

DISTRICT OF COLUMBIA OFFICE OF THE INSPECTOR GENERAL

OIG Project No. 17-1-12MA

February 2017



DISTRICT OF COLUMBIA RETIREMENT BOARD:

**FINANCIAL STATEMENTS AND MANAGEMENT'S DISCUSSION AND
ANALYSIS (WITH REPORT OF INDEPENDENT PUBLIC ACCOUNTANTS)
FOR FISCAL YEARS ENDED SEPTEMBER 30, 2016 AND 2015**



Guiding Principles

*Workforce Engagement * Stakeholders Engagement * Process-oriented * Innovation
* Accountability * Professionalism * Objectivity and Independence * Communication * Collaboration
* Diversity * Measurement * Continuous Improvement*

Mission

Our mission is to independently audit, inspect, and investigate matters pertaining to the District of Columbia government in order to:

- prevent and detect corruption, mismanagement, waste, fraud, and abuse;
- promote economy, efficiency, effectiveness, and accountability;
- inform stakeholders about issues relating to District programs and operations; and
- recommend and track the implementation of corrective actions.

Vision

Our vision is to be a world class Office of the Inspector General that is customer-focused, and sets the standard for oversight excellence!

Core Values

Excellence * Integrity * Respect * Creativity * Ownership
* Transparency * Empowerment * Courage * Passion
* Leadership



GOVERNMENT OF THE DISTRICT OF COLUMBIA
Office of the Inspector General

Inspector General



February 13, 2017

The Honorable Muriel Bowser
Mayor of the District of Columbia
Mayor's Correspondence Unit
1350 Pennsylvania Avenue, N.W., Suite 316
Washington, D.C. 20004

The Honorable Phil Mendelson
Chairman
Council of the District of Columbia
John A. Wilson Building
1350 Pennsylvania Avenue, N.W., Suite 504
Washington, D.C. 20004

Dear Mayor Bowser and Chairman Mendelson:

Enclosed is the final report entitled *District of Columbia Teachers' and Police Officers and Firefighters Retirement Fund Financial Statements for the Fiscal Years Ended September 30, 2016, and 2015* (OIG No. 17-1-12MA). CliftonLarsonAllen LLP (CliftonLarsenAllen) conducted this audit; SB & Company, LLC submitted this component report as part of our overall contract for the audit of the District of Columbia's general purpose financial statements for fiscal year (FY) 2016.

On February 3, 2017, CliftonLarsonAllen issued its opinion on the financial statements and concluded that the financial statements present fairly in all material respects, in conformity with accounting principles generally accepted in the United States of America. CliftonLarsonAllen identified no significant deficiencies or material weaknesses in internal control over financial reporting.

If you have any questions concerning this report, please contact me or Toayoa D. Aldridge, Assistant Inspector General for Audits, at (202) 727-2540.

Sincerely,

A handwritten signature in blue ink, appearing to read "D. Lucas", is written over the typed name.

Daniel W. Lucas
Inspector General

DWL/fg

Enclosure

cc: See Distribution List

Mayor Bowser and Chairman Mendelson
District of Columbia Teachers' Retirement Fund and
the District of Columbia Police Officers and
Firefighters' Retirement Fund, Pension Trust
Funds of the Government of the District of
Columbia Financial Statements for FYs 2016
and 2015 (with Report of Independent Public
Accountants Therein)

OIG No. 17-1-12MA

February 13, 2017

Page 2 of 2

DISTRIBUTION:

The Honorable Jack Evans, Chairperson, Committee on Finance and Revenue, Council of the District
of Columbia (via email)

Mr. Rashad M. Young, City Administrator, Attention: Mr. Barry Kreiswirth (via email)

Mr. John Falcicchio, Chief of Staff, Office of the Mayor (via email)

Mr. Kevin Harris, Director, Office of Communications, (via email)

Mr. Matthew Brown, Director, Mayor's Office of Budget and Finance (via email)

Ms. Nyasha Smith, Secretary to the Council, Council of the District of Columbia (via email)

Mr. Jeffrey DeWitt, Chief Financial Officer, Office of the Chief Financial Officer (via email)

Mr. Timothy Barry, Executive Director, Office of Integrity and Oversight, Office of the Chief Financial
Officer (via email)

The Honorable Kathleen Patterson, D.C. Auditor, Office of the D.C. Auditor, Attention: Candace McCrae
(via email)

Mr. Jed Ross, Director and Chief Risk Officer, Office of Risk Management (via email)

Mr. Graylin (Gray) Smith, Partner, SB & Company, LLC (via email)

District of Columbia Teachers' and Police Officers and Firefighters' Retirement Fund

Financial Statements and Schedules
(with Independent Auditors' Report thereon)

As of and for the Years Ended September 30, 2016 and 2015



TABLE OF CONTENTS

	PAGE
INDEPENDENT AUDITORS' REPORT	1
MANAGEMENT'S DISCUSSION AND ANALYSIS	3
FINANCIAL STATEMENTS	
Combining Statements of Fiduciary Net Position	11
Combining Statements of Changes in Fiduciary Net Position.....	12
Notes to the Basic Financial Statements.....	13
REQUIRED SUPPLEMENTARY INFORMATION	
Schedules of Changes in the Net Pension Liability and Related Ratios.....	40
Schedules of Employer Contributions	42
Schedule of Investment Returns	44
SUPPLEMENTARY INFORMATION	
Schedules of Administrative Expenses.....	45
Schedules of Investment Expenses	46
Schedules of Payments to Consultants	47



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INDEPENDENT AUDITORS' REPORT

Board of Trustees
District of Columbia Teachers' Retirement Fund and
District of Columbia Police Officers and Firefighters' Retirement Fund

Report on Financial Statements

We have audited the accompanying combining statements of fiduciary net position of the District of Columbia Teachers' Retirement Fund and the District of Columbia Police Officers and Firefighters' Retirement Fund, Pension Trust Funds of the Government of the District of Columbia (the District), as of September 30, 2016 and 2015, and the related combining statements of changes in fiduciary net position for the years 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 audits. We conducted our audits 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 of material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

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

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the District of Columbia Teachers' Retirement Fund and the District of Columbia Police Officers and Firefighters' Retirement Fund as of September 30, 2016 and 2015, and the respective changes in their financial position for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matter

As discussed in Note 1, these financial statements only present the District of Columbia Teachers' Retirement Fund and the District of Columbia Police Officers and Firefighters' Retirement Fund and do not purport to, and do not, present the financial position of the Government of the District of Columbia as of September 30, 2016 and

Board of Trustees
District of Columbia Teachers' Retirement Fund and
District of Columbia Police Officers and Firefighters' Retirement Fund

2015, and the changes in its financial position for the years then ended in conformity 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 net pension liability and related ratios, employer contributions and investment returns, 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 and 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 audits 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 audits were conducted for the purpose of forming an opinion on the District of Columbia Teachers' Retirement Fund and the District of Columbia Police Officers and Firefighters' Retirement Fund financial statements. The supplementary information, including the schedules of administrative expenses, investment expenses, and payments to consultants, as listed in the table of contents, is presented for purposes of additional analysis and is not a required part of the financial statements.

The supplementary information, as listed in the table of contents, 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 audits 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, including the schedules of administrative expenses, investment expenses, and payments to consultants, as listed in the table of contents, is fairly stated, in all material respects, in relation to the financial statements as a whole.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated January 3, 2017 on our consideration of the District of Columbia Teachers' Retirement Fund and the District of Columbia Police Officers and Firefighters' Retirement Fund's internal control over financial reporting and on our tests of their compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is 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 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 District of Columbia Teachers' Retirement Fund and the District of Columbia Police Officers and Firefighters' Retirement Fund's internal control over financial reporting and compliance.



CliftonLarsonAllen LLP

Baltimore, Maryland
January 3, 2017

MANAGEMENT'S DISCUSSION AND ANALYSIS

INTRODUCTION

This discussion and analysis provides an overview of the financial activities of the District of Columbia Teachers' Retirement Fund (TRF) and Police Officers and Firefighters' Retirement Fund (POFRF), for the years ended September 30, 2016, 2015 and 2014, which collectively will be referred to as the "District Retirement Funds" or the "Fund." This discussion and analysis should be read in conjunction with the financial statements, the notes to the financial statements, the required supplementary information and the supplementary information provided in this report.

The District of Columbia Retirement Board (the Board or DCRB) is an independent agency of the District of Columbia (the District or D.C.) government. The Board is responsible for managing the assets of the District Retirement Funds. As authorized by D.C. Code, the Board pools the assets of the TRF and the POFRF into a single investment portfolio. The Board allocates the investment returns and expenses, and the administrative expenses of the Board, between the two District Retirement Funds in proportion to their respective net position. The Board maintains financial records of contributions, purchases of service, benefit payments, refunds, investment earnings, investment expenses and administrative expenses.

Effective October 1, 2005, the Board entered into a Memorandum of Understanding (MOU) with the District of Columbia and the United States Department of the Treasury (the U.S. Treasury) to administer the pension benefits under the TRF and the POFRF for all retirees, survivors and beneficiaries that are the financial responsibility of the District of Columbia (service earned on and after July 1, 1997) and the Federal Government (service through June 30, 1997). In addition to the Board's administrative duties, the U.S. Treasury also provides certain administrative services related to the administration of pension benefits under the District of Columbia Teachers' Retirement Plan and the District of Columbia Police Officers and Firefighters' Retirement Plan (the Plans). The administrative costs incurred while administering the pension benefits are shared by DCRB and the U.S. Treasury in accordance with an MOU that is agreed to annually between the two parties.

OVERVIEW OF THE FINANCIAL STATEMENTS AND SCHEDULES

The following discussion and analysis are intended to serve as an introduction to DCRB's financial statements. The basic financial statements include:

The Combining Statements of Fiduciary Net Position are a point-in-time snapshot of plan fund balances at fiscal year end. It reports the assets available to pay future benefits to retirees, and any liabilities that are owed as of the statement date. The resulting Net Position (Assets – Liabilities = Net Position) represents the value of assets restricted for pensions net of liabilities owed as of the financial statement date.

The Combining Statements of Changes in Fiduciary Net Position display the effect of financial transactions that occurred during the fiscal year, where Additions – Deductions = Change in Net Position. This increase (or decrease) in Net Position reflects the change in the value of Net Position Restricted for Pensions.

MANAGEMENT'S DISCUSSION AND ANALYSIS

The Notes to Financial Statements contain disclosures and discussions which support the data presented in the financial statements. The notes present information about the creation and administration of the Fund, significant accounting policies, and investments. The notes are an integral part of the financial statements and should be considered in conjunction with any review of the financial statements.

The Required Supplementary Information The required supplementary information consists of schedules of changes of employers' net pension liability and related ratios, employer contributions, and the money-weighted rate of investment returns.

The Supplementary Information includes additional information on the District Retirement Funds including schedules of administrative expenses, investment expenses and payments to consultants. These schedules include more detailed information pertaining to the Plans.

ANALYSIS OF FINANCIAL INFORMATION

DCRB's funding objective is to meet long-term benefit obligations with net investment income and employer and member contributions. The discussion below provides an analysis of the current year's financial activities in relation to the current member population and relevant economic conditions for the combined Funds.

Additions to Net Position (Revenues)

Additions to net position are comprised of employer contributions, employee contributions, net investment income, and other income. These additions for fiscal year 2016 totaled \$818.2 million, an increase of \$868.5 million over the fiscal year 2015 amount of \$(50.3) million. This increase was primarily due to the higher investment returns in fiscal year 2016.

Employer contributions in fiscal year 2016 totaled \$180.6 million, an increase of \$37.7 million over the fiscal year 2015 amount of \$142.9 million. The fiscal year 2016 employer contribution was derived from the contribution rate calculated in the actuary's report for the period ended October 1, 2014 multiplied by covered payroll and adjusted for timing differences caused by the contribution being calculated 2 years in arrears. This adjustment is required by the D.C. Code.

