



# Comprehensive Annual Financial Report

For the fiscal years ended  
September 30, 2020 and 2019

**Teachers' Retirement Fund and  
Police Officers and Fire Fighters'  
Retirement Fund  
of the  
District of Columbia Government  
as managed by  
The District of Columbia  
Retirement Board**



## **Comprehensive Annual Financial Report**

For the fiscal years ended September 30, 2020 and 2019

### **District of Columbia Retirement Board**

a Pension Trust Fund of the District of Columbia Government

900 7th Street NW  
2nd Floor  
Washington, D.C. 20001  
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## Letter of Transmittal

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Washington, DC 20001  
[www.dcrb.dc.gov](http://www.dcrb.dc.gov)



Telephone: (202) 343-3200  
Facsimile: (202) 566-5000  
E-mail: [dcrb@dc.gov](mailto:dcrb@dc.gov)

February 19, 2021

Board of Trustees  
District of Columbia Retirement Board  
900 7<sup>th</sup> Street NW Washington, DC  
20001

Dear Board Members:

It is my pleasure to submit the Comprehensive Annual Financial Report (CAFR or Report) of the District of Columbia Retirement Board (DCRB or Agency) for the fiscal year (FY) ended September 30, 2020. This CAFR is a presentation of the financial results that are intended to provide useful information related to DCRB's management of the assets in the District of Columbia Police Officers and Fire Fighters' Retirement Fund, and the District of Columbia Teachers' Retirement Fund (collectively referred to as the Fund), which are held in trust for our members.

The District is responsible for members covered under the District Replacement Plans for Police Officers, Firefighters, and Teachers (the District Plans), which were adopted on July 1, 1997. Fund assets, which are pooled for investment purposes, may only be used to pay benefits and expenses necessary to administer the retirement program. DCRB also serves as the third-party administrator for benefits earned through June 30, 1997, under the frozen, federally funded plans (the Frozen Plans), which are the responsibility of the U.S. Department of the Treasury (U.S. Treasury). U.S. Treasury reimburses DCRB for costs incurred for these third-party administrator services. Any reimbursement of administrative expenses from U.S. Treasury offsets the amount required from the Fund each year.

For the District Plans, the District Government, as the employer, is the Plan Sponsor, and is responsible for the design of the Plans, for certain benefits administration activities, and for paying the required employer contributions into the Fund. In addition to employer contributions, Fund income includes employee contributions, which are a fixed percentage of their pay, and investment earnings.

DCRB's mission includes two, overarching goals: (1) *to prudently invest and manage the assets of the Fund*, and (2) *to administer retirement benefits by providing members with accurate and timely pension payments, as well as excellent customer service*. Agency operations are managed in accordance with DCRB's fiduciary responsibilities and relevant legal authorities. The projects and initiatives in progress, as well as those planned, are undertaken to support this mission.

## Letter of Transmittal

### Prudently Invest and Manage Fund Assets

One of DCRB's major, ongoing responsibilities is to prudently invest Fund assets, with the goal of earning a return that meets or exceeds the long-term actuarial return target of 6.5 percent. This target is intended to sustain the Fund's viability over the long-term investment horizon. I am pleased to report that, as of September 30, 2020, the Fund generated an annualized gross return of 8.5 percent since its inception in October 1982. For fiscal year 2020, a volatile market year, the Fund earned a gross return of 5.4 percent.

In building a solid foundation for achieving long-term, sustainable risk-adjusted net returns, DCRB continues to review investment manager performance against benchmark returns, rebalance the portfolio to maintain compliance with asset allocation targets and ranges, and monitor and evaluate investment manager fees. In FY 2020, volatile markets created significant rebalancing opportunities, especially around the March/April pandemic-induced equity market decline and rebound.

In FY 2021, the focus will be on reviewing the Fund's strategic asset allocation and recommending any updates to further reduce equity-market risk through diversification, while maintaining similar return expectations. We also aspire to increase DCRB's partnerships with emerging and diverse investment managers.

More broadly, DCRB will continue providing ongoing education to Board members and staff on a wide range of topics including fiduciary principles; ethics; risk management and mitigation strategies; cybersecurity awareness; and actuarial principles. From a risk-management perspective, we believe that the integration of a strong governance, risk-mitigation, and compliance program is critical to sustaining longer-term investment returns and maintaining high quality operations.

In FY 2021, DCRB will engage a consultant to conduct an Agency-wide fiduciary audit. This is a top-to-bottom analysis of the Agency's operations, processes, and performance needed to ensure that DCRB is following best practices and planning for Fund sustainability.

### Provide Members with Accurate and Timely Payments and Excellent Customer Service

The other of DCRB's major ongoing responsibilities is to provide plan administration services. Among the Agency's primary tasks is to ensure the accurate calculation and timely payment of benefits to retired Plan participants and their survivors and beneficiaries, and to provide them with excellent customer service. These services also include providing information about the Plans, responding to questions, providing required notices, and communicating changes and issues related to the benefits.

DCRB continues to evolve its strategy and direction for plan administration services to support ongoing maturity in the services offered and the delivery of those services. The implementation of the strategic plan incorporates activities to support the participants and beneficiaries, partners external to DCRB, and the Agency's employees. The unexpected transition to work away from the office due to the global pandemic created an opportunity for the Agency to improve processes. The Agency was able to implement technical solutions to support the continuing of work through the year. During FY 2021, there are plans to annuitants to access certain demographic, benefit, and payment information online. In FY 2021, DCRB will provide Estimated Benefits Statements to active members of the Plans. In FY 2022 DCRB will update Summary Plan Descriptions (SPDs) for each of the Plans.



## Letter of Transmittal

### Strategic Planning and Initiatives

In 2005, when DCRB began its responsibilities as Plan Administrator for the District's Plans, most of the benefits being paid to retirees and survivors were the responsibility of the Federal Government and, consequently, the U.S. Treasury developed an automated System to Administer Retirement (STAR), to make the then paper-based plan administration process more efficient. Over the ensuing fifteen years, although the U.S. Treasury continues to pay out a larger amount of the benefits payable under the District Plans, the District Government now has a larger number of annuitants and survivors who are being paid. Since no further Federal Government service is being earned by District employees, the District's number of participants, and the amount of its payments, will continue to increase over time. As the composition of the participants population changes, DCRB must continue to explore and identify overarching solutions that manage the entire participant life cycle, in addition to the pension calculation and claims processing modules, the sub-systems also include Customer Relationship Management, Case Management, and Member Services.

Like so many other organizations, during FY 2020, DCRB spent a good deal of time creating an operating environment that allows staff to work remotely to avoid exposing members, Board members, staff, and stakeholders to COVID-19. With the 100% telework currently in effect due to COVID-19, all DCRB staff use laptops and remote access solutions to get their work done. We have implemented technical controls for secure remote access, encryption, patch management and Data Loss Prevention. We also implemented secure methods for individuals to submit information to DCRB.

### Management Responsibility for Financial Reporting

The responsibility for both the accuracy of the data and the completeness and fairness of the presentation of financial information, including all disclosures, rests with DCRB management. We believe the data, as presented, is accurate in all material respects; is presented in a manner designed to fairly set forth the Plan Fiduciary Net Position and the Changes in Fiduciary Net Position; and includes all disclosures necessary to enable the reader to gain the maximum understanding of the financial activities of the Fund.

The accounting records of DCRB are maintained by DCRB staff. Pension payment information is contained within STAR, which is managed by the U.S. Treasury. DCRB's employee payroll is processed through the District of Columbia's PeopleSoft System.

