21	4.00	16-18	4.50	11-15	4.75	30+	3.00
22-24	3.75	19-20	4.25	16	4.50		
25-29	3.50	21	4.00	17	4.25		
30+	3.00	22-27	3.75	18-20	4.00		
		28-29	3.50	21-25	3.25		
		30+	3.00	26+	3.00		

* Includes GRIP

ANALYSIS OF FINANCIAL EXPERIENCE

Gains and Loss in Accrued Liability During Years Ended June 30 Resulting from Differences Between Assumed Experience and Actual Experience

Fiscal Year	(a) Investment gain/(loss)	(b) Combined liability experience	(a)+(b) Gain/(Loss) during year
2010	\$ (155,831,291)	\$ 84,758,321	\$ (71,072,970)
2011	(73,632,309)	2,351,277	(71,281,032)
2012	(110,314,254)	102,955,793	(7,358,461)
2013	(33,134,494)	93,060,972	59,926,478
2014	163,194,287	7,865,965	171,060,252
2015	107,001,671	81,145,514	188,147,185
2016	(23,178,967)	86,796,201	63,617,234
2017	10,966,494	80,948,741	91,915,235
2018	12,111,506	21,671,951	33,783,457
2019	(42,453,998)	153,309,578	110,885,580

SOLVENCY TEST

Aggregate Accrued Liability

Valuation Date	(1) Active Members Contributions	(2) Retirees, Vested Terms, Beneficiaries	(3) Active Members (Employer Financed Portion)	Reported Assets	Portion of Accrued Liabilities Covered by Reported Assets (%)		
					(1)	(2)	(3)
6/30/2010	\$ 213,191,851	\$ 2,054,949,883	\$ 1,377,434,607	\$ 2,791,144,974	100%	100%	38%
6/30/2011	236,934,960	2,181,816,842	1,325,970,792	2,869,422,276	100	100	34
6/30/2012	210,537,737	2,465,714,392	1,092,493,833	2,891,435,563	100	100	20
6/30/2013	248,331,006	2,526,844,154	1,046,205,572	3,012,547,244	100	100	23
6/30/2014	265,055,643	2,585,446,584	1,108,427,491	3,333,484,724	100	100	44
6/30/2015	280,135,577	2,698,040,722	1,072,560,553	3,630,075,610	100	100	61
6/30/2016	297,715,372	2,747,575,831	1,095,769,765	3,798,555,275	100	100	69
6/30/2017	314,707,102	2,789,167,599	1,098,758,441	3,968,497,692	100	100	79
6/30/2018	327,611,097	2,900,824,622	1,105,861,079	4,149,435,330	100	100	83
6/30/2019	333,645,308	2,927,345,196	1,059,170,568	4,261,996,413	100	100	95

SCHEDULE OF RETIREES AND SURVIVORS
During Years Ended June 30

	New Retirees and Disableds	Survivors	Total
July 1, 2010	5,211	380	5,591
New retirements & disabilities	282	0	282
Deaths with beneficiaries	(20)	20	0
Deaths/benefits ended	(154)	(7)	(161)
July 1, 2012	5,386	438	5,824
New retirements & disabilities	269	0	269
Deaths with beneficiaries	(38)	38	0
Deaths/benefits ended	(104)	(28)	(132)
July 1, 2013	5,513	448	5,961
New retirements & disabilities	400	0	400
Deaths with beneficiaries	(23)	23	0
Deaths/benefits ended	(100)	(19)	(119)
July 1, 2014	5,790	452	6,242
New retirements & disabilities	264	0	264
Deaths with beneficiaries	(24)	24	0
Deaths/benefits ended	(98)	(28)	(126)
July 1, 2015	5,932	448	6,380
New retirements & disabilities	203	0	203
Deaths with beneficiaries	(20)	20	0
Deaths/benefits ended	(107)	(23)	(130)
July 1, 2016	6,008	445	6,453
New retirements & disabilities	207	0	207
Deaths with beneficiaries	(30)	30	0
Deaths/benefits ended	(122)	(22)	(144)
July 1, 2017	6,063	453	6,516
New retirements & disabilities	271	0	271
Deaths with beneficiaries	(40)	40	0
Deaths/benefits ended	(144)	(28)	(172)
July 1, 2018	6,150	465	6,615
New retirements & disabilities	270	0	270
Deaths with beneficiaries	(35)	35	0
Deaths/benefits ended	(125)	(29)	(154)
July 1, 2019	6,260	471	6,731