Employee contributions in fiscal year 2016 totaled \$66.4 million, an increase of \$1.1 million over the fiscal year 2015 amount of \$65.3 million. Employee contributions consist of amounts paid by members for future retirement benefits.

Investment income, net of investment fees, for fiscal year 2016 totaled \$567.4 million, a return of 9.3%. Net investment income for fiscal year 2015 totaled \$(259.9) million, a return of (4.1%). Other income in fiscal year 2016 totaled \$3.8 million, an increase of \$2.4 million over the fiscal year 2015 amount of \$1.4 million. Other income consists mainly of reimbursements of administrative expenses from the U.S. Treasury.

MANAGEMENT'S DISCUSSION AND ANALYSIS

Deductions from Net Position (Expenses)

The statutory mandate of DCRB is to provide retirement, survivor and disability benefits to qualified members and their survivors. The costs of such programs include recurring benefit payments, elective refunds of contributions to employees who terminate employment, and the cost of administering the District Retirement Funds.

Deductions from net position are comprised of benefit payments, retirement benefits payable to the U.S. Treasury, refunds and administrative expenses. These deductions for fiscal year 2016 totaled \$174.3 million, an increase of \$23.1 million or 15.3% over the fiscal year 2015 amount of \$151.2 million.

Benefit payments for fiscal year 2016 totaled \$147.6 million, an increase of \$19.9 million or 15.5% over the fiscal year 2015 amount of \$127.7 million. This increase reflects the combination of a net growth of 8.8% in the number of retirees and survivors receiving benefits, coupled with COLA adjustments and an overall increase in the final average salary for new retirees. In fiscal years 2016 and 2015, benefit payments made on behalf of current retirees, survivors and beneficiaries comprised approximately 85% of DCRB expenses.

Refunds in fiscal year 2016 totaled \$8.4 million, an increase of \$1.4 million or 20.3% over the fiscal year 2015 amount of \$7.0 million. Refunds of member accounts are at the discretion of the member, and vary from year to year.

Administrative expenses in fiscal year 2016 totaled \$17.7 million, an increase of \$1.2 million or 7.2% over the fiscal year 2015 amount of \$16.5 million. In fiscal years 2016 and 2015, the administrative expenses were equivalent to 26 and 27 basis points of the assets under management, respectively.

Funding Status

As of October 1, 2016 (the date of the most recent actuarial valuation), the funding status was 104.6% for the combined District Retirement Funds. DCRB is a well-funded yet immature system as a result of the 1999 asset split with the U.S. Treasury in which the U.S. Treasury assumed responsibility for all benefit obligations prior to July 1, 1997. As with all immature systems, a higher percentage of benefits are funded by current contributions. As the system matures, investment income will provide a greater percentage of the funds necessary to pay retirement benefits. Therefore, the long-term rate of investment return is critical to DCRB's long-term funding status.

At October 1, 2016, the actuarial value of assets set aside to pay pension benefits was \$1.8 billion for the TRF and \$5.0 billion for the POFRF for a total of \$6.8 billion. The fair value of these assets at September 30, 2016, included on the financial statements of DCRB was \$1.8 billion for the TRF and \$5.0 billion for the POFRF for a total of \$6.8 billion. Therefore, when viewing the actuarial funding status in this case, the actuarial value of assets would provide a similar funding position to the fair value of assets as of the October 1, 2015 valuation.

MANAGEMENT'S DISCUSSION AND ANALYSIS

FINANCIAL ANALYSIS SUMMARY

Net position may serve over time as a useful indication of DCRB's financial strength. At the close of fiscal years 2016 and 2015, the net position of DCRB totaled \$6.8 and \$6.1 billion, respectively. Net position serves to meet DCRB's ongoing obligations to Plan participants and their survivors and beneficiaries.

SUMMARY OF FINANCIAL INFORMATION

The following Condensed and Combining Statements of Fiduciary Net Position and Changes in Fiduciary Net Position present financial information for the combined Funds and compares fiscal years 2016, 2015 and 2014.

Condensed and Combining Statements of Fiduciary Net Position

(Dollars in thousands)

	2016	2015	2014	2016 Percent Change	2015 Percent Change
Assets					
Cash and short-term investments	\$ 51,480	\$ 75,492	\$ 27,400	-31.8%	175.5%
Receivables	14,235	14,077	155,149	1.1%	-90.9%
Prepaid expenses	10	47	194	-78.7%	-75.8%
Investments	6,728,612	6,056,101	6,275,768	11.1%	-3.5%
Collateral from securities lending	-	-	24,982	-	-100.0%
Total assets	<u>6,794,337</u>	<u>6,145,717</u>	<u>6,483,493</u>	<u>10.6%</u>	<u>-5.2%</u>
Liabilities					
Other payables	7,879	4,214	6,404	87.0%	-34.2%
Investment commitments payable	9,878	8,867	117,663	11.4%	-92.5%
Obligations under securities lending	-	-	25,336	-	-100.0%
Total liabilities	<u>17,757</u>	<u>13,081</u>	<u>149,403</u>	<u>35.7%</u>	<u>-91.2%</u>
Net Position Restricted For Pensions	<u>\$ 6,776,580</u>	<u>\$ 6,132,636</u>	<u>\$ 6,334,090</u>	<u>10.5%</u>	<u>-3.2%</u>

MANAGEMENT'S DISCUSSION AND ANALYSIS

Condensed and Combining Statements of Changes in Fiduciary Net Position

(Dollars in thousands)

	2016	2015	2014	2016 Percent Change	2015 Percent Change
Additions					
Employer contributions	\$ 180,584	\$ 142,943	\$ 142,402	26.3%	0.4%
Plan member contributions	66,376	65,300	61,572	1.6%	6.1%
Net investment income (loss)	567,419	(259,930)	470,980	318.3%	-155.2%
Other income	3,843	1,397	1,864	175.1%	-25.1%
Total additions (reductions)	<u>818,222</u>	<u>(50,290)</u>	<u>676,818</u>	<u>1727.0%</u>	<u>-107.4%</u>
Deductions					
Benefit payments	147,554	127,710	112,616	15.5%	13.4%
Retirement benefits payable to U.S. Treasury	676	-	-		
Refunds	8,384	6,972	7,427	20.3%	-6.1%
Administrative expenses	17,664	16,482	13,517	7.2%	21.9%
Total deductions	<u>174,278</u>	<u>151,164</u>	<u>133,560</u>	<u>15.3%</u>	<u>13.2%</u>
Change In Net Position	<u>\$ 643,944</u>	<u>\$ (201,454)</u>	<u>\$ 543,258</u>	<u>419.6%</u>	<u>-137.1%</u>

MANAGEMENT'S DISCUSSION AND ANALYSIS

FINANCIAL HIGHLIGHTS

The Teachers' Retirement Fund financial highlights for fiscal year 2016 are as follows:

- Net position restricted for pensions as of September 30, 2016 was \$1.8 billion, an increase of \$151.5 million or 9.1% over fiscal year 2015.
- Investment income, net of investment expenses, for fiscal year 2016 was \$152.3 million, a return of 9.3%. Investment income, net of investment expenses, for fiscal year 2015 was \$(72.6) million, a return of (4.2%).
- Total additions for fiscal year 2016 were \$231.4 million, an increase of \$232.5 million over fiscal year 2015. In fiscal year 2015, there was a total reduction of (\$1.1 million). Employer contributions for fiscal year 2016 were \$44.5 million, an increase of \$5.0 million or 12.5% over fiscal year 2015. Employee contributions for fiscal year 2016 were \$33.6 million, an increase of \$2.0 million or 6.2% over fiscal year 2015. Other income for fiscal year 2016 was \$1.0 million, an increase of \$600 thousand over the fiscal year 2015 amount of \$400 thousand.
- Total deductions for fiscal year 2016 were \$80.1 million, an increase of \$5.9 million or 8.0% over fiscal year 2015. Pension benefit payments for fiscal year 2016 were \$68.6 million, an increase of \$4.6 million or 7.1% over fiscal year 2015. Refunds of member contributions for fiscal year 2016 were \$6.2 million, an increase of \$600 thousand or 11.3% over fiscal year 2015. Administrative expenses for fiscal year 2016 were \$4.8 million, an increase of \$300 thousand or 5.9% over fiscal year 2015.
- The Board's funding objective is to meet long-term pension benefit obligations. As of October 1, 2016, the date of the latest actuarial valuation, the TRF's ratio of plan net position to total pension liability (at September 30, 2016) was 88.27%. In general, this means that for each dollar's worth of future pension liability, the TRF has accumulated \$0.88 to meet that obligation. This ratio increased 2.6% over the prior year funded ratio of 85.6%.

MANAGEMENT'S DISCUSSION AND ANALYSIS

The Police Officers and Firefighters' Retirement Fund financial highlights for fiscal year 2016 are as follows:

- Net position restricted for pensions as of September 30, 2016 was \$5.0 billion, an increase of \$492.5 million or 11% over fiscal year 2015.
- Investment income, net of investment expenses, for fiscal year 2016 was \$415.1 million, a return of 9.3%. Investment income, net of investment expenses, for fiscal year 2015 was \$(187.3) million, a return of (4.1%).
- Total additions for fiscal year 2016 were \$586.9 million, an increase of \$636.1 million over fiscal year 2015. In fiscal year 2015, there was a total reduction of (\$49.2) million. Employer contributions for fiscal year 2016 were \$136.1 million, an increase of \$32.7 million or 31.6% over fiscal year 2015. Member contributions for fiscal year 2016 were \$32.8 million, a decrease of \$900 thousand or (2.7%) over fiscal year 2015. Other income for fiscal year 2016 was \$2.8 million, an increase of \$1.8 million over the fiscal year 2015 amount of \$1.0 million.
- Total deductions for fiscal year 2016 were \$94.2 million, an increase \$17.2 million or 22.3% over fiscal year 2015. Pension benefit payments for fiscal year 2016 were \$78.9 million, an increase of \$15.3 or 24.0% over fiscal year 2015. Refunds of member contributions for fiscal year 2016 were \$2.2 million, an increase of \$800 thousand or 56.1% over fiscal year 2015. Administrative expenses for fiscal year 2016 were \$12.9 million, an increase of \$900 thousand or 7.7% over fiscal year 2015.
- The Board's funding objective is to meet long-term pension benefit obligations. As of October 1, 2016, the date of the latest actuarial valuation, the POFRF's ratio of plan net position to total pension liability (at September 30, 2016) was 105.9%. In general, this means that for each dollar's worth of future pension liability, the POFRF has accumulated about \$1.06 to meet that obligation. This ratio increased 4.1% over the prior year ratio of 101.8%.

ADDITIONAL INFORMATION

These financial statements of the District Retirement Funds are presented in accordance with accounting principles generally accepted in the United States of America. Questions about these financial statements or other inquiries should be addressed to the Executive Director, District of Columbia Retirement Board, 900 7th Street, NW, 2nd Floor, Washington, D.C. 20001.