The Management Discussion and Analysis area of the Financial Section provides an introduction and overview of DCRB's financial statements. It supplements the Introductory Section of this CAFR, as well as the financial statements, notes, and supplementary information within the Financial Section.

The independent auditor's report was issued by the public accounting firm of BCA Watson Rice, LLP, whose selection was approved by DCRB's Board Members. This report on the Plans is presented in the Financial Section of this CAFR. DCRB's financial statements are audited annually. DCRB received an unmodified, or "clean," opinion for FY 2020, which is reflected in the opinion letter in the Financial Section of this document. DCRB will strive to obtain clean audit opinions annually and will continue to report our financial activities according to accounting principles generally accepted in the United States of America.

## Letter of Transmittal

The Agency's independent actuary performs an actuarial valuation each year. The actuarial study was performed as of October 1, 2020 for FY 2022 by the firm, Bolton. The actuarial certification letter provided by Bolton expressly states that the assumptions and methods used for funding purposes meet the parameters set by the Actuarial Standards of Practice (ASOP). The certification and related schedules included in the CAFR were provided by Bolton, whose selection was approved by DCRB's Board of Trustees. The actuarial valuation results are presented in the Actuarial Section of this CAFR.

Northern Trust, the custodian as of September 30, 2020, records and reports all investment and cash management transactions, and the DCRB staff responsible for review and controls over those records and transactions with prudent oversight by the Trustees.

DCRB management is responsible for maintaining internal accounting controls to provide reasonable assurance that transactions are properly authorized and recorded on an accrual basis in accordance with U.S. Generally Accepted Accounting Principles (GAAP), and that the financial statements conform with Governmental Accounting Standards Board (GASB) and American Institute of Certified Public Accountants (AICPA) reporting standards and Government Finance Officers Association (GFOA) guidelines. Consideration is given to the adequacy of internal accounting controls for systems under the authority of DCRB, as well as to the systems shared with other governmental offices or service providers. These controls are designed to provide reasonable assurance regarding the safekeeping of assets and the reliability of financial records. Additional disclosures that are specifically required by statute also are included in this CAFR.

## Recognition

GFOA awarded DCRB the Certificate of Achievement for Excellence in Financial Reporting to DCRB for its CAFR for the fiscal year ended September 30, 2019. To be awarded a Certificate of Achievement, an organization must publish an easily readable and efficiently organized CAFR. This Report must satisfy both GAAP and other applicable regulatory requirements. A Certificate of Achievement is valid for a period of one year. We believe that DCRB's CAFR continues to meet the Certificate of Achievement Program's requirements, and we are submitting it to GFOA to determine its eligibility for continuing certification.

DCRB also was among the public retirement systems that received the Public Pension Coordinating Council's (PPCC) Public Pension Standards 2019 Award in recognition of meeting professional standards for Plan design and administration. The PPCC is a national confederation of state retirement associations whose standards are widely recognized benchmarks for public pension systems in the areas of plan design, funding, actuarial and financial audits, benefits administration, and member communications.

## Letter of Transmittal

### Conclusion

In summary, I am pleased to report that the Fund is in sound financial condition, and that we continue striving to pay our Plan members accurately and timely. Further, the Trustees are fully engaged and committed to our mission, and we have a knowledgeable and experienced senior management team leading the Agency's strategic initiatives. Together, we continue to move forward in creating a comprehensive retirement system to serve the needs of Plan participants over the long-term.

I would like to express my appreciation to the U.S. Treasury's Office of D.C. Pensions, the District of Columbia City Council, the D.C. Office of Financial and Operations Systems, the D.C. Office of Budget and Planning, and all other D.C. Government Offices that support DCRB's Trustees, DCRB staff, consultants, and service providers for their tireless efforts to assure the financial soundness and successful operation of the District of Columbia Retirement Board.

If you have any questions regarding this CAFR of the District of Columbia Retirement Board for the fiscal year ended September 30, 2020, please direct them to my office at any time.

A handwritten signature in dark ink, appearing to read "Sheila M. Johnson", with a stylized flourish at the end.

Sheila Morgan-Johnson,  
Executive Director  
District of Columbia Retirement Board

## About DCRB

### History

DCRB is an independent agency of the District of Columbia government that was created by Congress in 1979 under the Retirement Reform Act (the Reform Act). Prior to the Reform Act, eligibility and benefit rules and financing arrangements for the Plans were authorized by acts of Congress and administered by the Federal Government. Benefits were paid monthly from the general revenues of the U.S. Treasury on a “pay-as-you-go” basis when workers retired, not on a prefunded basis using actuarial assumptions and methods.

In 1997, with the passage of the National Capital Revitalization and Self-Government Improvement Act (the Revitalization Act), the Federal Government assumed responsibility for the unfunded pension liabilities for retirement benefits earned by District Teachers, Police Officers, and Firefighters as of June 30, 1997.

In 1998, the District of Columbia passed the Police Officers, Firefighters and Teachers Retirement Benefit Replacement Plan Act (the Replacement Plan Act), which established retirement plans for pension benefits accrued after June 30, 1997, and the method for calculating the employer’s (District of Columbia) annual contribution to the retirement Fund. DCRB’s independent actuary determines the level of covered payroll and calculates the employer’s annual contribution, which is expressed as a percentage of payroll (the normal contribution rate) for each participant group.

With the passage of the District’s Office of Financial Operations and Systems Reorganization Act of 2004, DCRB assumed certain benefits administration responsibilities for the Plans from the District’s Office of Pay and Retirement Services. Those responsibilities included recordkeeping, related administrative tasks, and the payment of benefits for participants hired on or after July 1, 1997, who earned benefits under the District Plans. Under a memorandum of understanding signed in 2005, DCRB assumed recordkeeping and administrative tasks for participants hired prior to July 1, 1997, and whose benefit costs are the responsibility of the U.S. Treasury.

## About DRCB

### Profile of the Plans

The District of Columbia Police Officers and Firefighters' Retirement Plan provides retirement, service-related disability, non-service-related disability, and death benefits. All police officers and firefighters of the District of Columbia automatically become members on their date of employment. Police cadets are not eligible.

The District of Columbia Teachers' Retirement Plan provides retirement, disability, and death benefits. Permanent, temporary, and probationary teachers for the District of Columbia public day schools become members automatically on their date of employment. Other employees covered include school librarians, principals, and counselors. Former District of Columbia teachers working at District of Columbia public charter schools may be eligible to remain in the Plan.

In order to minimize administrative expenses, while providing a broad range of investment options that are economically feasible, the assets of the Plans are comingled for investment purposes. The investment returns of the Fund are calculated based on the fair value of the assets. The Board seeks long-term investment returns in excess of the actuarial investment rate of return assumption at a level of risk commensurate with the expected levels of returns and consistent with sound and responsible investment practices. The Board, working closely with investment consultants and with input from its actuary, selects the optimal asset allocation policy which best reflects the risk tolerance and investment goals of the Fund.

The asset allocation policy is implemented through the careful screening and selection of investment managers that have an audited, favorable, long-term track record, a disciplined investment process, and reasonable investment management fees. The Fund also seeks to outperform the Policy Benchmark, computed as the weighted average index return of the strategic asset allocation as described in the Investments Section.