SCHEDULE OF ANNUAL ALLOWANCE
During Years Ended June 30

	New Retirees and Disableds	Survivors	Total
July 1, 2010	\$ 176,263,008	\$ 6,035,373	\$ 182,298,381
Average Annual Allowance	33,825	15,883	32,606
Annual Allowance Added	14,287,432	580,328	14,867,760
Annual Allowance Removed	(868,937)	(103,095)	(972,032)
July 1, 2011	\$ 189,681,503	\$ 6,512,606	\$ 196,194,109
Average Annual Allowance	35,661	16,572	34,348
Annual Allowance Added	8,947,253	1,102,270	10,049,523
Annual Allowance Removed	(2,498,388)	(34,529)	(2,532,917)
July 1, 2012	\$ 196,130,368	\$ 7,580,347	\$ 203,710,715
Average Annual Allowance	36,415	17,307	34,978
Annual Allowance Added	11,709,284	867,622	12,576,906
Annual Allowance Removed	(5,027,794)	(572,950)	(5,600,744)
July 1, 2013	\$ 202,811,858	\$ 7,875,019	\$ 210,686,877
Average Annual Allowance	36,788	17,578	35,344
Annual Allowance Added	21,907,364	699,388	22,606,753
Annual Allowance Removed	(3,506,950)	(217,824)	(3,724,774)
July 1, 2014	\$ 221,212,272	\$ 8,356,583	\$ 229,568,856
Average Annual Allowance	38,206	18,488	36,778
Annual Allowance Added	8,938,666	612,732	9,551,398
Annual Allowance Removed	(3,140,736)	(366,643)	(3,507,379)
July 1, 2015	\$ 227,010,202	\$ 8,602,673	\$ 235,612,875
Average Annual Allowance	38,269	19,202	36,930
Annual Allowance Added	8,783,325	490,043	9,273,368
Annual Allowance Removed	(3,486,640)	(535,806)	(4,022,446)
July 1, 2016	\$ 232,306,887	\$ 8,556,910	\$ 240,863,796
Average Annual Allowance	38,666	19,229	37,326
Annual Allowance Added	8,587,719	633,990	9,221,709
Annual Allowance Removed	(4,617,442)	(329,036)	(4,946,478)
July 1, 2017	\$ 236,277,164	\$ 8,861,864	\$ 245,139,028
Average Annual Allowance	38,970	19,563	37,621
Annual Allowance Added	13,309,491	1,046,785	14,356,276
Annual Allowance Removed	(3,360,205)	(595,678)	(3,955,883)
July 1, 2018	\$ 246,226,450	\$ 9,312,972	\$ 255,539,422
Average Annual Allowance	40,037	20,028	38,630
Annual Allowance Added	15,362,545	843,157	16,205,702
Annual Allowance Removed	(5,059,721)	(505,871)	(5,565,591)
July 1, 2019	\$ 256,529,274	\$ 9,650,259	\$ 266,179,533
Average Annual Allowance	40,979	20,489	39,545

Schedule of Active Member Valuation Data

<u>Valuation Date</u>	<u>Number</u>	<u>Annual Payroll</u>	<u>Annual Average Pay</u>	<u>% Increase in Average Pay</u>
July 1, 2010	5,786	\$ 431,226,155	\$ 74,529	-0.66 %
July 1, 2011	5,515	405,336,529	73,497	-1.38
July 1, 2012	5,554	398,460,248	71,743	-2.39
July 1, 2013	5,606	395,988,026	70,636	-1.54
July 1, 2014	5,535	402,899,096	72,791	3.05
July 1, 2015	5,541	418,728,584	75,569	3.82
July 1, 2016	5,513	427,622,475	77,566	2.64
July 1, 2017	5,738	444,274,516	77,427	-0.18
July 1, 2018	6,004	467,974,450	77,944	0.67
July 1, 2019	6,003	476,619,112	79,397	1.86