FINANCIAL STATEMENTS

**DISTRICT OF COLUMBIA
TEACHERS' AND POLICE OFFICERS AND FIREFIGHTERS'
RETIREMENT FUND**

**Combining Statements of Fiduciary Net Position
For the Years ended September 30, 2016 and 2015
(Dollar amounts in thousands)**

	2016			2015		
	Teachers' Retirement Fund	Police Officers and Firefighters' Retirement Fund	Total	Teachers' Retirement Fund	Police Officers and Firefighters' Retirement Fund	Total
Assets						
Cash and short-term investments	\$ 13,993	\$ 37,487	\$ 51,480	\$ 18,352	\$ 57,140	\$ 75,492
Receivables:						
Federal Government	777	2,107	2,884	248	652	900
Investment sales proceeds	1,618	4,407	6,025	500	1,333	1,833
Interest & dividends	127	344	471	1,871	4,994	6,865
Employee contributions	2,480	2,375	4,855	2,253	2,226	4,479
Total receivables	<u>5,002</u>	<u>9,233</u>	<u>14,235</u>	<u>4,872</u>	<u>9,205</u>	<u>14,077</u>
Prepaid expenses	<u>3</u>	<u>7</u>	<u>10</u>	<u>13</u>	<u>34</u>	<u>47</u>
Investments at fair value:						
Domestic equity	525,588	1,430,431	1,956,019	379,824	1,013,536	1,393,360
International equity	559,372	1,522,376	2,081,748	458,933	1,224,239	1,683,172
Fixed income	488,528	1,329,569	1,818,097	511,262	1,364,270	1,875,532
Real estate	128,811	350,569	479,380	107,792	287,638	395,430
Private equity	105,699	287,669	393,368	193,163	515,444	708,607
Total investments at fair value	<u>1,807,998</u>	<u>4,920,614</u>	<u>6,728,612</u>	<u>1,650,974</u>	<u>4,405,127</u>	<u>6,056,101</u>
Total assets	<u>1,826,996</u>	<u>4,967,341</u>	<u>6,794,337</u>	<u>1,674,211</u>	<u>4,471,506</u>	<u>6,145,717</u>
Liabilities						
Retirement benefits						
payable to U.S. Treasury	459	217	676	-	-	-
Accounts payable and other liabilities	1,377	3,751	5,128	735	1,950	2,685
Due to Federal Government	56	154	210	20	53	73
Due to District of Columbia						
Government	501	1,364	1,865	401	1,055	1,456
Investment commitments payable	2,654	7,224	9,878	2,417	6,450	8,867
Total liabilities	<u>5,047</u>	<u>12,710</u>	<u>17,757</u>	<u>3,573</u>	<u>9,508</u>	<u>13,081</u>
Net Position Restricted For Pensions	<u>\$ 1,821,949</u>	<u>\$ 4,954,631</u>	<u>\$ 6,776,580</u>	<u>\$ 1,670,638</u>	<u>\$ 4,461,998</u>	<u>\$ 6,132,636</u>

The accompanying notes are an integral part of these financial statements.

**DISTRICT OF COLUMBIA
TEACHERS' AND POLICE OFFICERS AND FIREFIGHTERS'
RETIREMENT FUND**

**Combining Statements of Changes in Fiduciary Net Position
For the Years ended September 30, 2016 and 2015
(Dollar amounts in thousands)**

	2016			2015		
	Police		Total	Police		Total
	Teachers' Retirement Fund	Officers and Firefighters' Retirement Fund		Teachers' Retirement Fund	Officers and Firefighters' Retirement Fund	
Additions						
Contributions:						
District Government	\$ 44,469	\$ 136,115	\$ 180,584	\$ 39,513	\$ 103,430	\$ 142,943
Plan member	<u>33,591</u>	<u>32,785</u>	<u>66,376</u>	<u>31,621</u>	<u>33,679</u>	<u>65,300</u>
Total contributions	<u>78,060</u>	<u>168,900</u>	<u>246,960</u>	<u>71,134</u>	<u>137,109</u>	<u>208,243</u>
Investment (loss) income:						
Net (depreciation) appreciation in fair value of investments	147,820	371,288	519,108	(76,764)	(205,187)	(281,951)
Interest and dividends	<u>8,245</u>	<u>54,220</u>	<u>62,465</u>	<u>7,476</u>	<u>26,733</u>	<u>34,209</u>
Total gross investment (loss) income	156,065	425,508	581,573	(69,288)	(178,454)	(247,742)
Less:						
Investment expenses	<u>3,803</u>	<u>10,351</u>	<u>14,154</u>	<u>3,378</u>	<u>8,878</u>	<u>12,256</u>
Net investment (loss) income	<u>152,262</u>	<u>415,157</u>	<u>567,419</u>	<u>(72,666)</u>	<u>(187,332)</u>	<u>(259,998)</u>
Securities lending income	-	-	-	24	63	87
Less: securities lending expense	<u>-</u>	<u>-</u>	<u>-</u>	<u>5</u>	<u>14</u>	<u>19</u>
Net securities lending income	<u>-</u>	<u>-</u>	<u>-</u>	<u>19</u>	<u>49</u>	<u>68</u>
Total net investment (loss) income	<u>152,262</u>	<u>415,157</u>	<u>567,419</u>	<u>(72,647)</u>	<u>(187,283)</u>	<u>(259,930)</u>
Other income	<u>1,033</u>	<u>2,810</u>	<u>3,843</u>	<u>385</u>	<u>1,012</u>	<u>1,397</u>
Total (reductions) additions	<u>231,355</u>	<u>586,867</u>	<u>818,222</u>	<u>(1,128)</u>	<u>(49,162)</u>	<u>(50,290)</u>
Deductions						
Benefit payments	68,634	78,920	147,554	64,076	63,634	127,710
Retirement benefits payable to U.S. Treasury	459	217	676	-	-	-
Refunds	6,205	2,179	8,384	5,576	1,396	6,972
Administrative expenses	<u>4,746</u>	<u>12,918</u>	<u>17,664</u>	<u>4,543</u>	<u>11,939</u>	<u>16,482</u>
Total deductions	<u>80,044</u>	<u>94,234</u>	<u>174,278</u>	<u>74,195</u>	<u>76,969</u>	<u>151,164</u>
Change in Net Position	<u>151,311</u>	<u>492,633</u>	<u>643,944</u>	<u>(75,323)</u>	<u>(126,131)</u>	<u>(201,454)</u>
Net Position Restricted For Pensions:						
Beginning of Year	<u>1,670,638</u>	<u>4,461,998</u>	<u>6,132,636</u>	<u>1,745,961</u>	<u>4,588,129</u>	<u>6,334,090</u>
End of Year	<u>\$ 1,821,949</u>	<u>\$ 4,954,631</u>	<u>\$ 6,776,580</u>	<u>\$ 1,670,638</u>	<u>\$ 4,461,998</u>	<u>\$ 6,132,636</u>

The accompanying notes are an integral part of these financial statements.

**DISTRICT OF COLUMBIA
TEACHERS' AND POLICE OFFICERS AND FIREFIGHTERS'
RETIREMENT FUNDS**

**Notes to the Basic Financial Statements
For the years ended September 30, 2016 and 2015**

NOTE 1: ORGANIZATION

The District of Columbia Teachers' Retirement Fund and the District of Columbia Police Officers and Firefighters' Retirement Fund were established in 1979 by the District of Columbia Retirement Reform Act (the Reform Act, Pub. L. 96-122, D. C. Code § 1-701 et seq.). The Fund holds in trust the assets available to pay pension benefits to teachers, police officers and firefighters of the District of Columbia Government. The Reform Act also established the District of Columbia Retirement Board.

The National Capital Revitalization and Self-Government Improvement Act of 1997 (the Revitalization Act, Title XI of the Balanced Budget Act of 1997, Pub. L. 105-33) transferred significant assets and liabilities of the District Retirement Funds to the Federal Government. The Revitalization Act transferred to the Federal Government the liability for retirement benefits for employee service credit earned prior to July 1, 1997, by participants of the District Retirement Funds. The assets transferred to the Federal Government were intended to partially fund this liability.

On September 18, 1998, the Council of the District of Columbia (the Council) enacted the Police Officers, Firefighters, and Teachers Retirement Benefit Replacement Plan Act of 1998 (the Replacement Act). The Replacement Act established the District Retirement Funds for employee service earned after June 30, 1997, and provided for full funding of these benefits on an actuarially sound basis.

The Board is an independent agency of the District of Columbia government that is responsible for managing the assets of the TRF and the POFRF. Although the assets of these funds are commingled for investment purposes, each fund's assets may only be used for the payment of benefits to the participants of that fund and certain administrative expenses.

The District Retirement Funds are included in the District's Comprehensive Annual Financial Report as a pension trust fund.

**DISTRICT OF COLUMBIA
TEACHERS' AND POLICE OFFICERS AND FIREFIGHTERS'
RETIREMENT FUNDS**

**Notes to the Basic Financial Statements
For the years ended September 30, 2016 and 2015**

NOTE 2: FUND ADMINISTRATION AND DESCRIPTION

District of Columbia Retirement Board – The Board consists of 12 trustees, three appointed by the Mayor of the District, three appointed by the Council of the District, and six elected by the active and retired participants. Included are one active and one retired representative each, from the police officers, firefighters, and teachers. Each of the six representatives of the Plans' participants is elected by the respective groups of active and retired employees. In addition, the District's Chief Financial Officer or his designee serves as a non-voting, ex-officio trustee.

Since its inception, the Board has operated under a committee system which provides a two-tiered process for fiduciary review and analysis. In this manner, the Board, consistent with its fiduciary duties, reviews all issues brought before it. The Board has six standing committees: Benefits, Audit, Fiduciary, Investments, Legislative, and Operations. To implement its policies, the Board retains an executive director and other staff who are responsible for the day-to-day management of the District Retirement Funds and the administration of the benefits paid from the Funds.

Teachers' Retirement Fund

Other Entities involved in Plan Administration – The District of Columbia Public School's (the DCPS) Office of Human Resources makes decisions regarding voluntary and involuntary retirement, survivor benefits, and annual medical and income reviews.

Benefits Calculation – DCRB's Benefits Department receives the approved retirement applications for all active Plan members found eligible for retirement by the DCPS Office of Human Resources, and carries out the day-to-day processing of retirement benefits. DCRB also processes employee requests for refunds of contributions and purchases of service.

Eligibility – Permanent, temporary, part-time and probationary teachers and certain other employees of the District of Columbia public day schools are automatically enrolled in the Teachers' Retirement Fund on their date of employment. Certain D.C. Public Charter School employees are also eligible to be participants. However, substitute teachers and employees of the Department of School Attendance and Work Permits are not covered.

**DISTRICT OF COLUMBIA
TEACHERS' AND POLICE OFFICERS AND FIREFIGHTERS'
RETIREMENT FUNDS**

**Notes to the Basic Financial Statements
For the years ended September 30, 2016 and 2015**

NOTE 2: FUND ADMINISTRATION AND DESCRIPTION (CONTINUED)

Title 38, Chapter 20 of the D.C. Official Code (D.C. Code § 38-2021.01 et seq. (2001 Ed.)) establishes benefit provisions which may be amended by the District City Council. For employees hired before November 1, 1996, the annual retirement benefit is the average salary, as defined, multiplied by 1.5% for each of the first five years of service, plus 1.75% for each of the second five years; plus 2% for each additional year over 10 years. For employees hired on or after November 1, 1996, the annual retirement benefit is the average salary, as defined, multiplied by 2% for each year of service. The average salary is the highest average consecutive 36 months of pay.

The annuity may be further increased by crediting unused sick leave as of the date of retirement. Participants receiving retirement benefits receive an annual benefit increase proportional to changes in the Consumer Price Index; however, the annual increase may not exceed 3% for participants hired on or after November 1, 1996. Participants may select from among several survivor options.

Participants who have 5 years of school service (by working for the District of Columbia public school system), and who become disabled and can no longer perform their jobs satisfactorily, may be eligible for disability retirement. Such disability retirement benefits are calculated in the same manner as a retirement benefit, however, a minimum disability benefit applies.

Voluntary retirement is available for teachers who have a minimum of 5 years of school service and who achieve the following age and length of service requirements:

- at age 62 with 5 years of service;
- at age 60 with 20 years of service; and
- at age 55 with 30 years of service; if hired before November 1, 1996; or
- at any age with 30 years of service, if hired by the school system on or after November 1, 1996.