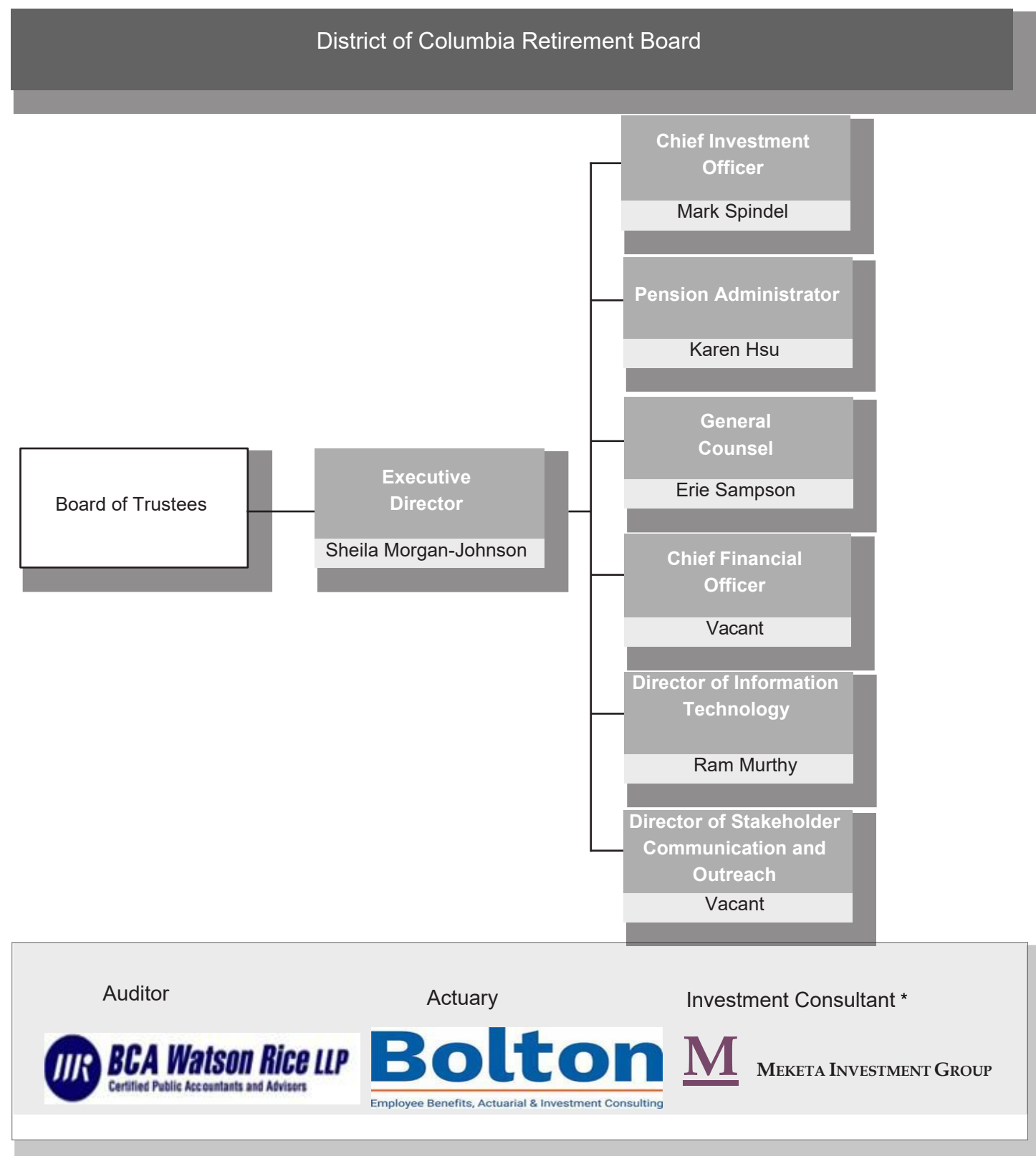
Upon assuming responsibility for administering the District Plans in September 2005, DCRB established a Benefits Department that is available to all Plan participants and their survivors and beneficiaries. The Benefits Department calculates benefit payments and works closely with the U.S. Treasury's Office of D.C. Pensions (ODCP) to implement system changes resulting from software upgrades or legislation affecting Plan provisions. DCRB produces Plan communications that include periodic newsletters and required communications such as Summary Plan Descriptions, as prescribed by statute. ODCP maintains the retirement information system used to calculate benefits, issue benefit payments and handle all payment-related activities, including tax withholdings and premiums for health and life insurance coverage.

By statute, the Board of Trustees is responsible for establishing DCRB's annual budget. The budget relies on monies derived from the Fund's investment earnings and employer and employee contributions. In addition, DCRB receives reimbursements as the third-party administrator for the Frozen Plans covering members whose pension benefits are financed by the U.S. Treasury. The District Council provides oversight of the budget process and, pursuant to Section 1-711 (f) of the District of Columbia Code, "may establish the amount of funds which will be allocated by the Board for administrative expenses, but may not specify the purposes for which such funds may be expended or the amounts which may be expended for the various activities."



## Organizational Structure

As of September 30, 2020



\*Information regarding the investment consultants can be found in the Schedule of Fees and Commissions in the Investments Section.

## Board of Trustees

As of September 30, 2020

DCRB's Board (the Board) has 12 Trustees, six (6) of whom are elected by the participant groups, three (3) who are appointed by the Mayor, and three (3) who are appointed by the District Council. In addition, the DC Treasurer (representing the District's Chief Financial Officer), serves on the Board as an ex-officio (non-voting) member. The Trustees, who are fiduciaries, must act solely in the interest of all Plan members.



Janice Adams  
Mayoral Appointee  
Current Term:  
2020 - 2024



Lyle Blanchard  
Treasurer  
Council Appointee  
Current Term:  
2017 - 2021



Joseph Bress  
Council Appointee  
Current Term:  
2020 - 2022



Joseph Clark  
Mayoral Appointee  
Vice Chair  
Current Term:  
2018 - 2022



Mary Collins  
Elected Retired Teacher  
Current Term:  
2018 - 2022



Denise Daniels  
Elected Active Teacher  
Current Term:  
2019- 2021



Gary Hankins  
Chairman  
Elected Retired Police  
Officer  
Current Term:  
2017 - 2021



Tracy Harris  
Mayoral Appointee  
Treasurer  
Current Term:  
2019 - 2023

## Board of Trustees

As of September 30, 2020



Gregory Pemberton  
Elected Active Police  
Officer  
Current Term: 2019 -  
2023