STATISTICAL SECTION

Employee Retirement Plans

STATISTICAL SECTION

The Statistical Section presents detailed information in the areas shown below, as a context for understanding what the information in the Financial Section says about the overall financial health of the Employee Retirement Plans:

The schedules beginning on page 82 are designed to show financial trend information to assist users in understanding and assessing how the Employee Retirement Plans' financial position has changed over the past ten years. The financial trend schedules presented are:

- Changes in Fiduciary Net Position – Information to help the reader understand the Plans' historical contributions, earnings, and expenses.
- Benefit, Refund and Distribution Deductions from Fiduciary Net Position – Information to help the reader understand the historical benefits, refund, and distribution deductions.

The schedules beginning on page 88 display demographic, economic, and operating information. The demographic and economic information is intended to assist users in understanding the environment in which the Employee Retirement Plans operate. The operating information is intended to provide contextual information about the Employee Retirement Plans' operations to assist readers in using financial statement information. The demographic and economic information and the operating information presented include:

- Principal Participating Employers
- Retired Members by Benefit Type
- Average Benefit Amounts
- Retired Members by Type of Retirement
- Average Benefit Payments and Average Final Valuation Pay
- Schedule of Participating Agencies and Political Subdivisions

EMPLOYEES' RETIREMENT SYSTEM
SCHEDULE OF CHANGE IN FIDUCIARY NET POSITION
JUNE 30, 2019
LAST TEN FISCAL YEARS
(dollars in thousands)

	2010	2011	2012	2013	2014
Additions					
Member contributions	\$ 20,431	\$ 18,592	\$ 22,833	\$ 24,854	\$ 26,463
Employer contributions	113,958	109,344	107,855	127,888	144,710
Transfer of member account asset balances	31,530	-	-	-	-
Investment income (loss) (net of expenses)	<u>304,185</u>	<u>510,018</u>	<u>117,692</u>	<u>307,859</u>	<u>534,397</u>
Total additions	<u>470,104</u>	<u>637,954</u>	<u>248,380</u>	<u>460,601</u>	<u>705,570</u>
Deductions					
Benefit payments	169,089	178,792	202,773	208,804	229,664
Refunds	1,415	1,568	2,495	1,925	4,330
Administrative expenses	<u>2,907</u>	<u>3,079</u>	<u>3,546</u>	<u>2,401</u>	<u>2,954</u>
Total deductions	<u>173,411</u>	<u>183,439</u>	<u>208,814</u>	<u>213,130</u>	<u>236,948</u>
Change in net position	<u>\$ 296,693</u>	<u>\$ 454,515</u>	<u>\$ 39,566</u>	<u>\$ 247,471</u>	<u>\$ 468,622</u>

EMPLOYEES' RETIREMENT SYSTEM
SCHEDULE OF BENEFIT AND REFUND DEDUCTIONS FROM FIDUCIARY NET POSITION BY TYPE
JUNE 30, 2019
LAST TEN FISCAL YEARS
(dollars in thousands)

	2010	2011	2012	2013	2014
Type of Benefit					
Service benefits:					
Retirees	\$ 122,861	\$ 129,941	\$ 150,413	\$ 153,566	\$ 172,472
Survivors	7,620	7,944	8,233	8,602	8,586
Disability	<u>38,608</u>	<u>40,907</u>	<u>44,127</u>	<u>46,636</u>	<u>48,606</u>
Total benefits	<u>\$ 169,089</u>	<u>\$ 178,792</u>	<u>\$ 202,773</u>	<u>\$ 208,804</u>	<u>\$ 229,664</u>
Refund of Contributions	\$ 1,415	\$ 1,568	\$ 2,495	\$ 1,925	\$ 4,330