Employees who are involuntarily separated other than for cause and who have 5 years of school service, may be eligible for retirement at any age with 25 years of service or at age 50 with 20 years of service.

An involuntary retirement benefit is reduced if, at the time of its commencement, the participant is under the age of 55.

**DISTRICT OF COLUMBIA
TEACHERS' AND POLICE OFFICERS AND FIREFIGHTERS'
RETIREMENT FUNDS**

**Notes to the Basic Financial Statements
For the years ended September 30, 2016 and 2015**

NOTE 2: FUND ADMINISTRATION AND DESCRIPTION (CONTINUED)

Police Officers and Fire Fighters' Retirement Fund

Other Entities involved in Plan Administration – The District of Columbia Police Officers and Firefighters' Retirement and Relief Board makes findings of fact, conclusions of law, and decisions regarding eligibility for retirement and survivor benefits, determines the extent of disability, and conducts annual medical reviews. The Police and Fire Clinic determines medical eligibility for disability retirement.

Benefits Calculation – DCRB's Benefits Department receives the retirement orders for retirement benefit calculations for all active Plan members found eligible for retirement by the District of Columbia Police Officers and Firefighters' Retirement and Relief Board, and carries out the day-to-day processing of retirement benefits. DCRB also processes employee requests for refunds of contributions and purchases of service. Effective 2013, DCRB began conducting annual disability income reviews.

Eligibility – A participant becomes a member when he/she begins work as a police officer or firefighter in the District. Cadets are not eligible to join the Fund.

Retirement and disability benefit provisions for District of Columbia police officers and firefighters are established by the "Policemen and Firemen's Retirement and Disability Act" (D.C. Code § 5-701 et seq. (2001 Ed.)).

Members Hired Before February 15, 1980 – Members are eligible for optional retirement with full benefits at any age after 20 years of departmental service, or for deferred retirement at age 55 after five years of departmental service. The annual basic retirement benefit equals 2.5% of average base pay, which is defined as the highest average consecutive 12 months of base pay, multiplied by departmental service through 20 years; plus 3% of average base pay multiplied by average base pay times departmental service over 20 years; plus 2.5% of average base pay multiplied by years of other creditable service; however, the aggregate annual basic retirement benefit may not exceed 80% of the member's average base pay. Members terminated after five years of police or fire service are entitled to a deferred pension beginning at age 55. Benefits are also provided to certain survivors of active, retired, or terminated vested members. Retirement benefits are increased by the same percentage in base pay granted to active participants.

**DISTRICT OF COLUMBIA
TEACHERS' AND POLICE OFFICERS AND FIREFIGHTERS'
RETIREMENT FUNDS**

**Notes to the Basic Financial Statements
For the years ended September 30, 2016 and 2015**

NOTE 2: FUND ADMINISTRATION AND DESCRIPTION (CONTINUED)

Members with a service-related disability receive a disability retirement benefit of 2.5% of average base pay multiplied by the number of years of creditable service. A minimum annual disability retirement benefit of 66 2/3% of average base pay and a maximum annual disability retirement benefit of 70% of average base pay apply.

Members with a non-service related disability and at least five years of departmental service receive a disability retirement benefit of 2% of average base pay multiplied by the number of years of creditable service. A minimum annual disability retirement benefit of 40% of average base pay and a maximum annual disability retirement benefit of 70% of average base pay apply.

Members Hired On or After February 15, 1980 and Before November 10, 1996 – Members are eligible for optional retirement with full benefits at age 50 with at least 25 years of departmental service, or after age 55 with five years of departmental service. The annual basic retirement benefit equals 2.5% of average base pay, which is defined as the highest average consecutive 36 months of base pay, multiplied by the number of years of creditable service through 25 years; plus 3% of average base pay multiplied by the number of years of departmental service over 25 years; plus 2.5% of average base pay multiplied by the number of years of other creditable service; however, the aggregate annual basic retirement benefit may not exceed 80% of the member's average base pay. Members separated from the Police or Fire Department after five years of departmental service are entitled to a deferred pension beginning at age 55.

Benefits are also provided to certain survivors of active, retired or terminated vested members. Members who retired after February 15, 1980 receive annual benefit increases proportional to changes in the Consumer Price Index.

Members Hired on or After November 10, 1996 – Members are eligible for retirement at any age, with at least 25 years of departmental service or after age 55 with five years of departmental service. The annual basic retirement benefit equals 2.5% of average base pay, which is defined as the highest average consecutive 36 months of base pay, multiplied by creditable service; however, the aggregate annual basic retirement benefit may not exceed 80% of the average base pay. Members separated after five years of departmental service are entitled to a deferred pension beginning at age 55. Benefits are also provided to certain survivors of active, retired, or terminated vested members. Members receive

**DISTRICT OF COLUMBIA
TEACHERS' AND POLICE OFFICERS AND FIREFIGHTERS'
RETIREMENT FUNDS**

**Notes to the Basic Financial Statements
For the years ended September 30, 2016 and 2015**

NOTE 2: FUND ADMINISTRATION AND DESCRIPTION (CONTINUED)

annual benefit increases proportional to changes in the Consumer Price Index, however, the increase is capped at 3%.

Members with a service-related disability receive a disability retirement benefit of 70% of base pay multiplied by the percentage of disability. A minimum annual disability retirement benefit of 40% of base pay applies.

Members with a non-service related disability and at least five years of departmental service receive a disability retirement benefit of 70% of base pay multiplied by the percentage of disability. A minimum annual disability retirement benefit of 30% of base pay applies.

Prior to reaching age 50, a disability retirement benefit will be reduced or terminated if outside earnings exceed a certain limit.

Participant Data

The number of participants for the years ended September 30 was as follows:

TRF	2016	2015	2014
Retirees and survivors receiving benefits (post June 30, 1997)	3,882	3,718	3,601
Active plan members	5,141	4,866	4,499
Vested terminations	1,176	1,152	969
Total participants	<u>10,199</u>	<u>9,736</u>	<u>9,069</u>
POFRF	2016	2015	2014
Retirees and survivors receiving benefits (post June 30, 1997)	3,003	2,609	2,365
Active plan members	5,359	5,537	5,551
Vested terminations	293	319	257
Total participants	<u>8,655</u>	<u>8,465</u>	<u>8,173</u>

**DISTRICT OF COLUMBIA
TEACHERS' AND POLICE OFFICERS AND FIREFIGHTERS'
RETIREMENT FUNDS**

**Notes to the Basic Financial Statements
For the years ended September 30, 2016 and 2015**

NOTE 2: FUND ADMINISTRATION AND DESCRIPTION (CONTINUED)

Contributions

Fund members contribute by salary deductions at rates established by D.C. Code § 5-706 (2001 Ed.). Members contribute 7% (or 8% for Teachers and Police Officers and Firefighters hired on or after November 1, 1996 and November 10, 1996, respectively) of annual gross salary, including any differential for special assignment and longevity, but excluding overtime, holiday, or military pay.

The District is required to contribute the amounts necessary to finance the Plan benefits of its members through annual contributions at actuarially determined amounts in accordance with the provisions of the Replacement Act. The amount of the District contributions for fiscal years 2016 and 2015 were equal to the amounts computed, if any, by the Board's independent actuary.

Contribution requirements of members are established by D.C. Code § 5-706 and requirements for District of Columbia government contributions to the Fund are established at D.C. Code § 1-907.02 (2001 Ed.), which may be amended by the City Council. Administrative costs are paid from investment earnings.

NOTE 3: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting – DCRB's financial statements were prepared in accordance with accounting principles generally accepted in the United States (GAAP) using the accrual basis of accounting. The Governmental Accounting Standards Board (GASB) is the accepted standard-setting body for establishing governmental accounting and reporting principles. Employee contributions are recognized at the time compensation is paid to Plan members. Employer contributions are recognized when due and the employer has made a formal commitment to provide the contributions. Benefits and refunds are recognized when due and payable in accordance with the terms of the retirement Plan's commitment.

Federal Income Tax Status – The District Retirement Funds are qualified plans under section 401(a) of the Internal Revenue Code and are exempt from federal income taxes under section 501(a).

Use of Estimates in Preparing Financial Statements – The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires the Board to make estimates and assumptions that affect the reported amounts of assets, liabilities, additions and

**DISTRICT OF COLUMBIA
TEACHERS' AND POLICE OFFICERS AND FIREFIGHTERS'
RETIREMENT FUNDS**

**Notes to the Basic Financial Statements
For the years ended September 30, 2016 and 2015**

NOTE 3: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

deductions to net position restricted for pensions and disclosure of contingent assets and liabilities at the date of the financial statements and during the reporting period. Actual results could differ from those estimates.

Investment Expenses – The District of Columbia Appropriation Act authorized Fund earnings to be used for investment expenses incurred in managing the assets and administering the Fund. The total investment expenses borne by the District Retirement Funds was \$14,154,932 in 2016 and \$12,256,010 in 2015. A significant number of the alternative investment managers provide account valuations net of management expenses. Those expenses are netted against investment income and, because they are not separable, are recorded and reported net of management expenses in the net (depreciation) appreciation in the fair value of investments.

New Accounting Pronouncement – GASB Statement No. 72, Fair Value Measurement and Application, which was adopted during the year ended September 30, 2016, addresses accounting and reporting issues related to fair value measurements. This Statement requires disclosures to be made about fair value measurements, the level of fair value hierarchy, and valuation techniques. Comprehensive footnote disclosure regarding this Statement is found in Note 4 beginning on page 33. The information as of September 30, 2015 was unavailable because of the transition to the new custodian.

**DISTRICT OF COLUMBIA
TEACHERS' AND POLICE OFFICERS AND FIREFIGHTERS'
RETIREMENT FUNDS**

**Notes to the Basic Financial Statements
For the years ended September 30, 2016 and 2015**

NOTE 4: INVESTMENTS

The Board is authorized to manage and control the investment of the District Retirement Funds' assets. The Board broadly diversifies the investments of the District Retirement Funds to minimize the risk of large losses, unless under the circumstances it is clearly prudent not to do so, as required by D.C. Code § 1-741(a)(2)(C), (2001 Ed.).

Master Trust – The Board has pooled all of the assets under its management (the Investment Pool), as is authorized by D.C. Code § 1-903(b), (2001 Ed.), with a master custodian under a master trust arrangement (the Master Trust). Using an investment pool, each Fund owns an undivided proportionate share of the pool.

District and employee contributions are deposited in the respective Retirement Fund for which the contribution was made, and benefit payments and employee contribution refunds are withdrawn from the Fund in which the recipient participates. Investment performance and administrative expenditures are allocated between the two Funds based upon their proportionate net position in the pool.