Edward Smith  
Elected Active Firefighter  
Current Term:  
2017 - 2021



Michael Warren  
Council Appointee  
Current Term:  
2019 - 2023

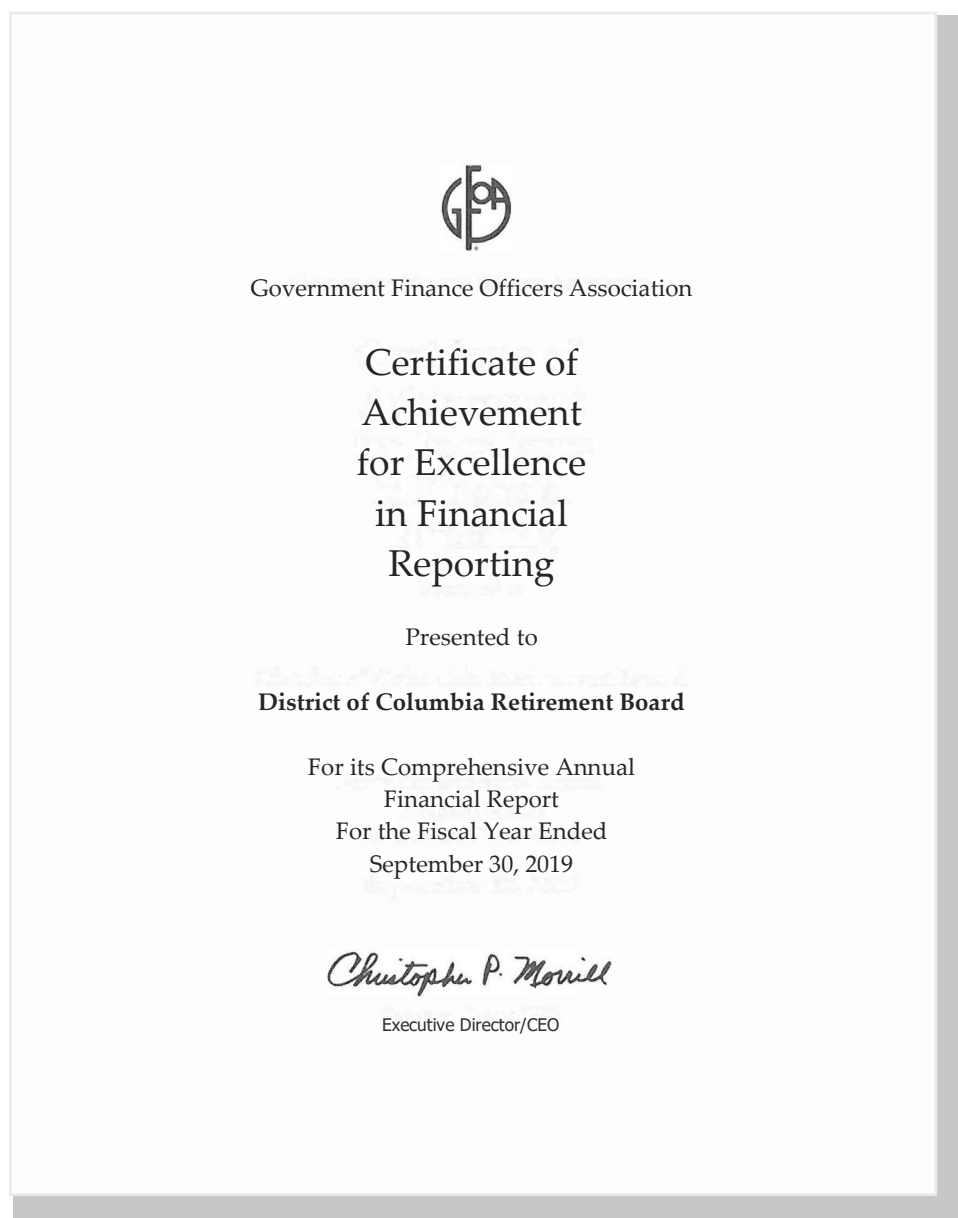


Bruno Fernandes  
Designee of the D.C.  
CFO  
D.C. Deputy CFO/  
Treasurer

## Awards

### Certificate of Achievement for Excellence in Financial Reporting

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to DCRB for our Comprehensive Annual Financial Report for the Fiscal Year ended September 30, 2019. The Certificate of Achievement is awarded to a government entity for publishing an easily readable and efficiently organized comprehensive annual financial report that satisfies both generally accepted accounting principles and applicable legal requirements. DCRB's Finance Department has won this award for the past twelve years. We believe our current comprehensive annual report continues to meet the Certificate of Achievement Program's requirements.



## Awards

### Public Pension Standards Award

The Public Pension Coordinating Council (PPCC) awarded a Public Pension Standards Award for Funding to DCRB for the Fiscal Year ended September 30, 2019. To be awarded a Public Pension Standards Award, a public pension program must meet professional standards for plan funding as set forth in the Public Pension Standards. A Public Pension Standards Award is valid for a period of one year.



Public Pension Coordinating Council

Recognition Award for Funding  
**2019**

Presented to

District of Columbia Retirement Board

In recognition of meeting professional standards for  
plan funding as set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation  
of

National Association of State Retirement Administrators (NASRA)  
National Conference on Public Employee Retirement Systems  
(NCPERS)  
National Council on Teacher Retirement (NCTR)

A handwritten signature in black ink that reads 'Alan H. Winkle'.

Alan H. Winkle  
Program Administrator



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## INDEPENDENT AUDITOR'S REPORT

To the Board of Trustees, District of Columbia Retirement Board for  
District of Columbia Teachers' Retirement Fund and  
District of Columbia Police Officers and Fire Fighters' Retirement Fund

### Report on the Funds' Financial Statements

We have audited the accompanying combining financial statements of District of Columbia Teachers' Retirement Fund and District of Columbia Police Officers and Fire Fighters' Retirement Fund (the Funds), Pension Trust Funds of the Government of the District of Columbia (the District), which comprise the Combining Statement of Fiduciary Net Position as of September 30, 2020, and the related Combining Statement of Changes in Fiduciary Net Position for the year then ended, and the related notes to the Funds combining financial statements, which collectively comprise the Funds' basic financial statements.

### Management's Responsibility for the Funds' Basic Financial Statements

The Funds' management is responsible for the preparation and fair presentation of the Funds' basic 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 the Funds' basic financial statements that are free from material misstatement, whether due to fraud or error

### Auditor's Responsibility

Our responsibility is to express an opinion on the Funds' basic financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America, and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the Funds' basic financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the basic financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the basic financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Funds' preparation and fair presentation of the basic 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 Funds' 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 basic financial statements.

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

### Opinions

In our opinion, the Funds' basic financial statements referred to above present fairly, in all material respects, the respective financial position of the Funds, as of September 30, 2020, and the respective changes in 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 are intended to present the financial position and changes in financial position of the Funds, and do not purport to, and do not present fairly the financial position of the District of Columbia, as of September 30, 2020, and the changes in its financial position for the year then ended in accordance with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

## **Other Matters**

### Prior Period Financial Statements

The combining financial statements of the Funds as of September 30, 2019, were audited by other auditors whose report dated January 16, 2020, expressed an unmodified opinion on those statements

### Required Supplementary Information

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

### Other Information

Our audit was conducted for the purpose of forming an opinion on the Funds' basic financial statements. The supplementary information, such as schedules of administrative expenses, schedules of investment expenses and schedules of payments to consultants, as listed in the table of contents, are presented for purposes of additional analysis and are not a required part of the Funds' basic financial statements.

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

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

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

In accordance with *Government Auditing Standards*, we have also issued our report dated January 15, 2021 on our consideration of the Funds' internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is 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 Funds' internal control over financial reporting and compliance.

Washington, D.C. *BCA Watson Rre LLP*  
January 15, 2021



## 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 Fire Fighters' Retirement Fund (POFRF), for the years ended September 30, 2020, 2019, and 2018, 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 September 26, 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.

***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*** 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.

## Management's Discussion and Analysis

The following Condensed and Combining Statements of Fiduciary Net Position present financial information for the combined Funds and compare fiscal years 2020, 2019, and 2018.