2015	2016	2017	2018	2019
\$ 26,627	\$ 27,056	\$ 27,940	\$ 28,965	\$ 29,629
151,302	134,806	95,399	93,163	86,584
-	-	-	-	-
<u>67,071</u>	<u>57,676</u>	<u>413,347</u>	<u>340,085</u>	<u>317,891</u>
<u>245,000</u>	<u>219,538</u>	<u>536,686</u>	<u>462,213</u>	<u>434,104</u>
230,647	230,696	235,124	238,916	256,951
2,874	5,887	6,473	4,624	6,760
2,685	3,014	3,186	2,871	3,064
<u>236,206</u>	<u>239,597</u>	<u>244,783</u>	<u>246,411</u>	<u>266,775</u>
<u>\$ 8,794</u>	<u>\$ (20,059)</u>	<u>\$ 291,903</u>	<u>\$ 215,802</u>	<u>\$ 167,329</u>

2015	2016	2017	2018	2019
\$ 171,785	\$ 171,391	\$ 175,049	\$ 178,268	\$ 193,422
8,982	9,017	9,334	9,784	10,291
49,880	50,288	50,741	50,864	53,238
<u>\$ 230,647</u>	<u>\$ 230,696</u>	<u>\$ 235,124</u>	<u>\$ 238,916</u>	<u>\$ 256,951</u>
\$ 2,874	\$ 5,887	\$ 6,473	\$ 4,624	\$ 6,760

RETIREMENT SAVINGS PLAN
SCHEDULE OF CHANGE IN FIDUCIARY NET POSITION
JUNE 30, 2019
LAST TEN FISCAL YEARS
(dollars in thousands)

	2010	2011	2012	2013	2014
Additions					
Member contributions	\$ 8,871	\$ 8,686	\$ 8,435	\$ 8,274	\$ 8,695
Employer contributions	16,401	16,072	11,792	15,629	17,117
Transfer of member account asset balances	(31,530)	-	-	-	-
Investment income (loss) (net of expenses)	<u>14,191</u>	<u>32,877</u>	<u>143</u>	<u>23,716</u>	<u>42,432</u>
Total additions	<u>7,933</u>	<u>57,635</u>	<u>20,370</u>	<u>47,619</u>	<u>68,244</u>
Deductions					
Distributions	3,902	5,854	6,950	9,389	11,682
Administrative expenses	<u>237</u>	<u>244</u>	<u>305</u>	<u>201</u>	<u>197</u>
Total deductions	<u>4,139</u>	<u>6,098</u>	<u>7,255</u>	<u>9,590</u>	<u>11,879</u>
Change in net position	<u>\$ 3,794</u>	<u>\$ 51,537</u>	<u>\$ 13,115</u>	<u>\$ 38,029</u>	<u>\$ 56,365</u>

RETIREMENT SAVINGS PLAN
SCHEDULE OF DISTRIBUTION DEDUCTIONS FROM FIDUCIARY NET POSITION
JUNE 30, 2019
LAST TEN FISCAL YEARS
(dollars in thousands)

	2010	2011	2012	2013	2014
Distributions	\$ 3,902	\$ 5,854	\$ 6,950	\$ 9,389	\$ 11,682

2015	2016	2017	2018	2019
\$ 9,728	\$ 10,714	\$ 10,303	\$ 10,801	\$ 12,023
18,502	19,682	19,782	20,348	20,511
-	-	-	-	-
<u>7,493</u>	<u>500</u>	<u>43,598</u>	<u>36,561</u>	<u>27,124</u>
<u>35,723</u>	<u>30,896</u>	<u>73,683</u>	<u>67,710</u>	<u>59,658</u>
12,694	10,055	15,220	15,387	16,066
235	181	267	329	325
<u>12,929</u>	<u>10,236</u>	<u>15,487</u>	<u>15,716</u>	<u>16,391</u>
<u>\$ 22,794</u>	<u>\$ 20,660</u>	<u>\$ 58,196</u>	<u>\$ 51,994</u>	<u>\$ 43,267</u>

2015	2016	2017	2018	2019
\$ 12,694	\$ 10,055	\$ 15,220	\$ 15,387	\$ 16,066

DEFERRED COMPENSATION PLAN
SCHEDULE OF CHANGE IN FIDUCIARY NET POSITION
JUNE 30, 2019
LAST TEN FISCAL YEARS
(dollars in thousands)