The values of investments of the Investment Pool as of September 30 are as follows:

<i>(Dollars in thousands)</i>	<u>2016</u>	<u>2015</u>
Cash and short-term investments	\$ 51,480	\$ 75,492
Investments:		
Domestic equity	1,956,019	1,393,360
International equity	2,081,748	1,683,172
Fixed income	1,818,097	1,875,532
Real estate	479,380	395,430
Private equity	<u>393,368</u>	<u>708,607</u>
Total investments	<u>6,728,612</u>	<u>6,056,101</u>
Total	<u>\$ 6,780,092</u>	<u>\$ 6,131,593</u>

**DISTRICT OF COLUMBIA
TEACHERS' AND POLICE OFFICERS AND FIREFIGHTERS'
RETIREMENT FUNDS**

**Notes to the Basic Financial Statements
For the years ended September 30, 2016 and 2015**

NOTE 4: INVESTMENTS (CONTINUED)

Annual money-weighted rate of return – The money-weighted rate of return shows investment performance when taking into account the impact of cash infusion into and disbursements from the pension system. For the years ended September 30, 2016 and 2015, the money-weighted rates of return, as calculated by the custodian, were as follows:

	<u>FY 2016</u>	<u>FY 2015</u>
Total Portfolio	9.346%	-4.006%

Debt Instruments – As of September 30, 2016, the Investment Pool held the following debt instruments:

(Dollars in thousands)

<u>Investment Type</u>	<u>Fair Value</u>	<u>% of Segment</u>	<u>Duration (years)</u>	<u>Rating*</u>
US Agency	\$ 29,916	1.65%	3.69	AA+
Asset Backed	11,300	0.62%	2.58	AAA
Bank Loans	83,759	4.61%	0.16	CCC+
CMBS	18,424	1.01%	5.39	AA
CMO	13,920	0.77%	1.33	AA+
Commingled funds	1,603	0.09%	-	NR
Corporate - US	323,326	17.78%	6.05	BBB+
Corporate - Euro	13,154	0.72%	1.08	CCC+
Foreign	382,125	21.02%	6.02	A-
Mortgage Pass-Through	232,759	12.80%	2.32	AA+
Municipal	7,087	0.39%	11.42	AA-
Unclassified	-	0.00%	-	
US Treasury	621,812	34.20%	7.10	AA+
Yankee	-	0.00%	-	
Other	78,912	4.34%	3.09	B-
Total Fixed Income	<u><u>\$ 1,818,097</u></u>	<u><u>100.00%</u></u>		

* Using quality ratings provided by Standard & Poor's

**DISTRICT OF COLUMBIA
TEACHERS' AND POLICE OFFICERS AND FIREFIGHTERS'
RETIREMENT FUNDS**

**Notes to the Basic Financial Statements
For the years ended September 30, 2016 and 2015**

NOTE 4: INVESTMENTS (CONTINUED)

As of September 30, 2015, the Investment Pool held the following debt instruments:

(Dollars in thousands)

<u>Investment Type</u>	<u>Fair Value</u>	<u>% of Segment</u>	<u>Duration (years)</u>	<u>Rating*</u>
US Agency	\$ 25,623	1.37%	4.12	AA+
Asset Backed	4,934	0.26%	2.44	AAA
Bank Loans	129,633	6.91%	4.69	NR
CMBS	16,447	0.88%	4.66	AA
Corporate	443,721	23.66%	5.42	BBB-
Foreign	369,210	19.69%	4.54	A
Mortgage Pass-Through	243,503	12.98%	3.54	AA+
Municipal	8,310	0.44%	11.27	AA-
Unclassified	1,904	0.10%	1.63	AA+
US Treasury	616,117	32.85%	6.61	AA+
Yankee	9,350	0.50%	6.88	B-
Other	6,780	0.36%	N/A	NR
Total Fixed Income	\$ 1,875,532	100.00%		

* Using quality ratings provided by Standard & Poor's

**DISTRICT OF COLUMBIA
TEACHERS' AND POLICE OFFICERS AND FIREFIGHTERS'
RETIREMENT FUNDS**

**Notes to the Basic Financial Statements
For the years ended September 30, 2016 and 2015**

NOTE 4: INVESTMENTS (CONTINUED)

Interest Rate Risk – Interest rate risk is the risk that changes in market interest rates will adversely affect the fair value of an investment. Generally, an investment with a longer maturity will have a greater sensitivity to fair value changes that are related to market interest rates. The Board monitors the interest rate risk inherent in its portfolio by measuring the weighted average duration of its portfolio. Duration is a measure of a debt investment's exposure to fair value changes arising from changing interest rates. It uses the present value of cash flows, weighted for those cash flows as a percentage of the investment's full price. As a general rule, the risk and return of the Board's fixed income segment of the portfolio is compared to the Barclays Capital U.S. Universal Index. To mitigate interest rate risk, the fixed income segment is expected to maintain a weighted average duration (sensitivity to interest rate changes) within +/-2 years of the duration of this Index.

Credit Risk – Generally, credit risk is the risk that an issuer of an investment will not fulfill its obligation to the holder of the investment. This is measured by the assignment of a rating by a nationally recognized statistical rating organization. Unless specifically authorized otherwise in writing by the Board, fixed income managers invest in investment grade instruments rated in the top four rating categories by a recognized statistical rating service.

**DISTRICT OF COLUMBIA
TEACHERS' AND POLICE OFFICERS AND FIREFIGHTERS'
RETIREMENT FUNDS**

**Notes to the Basic Financial Statements
For the years ended September 30, 2016 and 2015**

NOTE 4: INVESTMENTS (CONTINUED)

Foreign Currency Risk – Foreign currency risk is the risk that changes in exchange rates will adversely impact the fair value of an investment. As a general policy, investment managers with authority to invest in issuers denominated in a foreign currency may reduce exposure to currency risk by systematically hedging foreign currency positions back to U.S. dollars through the forward currency markets. Since the forward exchange rate is seldom equal to the spot exchange rate, forward hedging gains and losses may arise. For the years ended September 30, 2016 and 2015, the Investment Pool held amounts in commingled funds which invested in foreign currencies totaling \$2.4 billion and \$2.0 billion, respectively.

As of September 30, 2016, the Investment Pool held investments that were denominated in a currency other than the United States Dollar, as summarized below:

(Dollars in thousands)

	Asset Class				
	Cash	Equities	Fixed Income	Private Equity	Total
Australian Dollar	\$ -	\$ -	\$ -	\$ -	\$ -
Canadian Dollar	-	-	-	1,258	1,258
Danish Krone	-	-	-	-	-
Euro	76	-	-	29,203	29,279
Hong Kong Dollar	-	-	-	-	-
Japanese Yen	-	-	-	-	-
Mexican Peso	-	-	-	-	-
Pound Sterling	-	-	-	-	-
Singapore Dollar	-	-	-	-	-
South African Rand	-	-	-	-	-
Swedish Krona	-	-	-	-	-
Swiss Franc	110	-	-	-	110
Total Foreign	<u>186</u>	<u>-</u>	<u>-</u>	<u>30,461</u>	<u>30,647</u>
Total Foreign Currency Exposure	<u>\$ 186</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 30,461</u>	<u>\$ 30,647</u>

**DISTRICT OF COLUMBIA
TEACHERS' AND POLICE OFFICERS AND FIREFIGHTERS'
RETIREMENT FUNDS**

**Notes to the Basic Financial Statements
For the years ended September 30, 2016 and 2015**

NOTE 4: INVESTMENTS (CONTINUED)

As of September 30, 2015, the Investment Pool held investments that were denominated in a currency other than the United States Dollar, as summarized below:

(Dollars in thousands)

	Asset Class				
	Cash	Equities	Fixed Income	Private Equity	Total
Australian Dollar	\$ (652)	\$ -	\$ 6,107	\$ -	\$ 5,455
Canadian Dollar	492	2,273	20,124	-	22,889
Danish Krone	-	9,088	-	-	9,088
Euro	16,076	290,358	15,347	261,330	583,111
Hong Kong Dollar	-	32,050	-	-	32,050
Japanese Yen	532	220,725	-	-	221,257
Mexican Peso	172	-	-	-	172
Pound Sterling	1	54,215	928	-	55,144
Singapore Dollar	-	687	-	-	687
South African Rand	-	1,040	-	-	1,040
Swedish Krona	-	30,338	-	-	30,338
Swiss Franc	-	74,634	-	-	74,634
Total Foreign	<u>16,621</u>	<u>715,408</u>	<u>42,506</u>	<u>261,330</u>	<u>1,035,865</u>
Total Foreign Currency Exposure	<u>\$ 16,621</u>	<u>\$ 715,408</u>	<u>\$ 42,506</u>	<u>\$ 261,330</u>	<u>\$ 1,035,865</u>

**DISTRICT OF COLUMBIA
TEACHERS' AND POLICE OFFICERS AND FIREFIGHTERS'
RETIREMENT FUNDS**

**Notes to the Basic Financial Statements
For the years ended September 30, 2016 and 2015**

NOTE 4: INVESTMENTS (CONTINUED)

Securities Lending Transactions – The Board's policies permit the District Retirement Funds to participate in securities lending transactions by relying on a

Securities Lending Authorization Agreement, which authorizes the master custodian to lend the Board's securities to qualified broker-dealers and banks pursuant to a form of loan agreement.

In April 2015, the Board discontinued its participation in State Street's securities lending program. In 2016, the Board made the decision to transition custodial services from State Street to Northern Trust (see Note 6). As a result, the Board made the decision to discontinue the securities lending program in order to manage the operational risks associated with the planned transition. The Board may participate in securities lending through its new custodian bank in the future; however, it chose not to do so in fiscal year 2016.

For the first six months of fiscal year 2015 the master custodian, at the direction of the Board, loaned certain of the District Retirement Funds' public equity and fixed income securities for which it received collateral in the form of United States and foreign currency cash, securities issued or guaranteed by the United States government, the sovereign debt of foreign countries and irrevocable bank letters of credit. This collateral could not be pledged or sold unless the borrower defaulted on the loan. Borrowers were required to deliver and maintain collateral for each loan in an amount equal to (i) at least 102% of the fair value of the loaned security in the United States; or (ii) 105% of the fair value of the loaned securities in the case of loaned securities not denominated in United States dollars or whose primary trading market was not located in the United States.

The Board and the borrowers maintained the right to terminate all securities lending transactions on demand. The cash collateral received on each loan was invested, together with the cash collateral of other qualified tax-exempt plan lenders, in a collective investment pool (the Quality D Fund). The Quality D Fund does not meet the requirements of the Securities and Exchange Commission Rule 2a-7 of the Investment Company Act of 1940, and accordingly, the master custodian has valued the Fund's investments at fair value for reporting purposes.

**DISTRICT OF COLUMBIA
TEACHERS' AND POLICE OFFICERS AND FIREFIGHTERS'
RETIREMENT FUNDS**

**Notes to the Basic Financial Statements
For the years ended September 30, 2016 and 2015**

NOTE 4: INVESTMENTS (CONTINUED)

The Quality D Fund is not registered with the Securities and Exchange Commission. The master custodian, and consequently the investment vehicles it sponsors (including the Quality D Fund), are subject to the oversight of the Federal Reserve Board and the Massachusetts Commissioner of Banks. The fair value of the Funds' position in the Quality D Fund is not the same as the value of the District Retirement Funds' shares.

There was no involuntary participation in an external investment pool by the Quality D Fund and there was no income from one fund that was assigned to another fund by the master custodian during 2015.

During 2015, the Board did not restrict the amount of the loans that the master custodian made on its behalf. There were no failures by any borrowers to return loaned securities or pay distributions thereon and there were no losses resulting from a default of the borrowers or the master custodian during 2015.

As of September 30, 2016 and 2015 the fair value (USD) of securities on loan, associated collateral and invested cash collateral was \$0.

At times, the fair value of the shares in the Quality D Fund purchased with cash collateral by the lending agent was less than the cost. As of September 30, 2016 and 2015, there were no unrealized losses.

Net security lending income is composed of three components: gross income, broker rebates, and agent fees. Gross income is equal to earnings on cash collateral received in a security lending transaction. A broker rebate is the cost of using that cash collateral. Agent fees represent the fees paid to the agent for administering the lending program. Net security lending income is equal to gross income less broker rebates and agent fees. The Fund's share of securities lending income and expense are reflected on the Combining Statements of Changes in Fiduciary Net Position.

Derivative Investments – Derivatives are generally defined as contracts in which the value depends on, or derives from, the value of an underlying asset, reference rate, or index. Derivative investments generally contain exposure to credit risk, market risk, and/or legal risk. Credit risk is the exposure to the default of another party to the transaction (counterparty). Market risk is the exposure to changes in the market, such as a change in interest rates, currency exchange rates, or a change

**DISTRICT OF COLUMBIA
TEACHERS' AND POLICE OFFICERS AND FIREFIGHTERS'
RETIREMENT FUNDS**

**Notes to the Basic Financial Statements
For the years ended September 30, 2016 and 2015**

NOTE 4: INVESTMENTS (CONTINUED)

in the price or principal value of a security. The Board believes that all contracts entered into are legally permissible in accordance with the policy of the Board.