(Dollars in thousands)

	2020	2019	2018	2020 Percent Change	2019 Percent Change
<b>Assets</b>					
Cash and Short-Term Investments	\$ 33,041	\$ 76,434	\$ 59,334	(56.8) %	28.8 %
Receivables	51,495	8,620	8,657	497.4	(0.4)
Prepaid Expenses	157	151	-	4.0	0.0
Investments at Fair Value	8,986,818	8,453,602	8,144,235	6.3	3.8
Net Capital Assets	75	-	-	100.0	0.0
Total Assets	9,071,586	8,538,807	8,212,226	6.2	4.0
<b>Liabilities</b>					
Accounts Payable and Other Liabilities	7,011	6,437	7,518	8.9	(14.4)
Due to Federal Government	1,198	540	455	121.9	18.7
Due to District of Columbia Government	174	-	-	100.0	0.0
Investments Payables	31,623	10,985	4,377	187.9	151.0
Total Liabilities	40,006	17,962	12,350	122.7	45.4
Net Position Restricted for Pensions	\$ 9,031,580	\$ 8,520,845	\$ 8,199,876	6.0 %	3.9 %

### Assets

For fiscal year 2020, cash and short-term investments decreased by \$43.4 million (56.8%) while receivables increased by \$42.9 million (497.4%) over the fiscal year 2019. The net effect was an increase of \$0.5 million. 80.3% of the receivables in fiscal year 2020 was for investment sales proceeds receivable of \$41.4 million and 13.9% for employee contributions receivable of \$7.2 million. Cash and short-term investments increased by 28.8% in fiscal year 2019 compared to fiscal year 2018.

Prepaid expenses include payments for insurance premiums and IT related licenses and remained at the same level as the fiscal year 2019. No prepaid expense was made in fiscal year 2018.

Investment assets grew \$533.2 million (6.3%) over the fiscal year 2019. The highest growth was from private equity (28.0%) followed by fixed income (8.3%). The growth in the last quarter of fiscal year 2020 contributed to the high increase in private equity. In fiscal year 2019, the highest growth was from international equity (8.4%) followed by fixed income (5.5%) compared to the fiscal year 2018.

DCRB purchased IT equipment during the fiscal year 2020 that was capitalized based on DCRB's capitalization policy. No capital assets were purchased during the fiscal years 2019 and 2018.

### Liabilities

Accounts payable and other liabilities include accrued manager fees, accrued payroll, deferred rent, and other accrued administrative expenses. In fiscal year 2020, accounts payable and other liabilities increased by \$0.6 million, and 64.8% of it was for accrued investment manager fees of \$4.5 million. 79.0% of total liability was from investments payable, which was 187.9% higher than fiscal year 2019. Pending transactions at fiscal year end 2020 contributed to the increase. All pending transactions posted were confirmed to be completed in the following month. For fiscal year 2019, accounts payable and other liabilities decreased by 14.4% over fiscal year 2018. Investments payables in fiscal year 2019 were 151.0% higher than in fiscal year 2018.

## Management's Discussion and Analysis

The following Condensed and Combining Statements of Changes in Fiduciary Net Position present financial information for the combined Funds and compare fiscal years 2020, 2019, and 2018.

(Dollars in thousands)

	2020	2019	2018	2020 Percent Change	2019 Percent Change
<b>Additions</b>					
Employer Contributions	\$ 151,949	\$ 144,627	\$ 164,642	5.1 %	(12.2) %
Plan Member Contributions	80,236	78,675	74,802	2.0	5.2
Net Investment Income	520,531	318,034	410,971	63.7	(22.6)
Other Income	3,010	3,318	3,394	(9.3)	(2.2)
Total Additions	755,726	544,654	653,809	38.8	(16.7)
<b>Deductions</b>					
Benefit Payments	225,723	202,813	185,224	11.3	9.5
Refunds	6,109	7,951	7,706	(23.2)	3.2
Administrative Expenses	13,159	12,921	16,044	1.8	(19.5)
Total Deductions	244,991	223,685	208,974	9.5	7.0
Changes in Net Position	\$ 510,735	\$ 320,969	\$ 444,835	59.1 %	(27.8) %

### Additions

Additions in net position are comprised of employer contributions, employee contributions, net investment income, and other income. For fiscal year 2020, these additions totaled \$755.7 million, an increase of \$211.1 million (38.8%) from the fiscal year 2019 amount of \$544.7 million. This increase was primarily due to the higher investment returns experienced in fiscal year 2020. Net investment income increased by 63.7% in fiscal year 2020 over 2019. Net investment income makes up about 68.9% of the total additions to the net position figure. As a result, the higher net investment income has a significant impact.

Employer contributions in fiscal year 2020 totaled \$151.9 million, an increase of \$7.3 million (5.1%) from the fiscal year 2019 amount of \$144.6 million. The most recent Experience Study was completed in fiscal year 2017, covering the years 2012 through 2015. DCRB plans to conduct a new actuarial Experience Study in fiscal year 2021. The results of this study may require a change in some assumptions in the future. The fiscal year 2020 employer contribution was derived from the contribution rate calculated in the actuarial valuation report for the period ended October 1, 2018, 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.

Plan member contributions in fiscal year 2020 totaled \$80.2 million, an increase of \$1.6 million (2.0%) over the fiscal year 2019 amount of \$78.7 million. Member contributions consist of amounts paid by members for future retirement benefits and increased for two reasons: salary increases and an increase in active, contributing participants. According to the October 1, 2020 actuarial valuation report, the total number of active participants (post June 30, 1997 participants) increased by 276, an increase of 2.6%.

Investment income, net of investment fees, for fiscal year 2020 totaled \$520.5 million, an increase of 63.7%. Net investment income for fiscal year 2019 totaled \$318.0 million. Fiscal year 2019 had a return of 3.8% due to a volatile market. Net investment income for fiscal year 2018 totaled \$411.0 million and had a return of 5.4%. Other income in fiscal year 2020 totaled \$3.0 million, which was a decrease of \$0.3 million from the fiscal year 2019 amount of \$3.3 million. Other income in fiscal year 2019 was a decrease of \$0.1 million from the fiscal year 2018 amount of \$3.4 million. Other income consists mainly of reimbursements of administrative expenses from U.S. Treasury, which do not fluctuate significantly from year to year.

## Management's Discussion and Analysis

### Deductions

The statutory mandate of DCRB is to provide retirement, survivor, and disability benefits to eligible 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 Plans.

Deductions from net position are comprised of benefit payments, refunds, and administrative expenses. During fiscal year 2020, these deductions totaled \$245.0 million, an increase of \$21.3 million (9.5%) over fiscal year 2019 amount of \$223.7 million.

Benefit payments for fiscal year 2020 totaled \$225.7 million, an increase of \$22.9 million (11.3%) over the fiscal year 2019 amount of \$202.8 million. This increase is due to the demographic change of retirees and survivors receiving benefits. The benefit payments for members who retired after June 30, 1997 are paid by the District only and the number of these post 1997 retirees increased by 242 members, although the total number of retirees decreased by 69 members in fiscal year 2020. In fiscal years 2020 and 2019, benefit payments made on behalf of current retirees, survivors and beneficiaries comprised approximately 92.1% and 90.7% of the funds' expenses, respectively. Benefit payments for fiscal year 2019 totaled \$202.8 million, an increase of \$17.6 million (9.5%) over fiscal year 2018. The increase was due to the combination of a net growth in the number of retirees and survivors receiving benefits, COLA adjustments, and an overall increase in the final average salary for new retirees.

Refunds of member contributions in fiscal year 2020 totaled \$6.1 million, a decrease of \$1.8 million (23.2%) over the fiscal year 2019 amount of \$8.0 million. Refunds are typically much higher in the Teachers' Fund than in the Police Officers and Fire Fighters' Retirement Fund, because more teachers enter and leave the Plan annually, than do the active participants in the Police Officers and Firefighters' Retirement Plan. These refunds of member contributions are at the discretion of the member and vary from year-to-year. Refunds for fiscal year 2019 increased by \$0.3 million (3.2%) over fiscal year 2018.