	2010	2011	2012	2013	2014
Additions					
Member contributions	\$ 17,029	\$ 17,029	\$ 14,974	\$ 18,229	\$ 17,011
Investment income (loss) (net of expenses)	<u>19,411</u>	<u>42,988</u>	<u>286</u>	<u>34,096</u>	<u>48,864</u>
Total additions	<u>36,440</u>	<u>60,017</u>	<u>15,260</u>	<u>52,325</u>	<u>65,875</u>
Deductions					
Distributions	8,723	16,178	17,688	19,847	25,506
Administrative expenses	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Total deductions	<u>8,723</u>	<u>16,178</u>	<u>17,688</u>	<u>19,847</u>	<u>25,506</u>
Change in net position	<u>\$ 27,717</u>	<u>\$ 43,839</u>	<u>\$ (2,428)</u>	<u>\$ 32,478</u>	<u>\$ 40,369</u>

DEFERRED COMPENSATION PLAN
SCHEDULE OF DISTRIBUTION DEDUCTIONS FROM FIDUCIARY NET POSITION
JUNE 30, 2019
LAST TEN FISCAL YEARS
(dollars in thousands)

	2010	2011	2012	2013	2014
Distributions	\$ 8,723	\$ 16,178	\$ 17,688	\$ 19,847	\$ 25,506

2015	2016	2017	2018	2019
\$ 19,229	\$ 18,761	\$ 19,511	\$ 20,574	\$ 23,244
<u>15,259</u>	<u>(63)</u>	<u>47,590</u>	<u>43,154</u>	<u>25,775</u>
<u>34,488</u>	<u>18,698</u>	<u>67,101</u>	<u>63,728</u>	<u>49,019</u>
26,123	22,374	25,666	22,719	36,857
<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
<u>26,123</u>	<u>22,374</u>	<u>25,666</u>	<u>22,719</u>	<u>36,857</u>
<u>\$ 8,365</u>	<u>\$ (3,676)</u>	<u>\$ 41,435</u>	<u>\$ 41,009</u>	<u>\$ 12,162</u>

2015	2016	2017	2018	2019
\$ 26,123	\$ 22,374	\$ 25,666	\$ 22,719	\$ 36,857

EMPLOYEES' RETIREMENT SYSTEM
 PRINCIPAL PARTICIPATING EMPLOYERS
 CURRENT FISCAL YEAR AND NINE YEARS AGO
 JUNE 30, 2019

<u>Participating Government</u>	<u>2019</u>		<u>2010</u>	
	<u>Covered Employees</u>	<u>Percentage of Total System</u>	<u>Covered Employees</u>	<u>Percentage of Total System</u>
Montgomery County	5,845	97.2%	5,554	95.8%
Town of Chevy Chase	1	0.1%	6	0.1%
Strathmore Hall	11	0.2%	11	0.2%
Housing Opportunities Commission	139	2.3%	189	3.3%
Revenue Authority	6	0.1%	13	0.2%
Washington Suburban Transit Commission	0	0.0%	1	0.1%
SkyPoint Federal Credit Union	1	0.1%	8	0.1%
State Department of Assessment and Taxation	0	0.0%	3	0.1%
District Court	0	0.0%	1	0.1%
Total	<u>6,003</u>	<u>100.0%</u>	<u>5,786</u>	<u>100.0%</u>

EMPLOYEES' RETIREMENT SYSTEM
 SCHEDULE OF RETIRED MEMBERS BY BENEFIT TYPE
 JUNE 30, 2019

<u>Fiscal Year</u>	<u>Retiree</u>	<u>Disability</u>	<u>Survivor</u>	<u>Total</u>
2010	4,132	1,079	380	5,591
2011	4,245	1,074	393	5,712
2012	4,309	1,077	438	5,824
2013	4,412	1,101	448	5,961
2014	4,669	1,121	452	6,242
2015	4,807	1,125	448	6,380
2016	4,882	1,126	445	6,453
2017	4,947	1,116	453	6,516
2018	5,031	1,119	465	6,615
2019	5,128	1,132	471	6,731