During 2016 and 2015, the District Retirement Funds, in accordance with the policy of the Board, and through the District Retirement Funds' investment managers who have full discretion over investment decisions, invested in various derivative instruments either to increase potential earnings or to hedge against potential losses. A list of the derivatives aggregated by type is shown later in this note.

TBAs (to-be-announced, sometimes referred to as dollar rolls) are used by the District Retirement Funds as an alternative to holding mortgage-backed securities outright to raise the potential yield and to reduce transaction costs. The selected TBAs are used because they are expected to behave the same in duration and convexity as mortgage-backed securities with identical credit, coupon and maturity features. Credit risk is managed by limiting these transactions to primary dealers.

Market risk for this type of security is not significantly different from the market risk for mortgage-backed securities.

Foreign currency forwards, futures contracts and foreign currency options are generally used by the District Retirement Funds for defensive purposes. These contracts hedge a portion of the District Retirement Funds' exposure to particular currencies on occasion when significant adverse short-term movement in exchange rate levels is expected.

Foreign currency forward and futures contracts can pose market risk when the maximum potential loss on a particular contract is greater than the value of the underlying investment. Market risks arise due to movements in the foreign exchange rates underlying the contracts used by the District Retirement Funds. Credit risk is managed by limiting transactions to counterparties with short-term credit ratings of A1 or P1 or by trading on organized exchanges. Market risk for currency options is limited to the purchase cost. Credit risk for currency options is also managed by limiting transactions to counterparties with investment-grade ratings or by trading on organized exchanges.

Equity index futures were also used by the District Retirement Funds in order to gain exposure to equity markets in a more efficient and liquid manner than directly investing in all of the underlying equity securities. Equity index futures may pose

**DISTRICT OF COLUMBIA
TEACHERS' AND POLICE OFFICERS AND FIREFIGHTERS'
RETIREMENT FUNDS**

**Notes to the Basic Financial Statements
For the years ended September 30, 2016 and 2015**

NOTE 4: INVESTMENTS (CONTINUED)

market risk when the maximum potential loss on a particular contract is greater than the value of the underlying investment. Market risks arise due to movements in the equities markets underlying the contracts used by the District Retirement Funds. The notional amounts of the contracts are not included in the derivatives holdings disclosed. Credit risk is managed by dealing with member firms of the futures exchanges.

Exchange-traded and over-the-counter bond futures and options are used by the District Retirement Funds to gain exposure to fixed income markets in a more efficient and liquid manner than by purchasing the underlying bonds. Market risk for these futures and options is limited to purchase cost. Credit risk is managed by limiting transactions to counterparties with investment-grade ratings or by trading with member firms of organized exchanges.

Warrants are used by the District Retirement Funds to gain equity exposure and to enhance performance. Warrants are often distributed by issuers to holdings of common stock and bonds, and are held for the same fundamental reasons as the original common stock and/or bond holdings. Rights are a security that gives the holder the entitlement to purchase new shares issued by a corporation at a predetermined price in proportion to the number of shares already owned.

Market risk for warrants and rights is limited to the purchase cost. Credit risk for warrants and rights is similar to the underlying equity and/or bond holdings. Again, all such risks are monitored and managed by the District Retirement Funds' external investment managers who have full discretion over such investment decisions.

Swaps represent an agreement between two or more parties to exchange a sequence of cash flows during a predetermined timeframe. The District Retirement Funds utilize swaps for several different reasons: to manage interest rate fluctuations, to protect against a borrower default, and to gain market exposure without having to actually own the asset.

The District Retirement Funds may manage credit exposure through the use of credit default swaps. A credit default swap (CDS) is a contract whereby the credit risk associated with an investment is transferred by entering into an agreement with another party who, in exchange for periodic fees, agrees to make payments in the event of a default or other predetermined credit event. One of the main

**DISTRICT OF COLUMBIA
TEACHERS' AND POLICE OFFICERS AND FIREFIGHTERS'
RETIREMENT FUNDS**

**Notes to the Basic Financial Statements
For the years ended September 30, 2016 and 2015**

NOTE 4: INVESTMENTS (CONTINUED)

advantages of a CDS is that it allows for exposure to credit risk while limiting exposure to other risks such as interest rate and currency risk.

The District Retirement Funds also hold derivative instruments indirectly by participating in pooled, commingled, or short-term funds that hold derivatives. Information regarding any risks associated with these holdings is not generally available. There were no derivatives as of September 30, 2016. The following is a list of derivatives aggregated by type as of September 30, 2015:

Investment Derivatives	Changes in Fair Value (4)		Fair Value at September 30, 2015 (5)		Notional (3)
	Classification	Amount (1)	Classification	Amount (2)	
Credit Default Swaps Bought	Investment Revenue	\$ (71,881)	Swaps	\$ -	\$ -
Credit Default Swaps Written	Investment Revenue	51,904	Swaps	-	-
Fixed Income Futures Long	Investment Revenue	519,101	Futures	-	-
Fixed Income Futures Short	Investment Revenue	(134,495)	Futures	-	-
Fixed Income Options Bought	Investment Revenue	(31,513)	Options	-	-
Fixed Income Options Written	Investment Revenue	70,141	Options	-	-
Foreign Currency Options Written	Investment Revenue	1,619	Options	-	-
FX Forwards	Investment Revenue	(49,491)	Long Term Instruments	-	-
Pay Fixed Interest Rate Swaps	Investment Revenue	(520,352)	Swaps	-	-
Receive Fixed Interest Rate Swaps	Investment Revenue	236,204	Swaps	-	-
Warrants	Investment Revenue	371,524	Common Stock	-	-
Grand Totals		\$ 442,761		\$ -	

(1) Negative values (in brackets) refer to losses

(2) Negative values refer to liabilities

(3) Notional may be a dollar amount or size of underlying for futures and options, negative values refer to short positions

(4) Excludes futures margin payments

(5) DCRB had no derivatives in the investment portfolio as of September 30, 2015

**DISTRICT OF COLUMBIA
TEACHERS' AND POLICE OFFICERS AND FIREFIGHTERS'
RETIREMENT FUNDS**

**Notes to the Basic Financial Statements
For the years ended September 30, 2016 and 2015**

NOTE 4: INVESTMENTS (CONTINUED)

Fair Value Measurements - DCRB categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset and gives the highest priority to unadjusted quoted prices in active markets for identical assets (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements).

Level 1 - Unadjusted quoted prices for identical instruments in active markets.

Level 2 – Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs are observable.

Level 3 – Valuations derived from valuation techniques in which significant inputs are unobservable.

Investments that are measured at fair value using the net asset value per share (or its equivalent) are not classified in the fair value hierarchy as they do not have a readily determinable fair value. Examples include member units or an ownership interest in partners' capital to which a proportionate share of net assets is attributed.

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. DCRB'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 page 34 shows the fair value leveling of the investments for the Investment Pool.

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

Equity and fixed income securities classified in Level 2 of the fair value hierarchy are valued at prices provided by independent pricing vendors. The vendors provide these prices after evaluating observable inputs including, but not limited to: quoted prices for similar securities, the mean between the last reported bid and ask prices (or the last bid price in the absence of an asked price), yield curves,

**DISTRICT OF COLUMBIA
TEACHERS' AND POLICE OFFICERS AND FIREFIGHTERS'
RETIREMENT FUNDS**

**Notes to the Basic Financial Statements
For the years ended September 30, 2016 and 2015**

NOTE 4: INVESTMENTS (CONTINUED)

yield spreads, credit ratings, deal terms, tranche level attributes, default rates, cash flows, prepayment speeds, broker/dealer quotations, inflation and reported trades.

Investments measured at the Net Asset Value (NAV) - The unfunded commitment and redemption frequency and notice period for investments measured at the net asset value (NAV) per share (or its equivalent) is presented on the table on page 34.

Real Estate and Private Equity - DCRB has made commitments to purchase partnership interests in private equity and real estate funds as part of its long term asset allocation plan for private markets. As shown in the table on page 35, the unfunded commitments totaled \$404.5 million, as of September 30, 2016. This represents global investments in 28 real estate and 18 private equity funds. In general, investments in the private markets program are illiquid and redemptions are structurally limited over the life of the investment. The private equity program spans a range of underlying strategies including buyouts, growth equity/venture, private debt, secondaries and fund-of-funds. The real estate program includes investments in a broad range of real estate strategies (i.e., core, value-added, opportunistic), infrastructure and natural resources funds.

Domestic and International Equities – DCRB has investments in 6 funds with a domestic focus and 5 funds with an international focus, in which the equity securities maintain some level of market exposure; however, the level of market exposure may vary through time.

Fixed income - DCRB has investments in 5 funds, including corporate bonds, and U.S. Treasury obligations, with redemption notifications not greater than 30 days.

**DISTRICT OF COLUMBIA
TEACHERS' AND POLICE OFFICERS AND FIREFIGHTERS'
RETIREMENT FUNDS**

**Notes to the Basic Financial Statements
For the years ended September 30, 2016 and 2015**

	Investments measured at Fair Value (Dollars in 000s)			
	Sept 30, 2016	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Investments by fair value level				
Domestic equity	\$ 264,682	\$ 264,682	\$ -	\$ -
Fixed income	234,083	-	234,083	-
Private equity	896	896	-	-
Total investments by fair value level	\$ 499,661	\$ 265,578	\$ 234,083	\$ -

Investments measured at the net asset value (NAV)

Domestic equity	\$ 1,691,337
International equities	2,081,748
Fixed income	1,584,014
Real estate	479,380
Private equity	392,472
Total investments measured at NAV	\$ 6,228,951
Total investments	\$ 6,728,612

Additional information for investments measured at the net asset value (NAV) per share (or its equivalent) is presented on the table below:

	Sept 30, 2016	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Domestic equities	\$ 1,691,337	\$ -	Daily	None
International equities	2,081,748	-	Daily	None
Fixed income	1,584,014	-	Daily, Monthly	3-30 days
Real estate	479,380	204,735	None	N/A
Private equity	392,472	199,766	None	N/A
Total investments measured at NAV	\$ 6,228,951	404,501		

**DISTRICT OF COLUMBIA
TEACHERS' AND POLICE OFFICERS AND FIREFIGHTERS'
RETIREMENT FUNDS**

**Notes to the Basic Financial Statements
For the years ended September 30, 2016 and 2015**

NOTE 5: NET PENSION LIABILITY/(ASSET)

The components of the net pension liability/(asset) of the District Retirement Funds at September 30, 2016 and 2015, were as follows:

	2016		2015	
<i>(Dollars in thousands)</i>	TRF	POFRF	TRF	POFRF
Total Pension Liability	\$ 2,064,138	\$ 4,675,562	\$ 1,950,811	\$ 4,383,414
Fiduciary Net Position	1,821,949	4,954,631	1,670,638	4,461,998
Net Pension Liability (Asset)	\$ 242,189	\$ (279,069)	\$ 280,173	\$ (78,584)
Ratio of Fiduciary Net Position to Total Pension Liability (Asset)	88.27%	105.97%	85.64%	101.79%

Actuarial Assumptions - The total pension liability was determined based on an actuarial valuation as of October 1, 2015 and 2014, then updated using the following actuarial assumptions, applied to all periods included in the measurement and rolled forward to the measurement date of September 30, 2016 and 2015, respectively:

Teachers' Retirement Fund

Inflation	3.5 percent
Salary increases	4.45 - 8.25 percent, including wage inflation of 4.25 percent
Investment rate of return	6.5 percent, net of pension plan investment expense, and including inflation
Mortality	Pre-retirement and post-retirement mortality rates were based on the RP 2000 Combined Mortality Table projected to 2015 with Projection Scale AA set back three years for females. Post-disability mortality rates were based on the RP 2000 Disabled Mortality Table set back 1 year for males and set back 5 years for females.