Administrative expenses in fiscal year 2020 totaled \$13.2 million, an increase of \$0.2 million (1.8%) from the fiscal year 2019 amount of \$12.9 million. Although the payments to the U.S. Treasury for processing monthly retiree benefit payment services increased during the year, the administrative expenses remained at the same level as 2019 due to lower operational activities resulting from the pandemic. Administrative expenses in fiscal year 2019 decreased \$3.1 million (19.5%) from the fiscal year 2018, due to lower professional services fees and personal services costs.

### Funding Status

As of September 30, 2020 (the date of the most recent actuarial valuation), the funding status was 91.3% for the Teachers' Retirement Fund (TRF) and 109.9% for the Police Officers and Fire Fighters' Retirement Fund (POFRF). DCRB is a well-funded yet immature system as a result of the 1999 asset split with U.S. Treasury, in which U.S. Treasury assumed responsibility for all benefit obligations prior to July 1, 1997. As the system continues to mature, investment income is beginning to 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 September 30, 2020, the actuarial value of assets set aside to pay pension benefits was about \$2.4 billion for the TRF and about \$6.6 billion for the POFRF for a total of \$9.0 billion. The fair value of these assets as of September 30, 2020, included on the financial statements of DCRB, was \$2.4 billion for the TRF and \$6.6 billion for the POFRF for a total of \$9.0 billion. Therefore, when viewing the actuarial funding status in this case, the market value of assets would provide a similar funding position to the actuarial value of assets as of the September 30, 2020 valuation.

**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.



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## **FINANCIAL STATEMENTS**

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## Combining Statements of Fiduciary Net Position

As of September 30, 2020 and 2019

(Dollars in thousands)

	Teachers' Retirement Fund	2020 Police Officers and Fire Fighters' Retirement Fund	Total	Teachers' Retirement Fund	2019 Police Officers and Fire Fighters' Retirement Fund	Total
<b>Assets</b>						
Cash and Short-Term Investments	\$ 8,814	\$ 24,227	\$ 33,041	\$ 20,298	\$ 56,136	\$ 76,434
Receivables:						
Federal Government	789	2,168	2,957	437	1,161	1,598
Investment Receivables	11,037	30,335	41,372	252	695	947
Interest and Dividends	2	6	8	2	6	8
Employee Contributions	3,951	3,204	7,155	3,227	2,840	6,067
Other Receivables	1	2	3	-	-	-
Total Receivables	15,780	35,715	51,495	3,918	4,702	8,620
Prepaid Expenses	42	115	157	41	110	151
Investments at Fair Value:						
Domestic Equity	629,553	1,730,373	2,359,926	606,643	1,677,696	2,284,339
International Equity	646,113	1,775,890	2,422,003	618,471	1,710,408	2,328,879
Fixed Income	776,837	2,135,197	2,912,034	714,375	1,975,633	2,690,008
Real Assets	186,075	511,441	697,516	181,943	503,170	685,113
Private Equity	158,817	436,522	595,339	123,558	341,705	465,263
Total Investments at Fair Value	2,397,395	6,589,423	8,986,818	2,244,990	6,208,612	8,453,602
Capital Assets	23	64	87	-	-	-
Less Depreciation	3	9	12	-	-	-
Net Capital Assets	20	55	75	-	-	-
Total Assets	2,422,051	6,649,535	9,071,586	2,269,247	6,269,560	8,538,807
<b>Liabilities</b>						
Accounts Payable and Other Liabilities	1,859	5,152	7,011	1,704	4,733	6,437
Due to Federal Government	320	878	1,198	144	396	540
Due to District of Columbia Government	46	128	174	-	-	-
Investment Payables	8,436	23,187	31,623	2,917	8,068	10,985
Total Liabilities	10,661	29,345	40,006	4,765	13,197	17,962
<b>Net Position Restricted for Pensions</b>	<b>\$ 2,411,390</b>	<b>\$ 6,620,190</b>	<b>\$ 9,031,580</b>	<b>\$ 2,264,482</b>	<b>\$ 6,256,363</b>	<b>\$ 8,520,845</b>

See accompanying Notes to Basic Combining Financial Statements.

## Combining Statements of Changes in Fiduciary Net Position

For the years ended September 30, 2020 and 2019

(Dollars in thousands)

	Teachers' Retirement Fund	2020 Police Officers and Fire Fighters' Retirement Fund	Total	Teachers' Retirement Fund	2019 Police Officers and Fire Fighters' Retirement Fund	Total
<b>Additions</b>						
Contributions:						
District Government	\$ 58,888	\$ 93,061	\$ 151,949	\$ 53,343	\$ 91,284	\$ 144,627
Plan Members	42,356	37,880	80,236	40,432	38,243	78,675
Total Contributions	101,244	130,941	232,185	93,775	129,527	223,302
Investment Income						
Net Appreciation in Fair Value of Investments	130,757	359,227	489,984	74,878	204,976	279,854
Interest and Dividends	13,123	35,957	49,080	14,908	41,072	55,980
Total Gross Investment Income	143,880	395,184	539,064	89,786	246,048	335,834
Less:						
Investment Expenses	4,944	13,589	18,533	4,739	13,061	17,800
Net Investment Income	138,936	381,595	520,531	85,047	232,987	318,034
Other Income	803	2,207	3,010	883	2,435	3,318
Total Additions	240,983	514,743	755,726	179,705	364,949	544,654
<b>Deductions</b>						
Annuitant Benefit Payments	85,679	140,044	225,723	81,471	121,342	202,813
Refunds	4,873	1,236	6,109	6,418	1,533	7,951
Administrative Expenses	3,511	9,648	13,159	3,440	9,481	12,921
Total Deductions	94,063	150,928	244,991	91,329	132,356	223,685
Change in Fiduciary Net Position	146,920	363,815	510,735	88,376	232,593	320,969
Allocation Adjustments	(12)	12	-	-	-	-
<b>Net Position Restricted for Pensions:</b>						
Beginning of Year	2,264,482	6,256,363	8,520,845	2,176,106	6,023,770	8,199,876
<b>End of Year</b>	<u>\$ 2,411,390</u>	<u>\$ 6,620,190</u>	<u>\$ 9,031,580</u>	<u>\$ 2,264,482</u>	<u>\$ 6,256,363</u>	<u>\$ 8,520,845</u>

See accompanying Notes to Basic Combining Financial statements.

## Notes to Financial Statements

### NOTE 1: ORGANIZATION

The District of Columbia Teachers' Retirement Fund (TRF) and the District of Columbia Police Officers and Fire Fighters Retirement Fund (POFRF), collectively referred to as the Fund or the District Retirement Funds, are two separate single-employer defined benefit pension plans that 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, Fire Fighters, and Teachers Retirement Benefit Replacement Plan Act of 1998 (the Replacement Act). The Replacement Act established the District Retirement Plans 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.

### 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 nonvoting, 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 (DCPS) Office of Human Resources makes decisions regarding voluntary and involuntary retirement, survivor benefits, and annual medical and income reviews.

## Notes to Financial Statements

### **Teachers' Retirement Fund (Continued)**

**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 Plan 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.

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 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.

### **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.



## Notes to Financial Statements

### **Police Officers and Fire Fighters' Retirement Fund (Continued)**

**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 Plan.

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.

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 66⅔% of average base pay and a maximum annual disability retirement benefit of 70% of average base pay apply.

Members with a nonservice 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.

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 nonservice 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.

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.