EMPLOYEES' RETIREMENT SYSTEM
SCHEDULE OF AVERAGE BENEFIT AMOUNTS
JUNE 30, 2019

Fiscal Year	Retiree	Disability	Survivor	Total
2010	\$ 29,734	\$ 35,781	\$ 20,052	\$ 30,243
2011	30,610	38,088	20,214	31,301
2012	34,907	40,972	18,797	34,817
2013	34,807	42,357	19,201	35,028
2014	36,940	43,360	18,995	36,793
2015	35,736	44,337	20,049	36,152
2016	35,107	44,660	20,263	35,750
2017	35,385	45,467	20,605	36,084
2018	35,434	45,455	21,040	36,117
2019	37,719	47,030	21,850	38,174

EMPLOYEES' RETIREMENT SYSTEM
SCHEDULE OF RETIRED MEMBERS BY TYPE OF RETIREMENT
JUNE 30, 2019

Amount of Monthly Benefit	Number of Retired Members	Type of Retirement ^a			Option Selected ^b						
		1	2	3	1	2	3	4	5	6	7
Deferred	543										
\$ 1 – \$ 500	459	397	56	6	239	116	6	5	38	18	37
501 – 1,000	539	406	111	22	235	128	22	18	42	28	66
1,001 – 1,500	628	479	97	52	258	151	19	18	51	46	85
1,501 – 2,000	595	445	67	83	228	129	22	35	22	57	102
2,001 – 2,500	598	448	48	102	242	140	17	27	22	53	97
2,501 – 3,000	548	418	22	108	204	117	7	24	21	56	119
3,001 – 3,500	504	361	23	120	184	114	5	20	27	68	86
3,501 – 4,000	492	342	16	134	163	121	6	22	18	69	93
Over 4000	2,368	1,832	31	505	1,022	474	7	118	71	367	309
Total	7,274	5,128	471	1,132	2,775	1,490	111	287	312	762	994

Benefit amounts include total benefit amount for insured retirees (including the benefit amount that is paid by Aetna).
Counts include DRSP and DROP members.

Notes:

^a Type of retirement:

- 1—Retiree
- 2—Beneficiary
- 3—Disabled Retiree

^b Option selected:

- Option 1—Modified Cash Refund
- Option 2—Certain and Continuous
- Option 3—Life Annuity
- Option 4—Joint and Survivor 50%
- Option 5—Joint and Survivor 100%
- Option 6—Other Joint and Survivor Percentage
- Option 7—Social Security Adjustment Options