**DISTRICT OF COLUMBIA
TEACHERS' AND POLICE OFFICERS AND FIREFIGHTERS'
RETIREMENT FUNDS
Notes to the Basic Financial Statements
For the years ended September 30, 2016 and 2015**

NOTE 5: NET PENSION LIABILITY/(ASSET) (CONTINUED)

Police and Firefighters' Retirement Fund

Inflation	3.5 percent
Salary increases	4.25 - 9.25 percent, including wage inflation of 4.25 percent
Investment rate of return	6.5 percent, net of pension plan investment expense, and including inflation
Mortality	Pre-retirement and post-retirement mortality rates were based on the RP 2000 Combined Mortality Table projected to 2015 with Projection Scale AA set forward 1 year for females.

The actuarial assumptions used in the October 1, 2015 valuation were based on the results of the most recent actuarial experience study for the period October 1, 2006 to September 30, 2010, dated November 7, 2011.

The discount rate used to measure the total pension liability was 6.5 percent. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that the District contributions will be made in accordance with the Board's funding policy adopted in 2012. 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.

**DISTRICT OF COLUMBIA
TEACHERS' AND POLICE OFFICERS AND FIREFIGHTERS'
RETIREMENT FUNDS**

**Notes to the Basic Financial Statements
For the years ended September 30, 2016 and 2015**

NOTE 5: NET PENSION LIABILITY/(ASSET) (CONTINUED)

The long-term expected rate of return on pension plan investments was determined using a log-normal distribution analysis 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 September 30, 2016 and 2015 are summarized in the following table:

<u>Asset Class</u>	<u>Target Allocation</u>	<u>Long-Term Expected Real Rate of Return</u>
Domestic Equity	22.0%	5.1%
Foreign Equity (Developed)	20.0%	5.0%
Foreign Equity (Emerging)	8.0%	6.9%
Investment Grade Bonds	15.0%	0.2%
Treasury Inflation-Protected Securities (TIPS)	3.0%	1.4%
High Yield Bonds	3.0%	3.7%
Foreign Bonds (Developed)	2.0%	1.0%
Emerging Markets Debt (Local)	2.0%	3.5%
Real Estate	5.0%	4.6%
Infrastructure	2.0%	5.7%
Private Equity	8.0%	7.3%
Hedge Funds	10.0%	3.4%
Total	<u>100.0%</u>	

**DISTRICT OF COLUMBIA
TEACHERS' AND POLICE OFFICERS AND FIREFIGHTERS'
RETIREMENT FUNDS**

**Notes to the Basic Financial Statements
For the years ended September 30, 2016 and 2015**

NOTE 5: NET PENSION LIABILITY/(ASSET) (CONTINUED)

Disclosure of the sensitivity of the net pension liability to changes in the discount rate - The following presents the net pension liability of the Teachers' Retirement Fund and the Police Officers and Firefighters' Retirement Fund, calculated using the discount rate of 6.5 percent, as well as what the Plan's net pension liability calculated using a discount rate that is one percentage point lower (5.5 percent) or one percentage point higher (7.5 percent) than the current rate (dollar amounts in thousands):

FY 2016	1% Decrease (5.50%)	Current Discount Rate (6.50%)	1% Increase (7.50%)
Teachers' Plan's			
Net Pension Liability/(Asset)	\$ 571,400	\$ 242,189	\$ (36,976)
Police and Firefighters' Plan's			
Net Pension Liability/(Asset)	\$ 532,621	\$ (279,069)	\$ (943,216)
FY 2015	Decrease (5.50%)	Current Discount Rate (6.50%)	Increase (7.50%)
Teachers' Plan's			
Net Pension Liability	\$ 598,302	\$ 280,173	\$ 23,315
Police and Firefighters' Plan's			
Net Pension Liability/(Asset)	\$ 698,746	\$ (78,585)	\$ (704,007)

NOTE 6: CONVERSION TO NEW CUSTODIAN

DCRB elected to transition to a new custodian in fiscal year 2016, ending its relationship with State Street Corporation and transitioning to Northern Trust as of December 1, 2015.

DISTRICT OF COLUMBIA
TEACHERS' AND POLICE OFFICERS AND FIREFIGHTERS'
RETIREMENT FUNDS
Notes to the Basic Financial Statements
For the years ended September 30, 2016 and 2015

NOTE 7: RETIREMENT BENEFITS PAYABLE TO U.S. TREASURY

During 2016, the U.S. Treasury completed a calculation of the share of employee contributions (refunds) processed in FY 1999 and 1998 and originally paid by U.S. Treasury. Pursuant to the February 1, 2005, Memorandum of Understanding (MOU) concerning the refunds under the District of Columbia Police Officers and Firefighters', and Teachers' Retirement Programs, the District government and Treasury agreed to begin paying refunds in accordance with its respective statutory responsibilities and that the District would also reimburse Treasury for its share of past refunds. The MOU provides direction for the calculation of the District and Treasury portions of refunds and which records to use for the calculation. The U.S. Treasury requested reimbursement of \$676,330 for the District's share of refunds issued in FY 1999 and FY 1998.

**DISTRICT OF COLUMBIA
TEACHERS' AND POLICE OFFICERS AND FIREFIGHTERS'
RETIREMENT FUND
Required Supplementary Information
Schedules of Changes in the Net Pension Liability and Related Ratios
(Dollar amounts in thousands)**

Teachers' Retirement Fund

	<u>Sept 30, 2016</u>	<u>Sept 30, 2015</u>	<u>Sept 30, 2014</u>
Total pension liability			
Service Cost	\$ 61,599	\$ 53,297	\$ 50,409
Interest	124,370	118,378	112,204
Benefit changes	-	-	-
Difference between expected and actual experience	2,656	(7,246)	-
Changes of assumptions	-	-	-
Benefit payments	(69,093)	(64,076)	(59,832)
Refunds	(6,205)	(5,576)	(5,790)
Net change in total pension liability	<u>113,327</u>	<u>94,777</u>	<u>96,991</u>
Total pension liability - beginning	<u>1,950,811</u>	<u>1,856,034</u>	<u>1,759,043</u>
Total pension liability - ending (a)	<u>2,064,138</u>	<u>1,950,811</u>	<u>1,856,034</u>
Plan net position			
Contributions - District Government	44,469	39,513	31,636
Contributions - Plan member	33,591	31,621	28,751
Net investment (loss) income	152,262	(72,647)	132,086
Benefit payments	(69,093)	(64,076)	(59,832)
Administrative expense	(4,746)	(4,543)	(3,787)
Refunds	(6,205)	(5,576)	(5,790)
Other income	1,033	385	522
Change in net position	<u>151,311</u>	<u>(75,323)</u>	<u>123,586</u>
Plan net position - beginning	<u>1,670,638</u>	<u>1,745,961</u>	<u>1,622,375</u>
Plan net position - ending (b)	<u>1,821,949</u>	<u>1,670,638</u>	<u>1,745,961</u>
Net pension liability - ending (a) - (b)	<u>\$ 242,189</u>	<u>\$ 280,173</u>	<u>\$ 110,073</u>
Ratio of plan net position to total pension liability - (b) / (a)	88.27%	85.64%	94.07%
Covered employee payroll	\$ 438,079	\$ 417,090	\$ 378,926
Net pension liability as a percentage of covered-employee payroll	55.28%	67.17%	29.05%

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

DISTRICT OF COLUMBIA
TEACHERS' AND POLICE OFFICERS AND FIREFIGHTERS'
RETIREMENT FUND
Required Supplementary Information
Schedules of Changes in the Net Pension Liability and Related Ratios
(Dollar amounts in thousands)

Police and Firefighters' Retirement Fund

	Sept 30, 2016	Sept 30, 2015	Sept 30, 2014
Total pension liability			
Service Cost	\$ 198,020	\$ 192,114	\$ 176,102
Interest	282,285	257,943	235,097
Benefit changes	-	-	-
Difference between expected and actual experience	(106,840)	(2,477)	-
Changes of assumptions	-	-	-
Benefit payments	(79,137)	(63,634)	(52,784)
Refunds	(2,179)	(1,396)	(1,637)
Net change in total pension liability	<u>292,149</u>	<u>382,550</u>	<u>356,778</u>
Total pension liability - beginning	<u>4,383,413</u>	<u>4,000,863</u>	<u>3,644,085</u>
Total pension liability - ending (a)	<u>4,675,562</u>	<u>4,383,413</u>	<u>4,000,863</u>
Plan net position			
Contributions - District Government	136,115	103,430	110,766
Contributions - Plan member	32,785	33,679	32,821
Net investment (loss) income	415,157	(187,283)	338,894
Benefit payments	(79,137)	(63,634)	(52,784)
Administrative expense	(12,918)	(11,939)	(9,730)
Refunds	(2,179)	(1,396)	(1,637)
Other income	2,810	1,012	1,342
Change in net position	<u>492,633</u>	<u>(126,131)</u>	<u>419,672</u>
Plan net position - beginning	<u>4,461,998</u>	<u>4,588,129</u>	<u>4,168,457</u>
Plan net position - ending (b)	<u>4,954,631</u>	<u>4,461,998</u>	<u>4,588,129</u>
Net pension liability (asset) - ending (a) - (b)	<u>\$ (279,069)</u>	<u>\$ (78,585)</u>	<u>\$ (587,266)</u>
Ratio of plan net position to total pension liability (asset) - (b) / (a)	105.97%	101.79%	114.68%
Covered employee payroll	\$ 438,114	\$ 446,201	\$ 426,135
Net pension liability (asset) as a percentage of covered-employee payroll	-63.70%	-17.61%	-137.81%

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

**DISTRICT OF COLUMBIA
TEACHERS' AND POLICE OFFICERS AND FIREFIGHTERS'
RETIREMENT FUND
Required Supplementary Information
Schedules of Employer Contributions
(Dollar amounts in thousands)**

Teachers' Retirement Fund

	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>2012</u>	<u>2011</u>	<u>2010</u>	<u>2009</u>	<u>2008</u>	<u>2007</u>
Actuarially determined employer contribution	\$ 44,469	\$ 39,513	\$ 31,636	\$ 6,407	\$ -	\$ -	\$ -	\$ -	\$ 6,000	\$ 14,600
Actual employer contributions	<u>44,469</u>	<u>39,513</u>	<u>31,636</u>	<u>6,407</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>6,000</u>	<u>14,600</u>
Annual contribution deficiency (excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Covered-employee payroll	\$ 438,079	\$ 417,090	\$ 378,926	\$ 369,071	\$ 381,235	\$ 384,455	\$ 337,516	\$ 336,600	\$ 359,100	\$ 349,900
Actual contributions as a percentage of covered-employee payroll	10.15%	9.47%	8.35%	1.74%	0.00%	0.00%	0.00%	0.00%	1.67%	4.17%

Notes to Schedule:

Valuation Date: Actual contributions are based on valuations as of October 1, two years prior to end of fiscal year in which contributions are reported.
Methods and Assumptions used to determine contribution rates for fiscal year 2016 are:

Actuarial cost method	Entry age normal
Amortization method	Level dollar, closed
Remaining amortization period	18 years
Asset valuation method	7-year smoothed market
Inflation	3.5%
Salary increases	4.45% to 8.25%, including wage inflation of 4.25%
Investment rate of return	6.50%, net of pension plan investment expense, and including inflation
Cost of Living Adjustments	3.50% (Limited to 3.0% for those hired after 11/1/1996)

**DISTRICT OF COLUMBIA
TEACHERS' AND POLICE OFFICERS AND FIREFIGHTERS'
RETIREMENT FUND
Required Supplementary Information
Schedules of Employer Contributions
(Dollar amounts in thousands)**