## Notes to Financial Statements

### **Police Officers and Fire Fighters' Retirement Fund (Continued)**

**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 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 nonservice 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 used in the actuarial valuation as of September 30 was as follows:

Teachers' Retirement Fund	2020	2019
Retirees and Survivors Receiving Benefits (Post June 30, 1997)	4,071	4,059
Active Plan Members	5,531	5,226
Vested Terminations	1,510	1,446
Total Participants	11,112	10,731

Police Officers and Fire Fighters' Retirement Fund	2020	2019
Retirees and Survivors Receiving Benefits (Post June 30, 1997)	3,929	3,699
Active Plan Members	5,377	5,406
Vested Terminations	303	261
Total Participants	9,609	9,366

Total	2020	2019
Retirees and Survivors Receiving Benefits (Post June 30, 1997)	8,000	7,758
Active Plan Members	10,908	10,632
Vested Terminations	1,813	1,707
Total Participants	20,721	20,097

## Notes to Financial Statements

### **Contributions**

As a condition of participation, members are required to contribute certain percentages of salaries as authorized by statute. Plan 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 2020 and 2019 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.

### **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.

#### **Method Used to Value Investments**

Investments are reported at fair value. Securities traded on a national or international exchange are valued at the last reported sales price at current exchange rates. The fair value of private investment funds, including private equity and private real assets, is determined using unit values supplied by the fund managers, which are based upon the fund managers' appraisals of the funds' underlying holdings. Such values involve subjective judgement and may differ from amounts which would be realized if such holdings were sold. The fair value of limited partnership investments is based on valuations of the underlying assets of the limited partnerships as reported by the general partner. A significant number of investment managers provide account valuations net of management expenses. Those expenses are netted against investment income.

#### **Use of Estimates**

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, at the date of the financial statements and additions and deductions during the reporting period. Significant estimates include the pension obligations and useful lives of capital assets. Actual results could differ from those estimates.

#### **Reclassification**

Certain accounts in the prior-year financial statements have been reclassified for comparative purposes to conform to the presentation in the current-year financial statements.

## Notes to Financial Statements

### **Allocation**

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 of the Plan 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 allocation percentages fluctuate slightly between the TRF and POFRF every month. Annualized allocation percentages were 26.68% for TRF and 73.32% for POFRF as of September 30, 2020.

### **Capital Assets**

During the fiscal year 2020, DCRB purchased IT equipment that was depreciated using a straight-line method over five years based on DCRB's capitalization policy.

### **Recent Accounting Pronouncements**

GASB Statement No. 95, Postponement of the Effective Dates of Certain Authoritative Guidance, was issued in May 2020. The Statement provides temporary relief to governments and other stakeholders due to the COVID-19 pandemic. Eight Statements and four Implementation Guides scheduled to become effective for periods beginning after June 15, 2018, and later were postponed by one year. GASB 87, Leases, and its Implementation Guide were postponed by eighteen months. DCRB will keep evaluating the impact of some of the postponed Statements and will adopt the statements, if applicable.

### **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).

### **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 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.

## Notes to Financial Statements

The following is the Board's approved asset allocation policy.

	Target Allocation	Allowable Ranges
Public Equities	46 %	34-56 %
U.S. Equities	20	15-25
International Developed Market Equities	16	12-20
Emerging Market Equities	10	7-13
Fixed Income	30	17-43
U.S. Core Fixed Income	11	7-15
TIPS	6	4-8
Bank Loan	3	1-5
Emerging Market Debt	4	2-6
High Yield	4	2-6
Foreign Bond	2	1-3
Alternatives	24	14-36
Absolute Return	4	4-6
Private Equity	9	4-14
Real Assets	11	6-16
Real Estate	6	4-8
Infrastructure/Opportunistic	3	1-5
Natural Resources	2	1-3
Cash	0	0-5

**Custodial Credit Risk** – Custodial credit risk is the risk that, in the event of the failure of the counterparty, DCRB will not be able to recover the value of its investments that are in the possession of an outside party. Investments held by the custodian on behalf of DCRB are held in an account in the name of DCRB. Funds not invested at the end of a given day are placed in overnight instruments in the name of DCRB.

**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. Generally, 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.

## Notes to Financial Statements

### NOTE 4: INVESTMENTS (continued)

**Debt Instruments** – As of September 30, 2020, the Investment Pool held the following debt instruments: (Dollars in thousands)

Investment Type	Rating*	Fair Value	Duration (Years)	Percentage of Portfolio
Bank Loans	B+	\$ 3,985	0.06	0.14 %
	B	17,498	0.19	0.60
	B-	24,537	0.26	0.84
	CCC+	27,092	0.34	0.93
	CCC	7,749	0.11	0.27
	CCC-	3,906	0.05	0.13
	CC	6,421	0.07	0.22
	NR	54,268	(0.07)	1.86
Corporate Bonds - US (including Convertible Bonds)	BB+	9,172	0.29	0.31
	BB	1,547	0.01	0.05
	BB-	3,053	0.07	0.11
	B+	1,513	0.02	0.05
	B	34,590	0.75	1.19
	B-	30,346	0.48	1.04
	CCC+	44,280	0.78	1.52
	CCC	14,114	0.20	0.49
	CCC-	8,483	0.09	0.29
	CC	5,699	0.11	0.20
	NR	36,328	1.30	1.25
Corporate Bonds - Foreign	B+	2,032	0.59	0.07
	B	1,302	0.56	0.05
	B-	7,947	1.92	0.27
	CCC	3,597	0.87	0.12
U.S Treasury	AA+	711,837	7.88	24.44
Fixed Income Pooled Funds	NR	1,850,738	N/A	63.56
Total Fixed Income		<u>\$ 2,912,034</u>		<u>100.00 %</u>

\* Using quality ratings provided by Standard & Poor's



## Notes to Financial Statements

## NOTE 4: INVESTMENTS (continued)

**Debt Instruments** – As of September 30, 2019, the Investment Pool held the following debt instruments: (Dollars in thousands)

Investment Type	Rating*	Fair Value	Duration (Years)	Percentage of Portfolio
Bank Loans	B+	\$ 614	-	0.02 %
	B	2,431	-	0.09
	B-	18,627	0.01	0.69
	CCC+	12,337	0.02	0.46
	CCC	11,551	(0.25)	0.43
	CCC-	11,256	(0.03)	0.42
	CC	3,738	0.01	0.14
	C	876	(0.01)	0.03
	NR	57,102	0.01	2.12
Corporate Bonds - US (including Convertible Bonds)	BB	785	0.02	0.03
	BB-	2,023	0.03	0.08
	B+	6,563	0.07	0.25
	B	14,010	0.25	0.52
	B-	30,957	0.48	1.15
	CCC+	45,355	0.79	1.69
	CCC	23,164	0.38	0.86
	CCC-	1,455	0.01	0.05
	C	9,016	0.15	0.34
	NR	29,761	0.01	1.11
Corporate Bonds - Foreign	BB-	8,962	1.39	0.33
	B-	7,047	1.44	0.26
	CCC+	4,010	0.93	0.15
U.S Treasury	AA+	613,541	7.75	22.80
Fixed Income Pooled Funds	NR	1,774,827	7.34	65.98
Total Fixed Income		<u>\$ 2,690,008</u>		<u>100.00 %</u>

\* Using quality ratings provided by Standard & Poor's

## Notes to Financial Statements

### 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, 2020 and 2019, the Investment Pool held amounts in commingled funds which invested in foreign currencies totaling approximately \$2.6 billion and \$2.4 billion, respectively.