EMPLOYEES' RETIREMENT SYSTEM
SCHEDULE OF AVERAGE BENEFIT PAYMENTS AND AVERAGE FINAL VALUATION PAY
LAST TEN FISCAL YEARS

Retirement Effective Dates	Years Credited Service						
	<u>0-5</u>	<u>5-10</u>	<u>10-15</u>	<u>15-20</u>	<u>20-25</u>	<u>25-30</u>	<u>30+</u>
Period 7/1/2009 to 6/30/2010							
Average monthly benefit*	\$ -	\$ 3,212	\$ 2,747	\$ 2,815	\$ 3,548	\$ 4,008	\$ 5,289
Average final valuation pay**	\$ -	\$ 63,839	\$ 82,064	\$ 83,152	\$ 85,524	\$ 83,495	\$ 86,947
Number of retired members***	-	6	6	43	49	39	68
Period 7/1/2010 to 6/30/2011							
Average monthly benefit*	\$ 1,965	\$ 3,412	\$ 2,674	\$ 3,091	\$ 3,303	\$ 4,136	\$ 5,079
Average final valuation pay**	\$ 46,807	\$ 65,268	\$ 65,263	\$ 85,031	\$ 82,627	\$ 88,067	\$ 84,544
Number of retired members***	1	4	5	37	80	50	57
Period 7/1/2011 to 6/30/2012							
Average monthly benefit*	\$ -	\$ -	\$ 1,738	\$ 1,840	\$ 3,020	\$ 5,064	\$ 5,546
Average final valuation pay**	\$ -	\$ -	\$ 56,551	\$ 61,633	\$ 80,696	\$ 98,400	\$ 90,742
Number of retired members***	-	-	3	14	30	34	57
Period 7/1/2012 to 6/30/2013							
Average monthly benefit*	\$ -	\$ 331	\$ 1,595	\$ 2,147	\$ 3,063	\$ 4,641	\$ 5,845
Average final valuation pay**	\$ -	\$ 50,497	\$ 56,936	\$ 72,901	\$ 76,904	\$ 90,509	\$ 94,904
Number of retired members***	-	1	5	17	46	38	69
Period 7/1/2013 to 6/30/2014							
Average monthly benefit*	\$ -	\$ -	\$ -	\$ 2,636	\$ 2,941	\$ 4,552	\$ 5,790
Average final valuation pay**	\$ -	\$ -	\$ -	\$ 71,521	\$ 75,097	\$ 90,425	\$ 92,772
Number of retired members***	-	-	-	17	53	98	71
Period 7/1/2014 to 6/30/2015							
Average monthly benefit*	\$ -	\$ -	\$ 2,231	\$ 1,654	\$ 3,273	\$ 4,388	\$ 5,062
Average final valuation pay**	\$ -	\$ -	\$ 72,858	\$ 62,439	\$ 82,958	\$ 90,297	\$ 91,982
Number of retired members***	-	-	1	11	49	74	57
Period 7/1/2015 to 6/30/2016							
Average monthly benefit*	\$ -	\$ -	\$ 1,697	\$ 2,309	\$ 3,054	\$ 4,510	\$ 5,274
Average final valuation pay**	\$ -	\$ -	\$ 65,941	\$ 74,376	\$ 84,079	\$ 94,265	\$ 99,878
Number of retired members***	-	-	6	5	32	63	37
Period 7/1/2016 to 6/30/2017							
Average monthly benefit*	\$ -	\$ -	\$ 1,953	\$ 2,427	\$ 3,325	\$ 4,362	\$ 4,991
Average final valuation pay**	\$ -	\$ -	\$ 76,592	\$ 74,271	\$ 85,297	\$ 96,041	\$ 90,799
Number of retired members***	-	-	12	5	27	60	39
Period 7/1/2017 to 6/30/2018							
Average monthly benefit*	\$ -	\$ -	\$ 2,149	\$ 3,074	\$ 3,218	\$ 4,736	\$ 5,781
Average final valuation pay**	\$ -	\$ -	\$ 101,266	\$ 90,712	\$ 81,372	\$ 100,236	\$ 104,711
Number of retired members***	-	-	5	7	31	76	48
Period 7/1/2018 to 6/30/2019							
Average monthly benefit*	\$ -	\$ -	\$ 2,062	\$ 3,105	\$ 3,639	\$ 4,561	\$ 5,727
Average final valuation pay**	\$ -	\$ -	\$ 77,242	\$ 93,928	\$ 88,698	\$ 96,500	\$ 108,661
Number of retired members***	-	-	4	9	22	69	75

* Based on current benefits only, and does not take into account any future benefits. Includes total benefit amount for insured retirees (including the benefit amount that is paid by Aetna).

** Pay used for last valuation (when member was an active employee).

*** Only includes participants who went from active to retiree status. Excludes disability retirees.

Beginning with periods after 7/1/2011, counts include members that were in DRSP or DROP in the previous valuation and were retirees in the current valuation.

**SCHEDULE OF PARTICIPATING AGENCIES
AND POLITICAL SUBDIVISIONS
EMPLOYEES' RETIREMENT SYSTEM
RETIREMENT SAVINGS PLAN**

Town of Chevy Chase
Strathmore Hall Foundation, Inc.
Housing Opportunities Commission of Montgomery County
Montgomery County Revenue Authority
Washington Suburban Transit Commission
SkyPoint Federal Credit Union

Certain employees of the:
State Department of Assessments and Taxation
District Court of Maryland