Police and Firefighters' Retirement Fund

	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>2012</u>	<u>2011</u>	<u>2010</u>	<u>2009</u>	<u>2008</u>	<u>2007</u>
Actuarially determined employer contribution	\$ 136,115	\$ 103,430	\$ 110,766	\$ 96,314	\$ 116,700	\$ 127,200	\$ 132,300	\$ 106,000	\$ 137,000	\$ 140,100
Actual employer contributions	<u>136,115</u>	<u>103,430</u>	<u>110,766</u>	<u>96,314</u>	<u>116,700</u>	<u>127,200</u>	<u>132,300</u>	<u>106,000</u>	<u>137,000</u>	<u>140,100</u>
Annual contribution deficiency (excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Covered-employee payroll	\$ 438,114	\$ 446,201	\$ 426,135	\$ 413,380	\$ 414,877	\$ 421,221	\$ 423,854	\$ 436,100	\$ 421,950	\$ 396,300
Actual contributions as a percentage of covered-employee payroll	31.07%	23.18%	25.99%	23.30%	28.13%	30.20%	31.21%	24.31%	32.47%	35.35%

Notes to Schedule:

Valuation Date: Actual contributions are based on valuations as of October 1, two years prior to end of fiscal year in which contributions are reported.
Methods and Assumptions used to determine contribution rates for fiscal year 2016 are:

Actuarial cost method	Entry age normal
Amortization method	Level dollar, closed
Remaining amortization period	18 years
Asset valuation method	7-year smoothed market
Inflation	3.5%
Salary increases	4.25% to 9.25%, including wage inflation of 4.25%
Investment rate of return	6.50%, net of pension plan investment expense, and including inflation
Cost of Living Adjustments	3.50% (Limited to 3.0% for those hired after 11/10/1996)

**DISTRICT OF COLUMBIA
TEACHERS' AND POLICE OFFICERS AND FIREFIGHTERS'
RETIREMENT FUND
Required Supplementary Information
Schedule of Investment Returns**

Annual Money-Weighted Rates of Return

	<u>FY 2016</u>	<u>FY 2015</u>	<u>FY 2014</u>
Total Portfolio	9.346%	-4.006%	-8.178%

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

DISTRICT OF COLUMBIA
TEACHERS' AND POLICE OFFICERS AND FIREFIGHTERS'
RETIREMENT FUND
Supplementary Information
Schedules of Administrative Expenses
For the years ended September 30, 2016 and 2015

	<u>2016</u>	<u>2015</u>
Personal services		
Salaries	\$ 6,180,879	\$ 4,760,425
Fringe benefits	<u>1,318,468</u>	<u>1,301,367</u>
Total personal services	<u>7,499,347</u>	<u>6,061,792</u>
Non-personal services		
Office supplies	99,222	126,214
Telephone	91,324	71,496
Rent	1,753,961	1,634,856
Travel	208,681	206,727
Professional fees	6,378,535	6,225,496
Postage	27,327	29,241
Printing	52,725	14,387
Insurance	150,954	150,693
Dues & memberships	41,177	32,718
Audit costs	62,500	85,500
Actuarial fees	180,000	153,584
Legal fees	337,453	524,213
Investment fees	12,862,522	11,377,263
Contractual services (STAR)	1,697,283	1,077,383
Equipment and rental	375,969	966,527
Depreciation	<u>-</u>	<u>-</u>
Total non-personal services	<u>24,319,633</u>	<u>22,676,298</u>
Total administrative expenses	31,818,980	28,738,090
Investment expenses	<u>(14,154,932)</u>	<u>(12,256,010)</u>
Net administrative expenses	<u>\$ 17,664,048</u>	<u>\$ 16,482,080</u>

**DISTRICT OF COLUMBIA
TEACHERS' AND POLICE OFFICERS AND FIREFIGHTERS'
RETIREMENT FUND
Supplementary Information
Schedules of Investment Expenses
For the years ended September 30, 2016 and 2015**

	<u>2016</u>	<u>2015</u>
Investment managers*	\$ 11,811,259	\$ 10,117,761
Investment administrative expense	1,051,263	878,747
Investment consultants	1,017,272	1,030,008
Investment custodian	<u>275,138</u>	<u>229,494</u>
 Total investment expenses	 <u>\$ 14,154,932</u>	 <u>\$ 12,256,010</u>

*Fees paid to traditional investment managers only; traditional investment managers are those that invest primarily in public equity and fixed income securities. A significant number of alternative investments are presented net of expenses. Management expenses are netted against investment income and because they are not readily separable from specific investment income as of the financial statement reporting date, amounts are recorded and reported net of management expenses and therefore are not included on this schedule.

**DISTRICT OF COLUMBIA
TEACHERS' AND POLICE OFFICERS AND FIREFIGHTERS'
RETIREMENT FUND
Supplementary Information
Schedules of Payments to Consultants
For the years ended September 30, 2016 and 2015**

<u>Professional/Consultant</u>	<u>Nature of Service</u>	<u>FY 2016</u>	<u>FY 2015</u>
Administrative Consultants			
Software Information Resource Corp.	Information technology consulting	\$ 1,731,030	-
U.S. Treasury Office of D.C. Pensions	Benefit payment processing	1,220,209	1,077,383
Mobomo, LLC	Information technology consulting	760,125	809,190
Morgan, Lewis & Bockius	Legal counsel	323,739	410,882
Softech & Associates, Inc.	Information technology consulting	248,000	242,000
Ectam, LLC	Information technology consulting	236,880	213,485
D.C. Office of the Chief Technology Officer	Information technology consulting	228,000	228,000
Cavanaugh Macdonald Consulting	Actuarial services	194,655	121,147
Managed Frameworks, LLC	Information technology consulting	179,057	195,772
DLT Solutions, Inc.	Information technology consulting	175,915	87,507
Midtown Personnel Inc.	Benefits consulting	168,261	80,858
Business Development Associates, LLC	Information technology consulting	157,541	38,789
D.C. Department of Human Resources	Information technology consulting	136,607	137,859
Analytica LLC	Information technology consulting	128,338	-
Intuitive Technology Group, LLC	Information technology consulting	118,724	37,802
Gartner, Inc.	Information technology consulting	116,898	102,193
Mark Jackson	Information technology consulting	106,630	98,673
FireEye, Inc.	Information technology consulting	105,283	-
Yared Desta	Information technology consulting	99,912	88,858
TW Telecom	Information technology consulting	97,658	89,548
IT-CNP, Inc..	Information technology consulting	94,802	-
Equinix, Inc.	Information technology consulting	94,393	79,158
Networking for Future, Inc.	Information technology consulting	73,672	471,745
Vonage Business formerly Icore Networks, Inc.	Information technology consulting	63,681	56,642
Clifton Larson Allen	Financial audit	62,500	85,500
National Associates, Inc.	Benefits consulting	61,130	3,868
RSM US LLP formerly RSM McGladrey, Inc.	Financial system consulting	47,582	62,200
Katharine A. Schultz	Executive consultant	45,072	-
Steven Van Rees	Operations consultant	43,650	-
ASI Government, Inc.	Temporary staffing services	40,934	152,006
Capitol Document Solutions	Information technology consulting	40,239	32,481
Newlin LLC	Accounting & audit consulting	39,071	79,605
HBP, Inc.	Graphic design for publications	38,693	13,993
Avitecture	Information technology consulting	37,198	104,472
Diligent Corp	Information technology consulting	31,575	35,225
CEM Benchmarking, Inc.	Investment consultant	30,000	-
DC Net	Information technology consulting	28,985	-
eVestment Alliance	Online Investment service	22,932	21,840
Advent Software, Inc.	Investment consulting	20,538	-
Sebastian Podesta	Professional services	18,893	39,095
Project Made Easy	Information technology consulting	17,400	-
ZixCorp Systems, Inc.	Information technology consulting	16,575	18,663
Kofax, Inc.	Information technology consulting	16,562	15,670
Groom Law Group	Legal counsel	13,159	113,017

DISTRICT OF COLUMBIA
TEACHERS' AND POLICE OFFICERS AND FIREFIGHTERS'
RETIREMENT FUND
Supplementary Information
Schedules of Payments to Consultants
For the years ended September 30, 2016 and 2015

<u>Professional/Consultant</u>	<u>Nature of Service</u>	<u>FY 2016</u>	<u>FY 2015</u>
American Arbitration Association	Arbitration services	12,918	-
InfoLock Technologies	Information technology consulting	10,090	48,758
Corporate Investigations, Inc.	Professional services	8,468	8,965
Human Resources Technologies, Inc.	Information technology consulting	7,958	14,469
Tecknomic LLC	Information technology consulting	7,316	-
Exemplis LLC	Professional services	6,117	-
The Newberry Group, Inc.	Information technology consulting	5,451	38,716
Shaquja Clark	Executive consultant	3,736	-
Clayton Gordon	Information technology intern	3,325	-
ImageTag, Inc.	Information technology consulting	3,000	-
Syed-Mohd Nasib Hafeez	Information technology consulting	2,656	-
Carlson Dettmann LLC	Information technology consulting	2,450	-
William Harris	Information technology consulting	2,223	-
RaeShawn White	Benefits intern	1,356	-
Brea Grisham	Benefits intern	1,002	-
John Siegmund	Investment intern	894	-
Armstrong Teasdale	Legal counsel	555	-
Linea Solutions, Inc.	Business process re-engineering	-	506,241
Tony Phan	Information technology consulting	-	173,280
AON Consulting	Insurance consulting	-	141,556
MVS, Inc.	Professional services	-	140,422
Worldwide Staffing Exchange	Information technology consulting	-	81,963
D.C. Metropolitan Police Dept	Information technology consulting	-	65,580
Leslie Randle	Information technology consulting	-	61,040
Christina Lipscombe	Information technology consulting	-	57,898
Valsatech	Information technology consulting	-	38,198
Telecommunications Development Corp	Information technology consulting	-	37,280
Cheiron, Inc.	Actuarial auditing services	-	37,000
Document Access Systems	Information technology consulting	-	34,900
Document Management Solutions	Information technology consulting	-	19,225
True Ballot, Inc.	Board elections	-	18,118
SHI International Corporation	Information technology consulting	-	16,973
Total administrative consultants		7,612,213	\$ 6,985,704
Investment Consulting			
Cliffwater, LLC	Traditional investment consulting	525,006	682,508
Meketa Investment Group	Traditional investment consulting	403,334	290,000
Insightful Pension Consulting Group, LLC	Investment consultant	53,932	-
Zeno Consulting Group, LLC	Traditional investment consulting	35,000	57,500
Total investment consultants		1,017,272	1,030,008
Total payments to consultants		\$ 8,629,485	\$ 8,015,713



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INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS

Board of Trustees
District of Columbia Teachers' Retirement Fund and
District of Columbia Police Officers and Firefighters' Retirement Fund

We have audited, in accordance with the 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, the financial statements of the District of Columbia Teachers' Retirement Fund and the District of Columbia Police Officers and Firefighters' Retirement Fund (collectively, the Funds), which comprise the combining statement of fiduciary net position as of September 30, 2016, and the related combining statement of changes in fiduciary net position for the year then ended, and the related notes to the financial statements, and have issued our report thereon dated January 3, 2017.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the Funds' internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Funds' internal control. Accordingly, we do not express an opinion on the effectiveness of the Funds' internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. *A material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the Funds' financial statements will not be prevented, or detected and corrected on a timely basis. *A significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Funds' financial statements are free from material misstatement, we performed tests of their compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the result of that testing, and not to provide an opinion on the effectiveness of the Funds' internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Funds' internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

A handwritten signature in cursive script that reads "CliftonLarsonAllen LLP".

CliftonLarsonAllen LLP

Baltimore, Maryland
January 3, 2017