As of September 30, 2020, the Investment Pool held investments that were in a currency other than the United States Dollar, as summarized below:

(Dollars in thousands)

International Securities	Equity	Fixed Income	Private Equity	Real Estate	Short-term and Other	Total Non-U.S. Dollar
Euro	\$ -	\$ -	\$ 54,245	\$ 38,885	\$ 711	\$ 93,841
Canadian Dollar	-	-	28,216	-	-	28,216
British Pound Sterling	-	-	14,620	-	-	14,620
Swiss Franc	-	-	-	-	116	116
Japanese Yen	-	-	-	-	2	2
	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 97,081</u>	<u>\$ 38,885</u>	<u>\$ 829</u>	<u>\$ 136,795</u>

As of September 30, 2019, the Investment Pool held investments that were denominated in a currency other than the United States Dollar, as summarized below:

(Dollars in thousands)

International Securities	Equity	Fixed Income	Private Equity	Real Estate	Short-term and Other	Total Non-U.S. Dollar
Canadian Dollar	\$ -	\$ -	\$ 18,057	\$ -	\$ -	\$ 18,057
British Pound Sterling	-	-	13,808	-	-	13,808
Euro	-	-	40,961	-	-	40,961
	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 72,826</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 72,826</u>

**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.

The Board may participate in securities lending through its custodian in the future; however, it did not do so in fiscal years 2020 and 2019.

## Notes to Financial Statements

### NOTE 4: INVESTMENTS (continued)

**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 in the price or principal value of a security. The Board believes that all contracts are legally permissible in accordance with approved investment policies.

In accordance with the aforementioned investment policies of the Board, the Funds' investment managers used various derivative instruments to increase potential earnings and/or to hedge against potential losses during fiscal year 2020.

TBAs ("to-be-announced", sometimes referred to as "dollar rolls") are used by the Funds' investment managers as an alternative to hold mortgage-backed securities outright to raise the potential yield and to reduce transaction costs. TBAs are used because they are expected to behave similarly to mortgage-backed securities with identical credit, coupon, and maturity features. Credit risk is managed by limiting these transactions to primary dealers. Market risk for TBAs is not significantly different from the market risk for mortgage-backed securities.

Foreign currency forwards, futures, and options are generally used for defensive purposes. These contracts can reduce the Funds' exposure to particular currencies when adverse movements in exchange rates are expected. Foreign currency forwards and futures can introduce 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 underlying foreign exchange rates. Credit risk is managed by limiting derivative transactions to counterparties with short-term credit ratings of A1 or P1 or by trading on organized exchanges. Currency options can increase or decrease the Funds' exposure to foreign currencies.

Equity index futures were also used by the Funds to gain exposure to equity markets. Equity index futures are more efficient and cheaper than investing in all underlying equity securities. Equity index futures may 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 equities markets underlying the contracts used by the 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 organized futures exchanges.

Liquid exchange-traded and over-the-counter bond futures and options were used by the Funds to gain exposure to fixed income markets more efficiently than purchasing the underlying bonds. Market risk for these derivatives may be larger or smaller than the risk of the underlying fixed income market itself. Credit risk is managed by limiting transactions to counterparties with investment-grade ratings or by trading with member firms of organized exchanges.

Warrants were used by the Funds to gain equity exposure and to enhance performance. Warrants are often distributed by issuers of common stocks and bonds and are held for the same fundamental reasons as the original common stock and/or bonds. Stock 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 Funds' external investment managers, who have full discretion over such investment decisions within a contractual set of investment guidelines.

## Notes to Financial Statements

### NOTE 4: INVESTMENTS (continued)

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

The Funds may manage credit exposure using 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 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 Funds may hold derivative instruments directly via separately managed accounts or indirectly via pooled, commingled, or short-term funds. Information regarding risks associated with indirect holdings may not be disclosed. The following is a list of the Funds' derivatives exposure as reported by the Board's custodian bank as of September 30, 2020 and 2019.

**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 (NAV) per share (or its equivalent) are not classified in the fair value hierarchy as they do not have a readily determinable fair value.

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.

#### **Changes in Fair Value Levels**

The availability of observable market data is monitored to assess the appropriate classification of financial instruments within the fair value hierarchy. Changes in economic conditions or model-based valuation techniques may require the transfer of financial instruments from one fair value level to another. In such instances, the transfer is reported at the beginning of the reporting period.

Plan management has evaluated the significance of transfers between levels based upon the nature of the investments and size of the transfer relative to total net assets available for benefits. For the year ended September 30, 2020, investments in private equity securities were placed under Level 3 as compared to the previous year based on management's reevaluation of its valuation methodology.

The tables on pages 41 and 42 show 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.

## Notes to Financial Statements

### NOTE 4: INVESTMENTS (continued)

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

Equity securities classified in Level 3 are valued with last trade data having limited trading volume. Real assets classified in Level 3 are real estate investments generally valued using the income approach by internal manager reviews or independent external appraisers.

***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 tables on pages 41 and 42.

***Real Estate*** – DCRB has made commitments to purchase partnership interests in real estate funds as part of its long-term asset allocation plan for private markets. As shown in the table on page 41, it is fully funded as of September 30, 2020. This represents global investments in 37 real estate funds. As of September 30, 2019, the table on page 42 represents global investments in 39 real estate 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 asset 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 3 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 6 funds, including corporate bonds, and U.S. Treasury obligations, with redemption notifications not greater than 30 days.

## Notes to Financial Statements

### NOTE 4: INVESTMENTS (continued)

#### Investments Measured at Fair Value (Dollars in thousands)

	September 30, 2020	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
<b>Investments by Fair Value Level</b>				
Domestic Equity	\$ 336,694	\$ 328,224	\$ 1,128	\$ 7,342
International Equity	202,171	14,391	-	187,780
Fixed Income	664,833	-	322,853	341,980
Real Estate	393,376	-	-	393,376
Private Equity	595,339	-	-	595,339
Total Investments by Fair Value Level	2,192,413	\$ 342,615	\$ 323,981	\$ 1,525,817

#### Investment Measured at the Net Asset Value (NAV)

Domestic Equity	2,023,232
International Equity	2,219,832
Fixed Income	2,247,201
Real Estate	304,140
Total Investments Measured at NAV	6,794,405
Total Investments	<b>\$ 8,986,818</b>

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

	September 30, 2020	Unfunded Commitments	Redemption Frequency	Redemption Notice
Domestic Equity	\$ 2,023,232	\$ -	Daily	None
International Equity	2,219,832	-	Monthly	2-5 days
Fixed Income	2,247,201	-	Daily, Monthly	3-30 days
Real Estate	304,140	-	None	N/A
Total Investments Measured at NAV	\$ 6,794,405	\$ -		

#### Investments derivative instruments (Dollars in thousands)

	Market Value September 30, 2020
Forwards	\$ 92,236
Liabilities - Forwards	(90,897)
Liabilities - Swaps	(32,966)
Rights/Warrants	9,417
Swaps	19,215
Total	<b>\$ (2,995)</b>



## Notes to Financial Statements

### NOTE 4: INVESTMENTS (continued)

#### Investments measured at Fair Value (Dollars in thousands)

	September 30, 2019	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
<b>Investments by Fair Value Level</b>				
Domestic Equity	\$ 288,973	\$ 278,237	\$ 10,736	\$ -
International Equity	206,937	206,937	-	-
Fixed Income	623,222	-	623,222	-
Real Estate	421,396	-	-	421,396
Private Equity	465,263	-	-	465,263
Total Investments by Fair Value Level	2,005,791	\$ 485,174	\$ 633,958	\$ 886,659

#### Investment Measured at the Net Asset Value (NAV)

Domestic Equity	1,995,366
International Equity	2,121,942
Fixed Income	2,066,786
Real Estate	263,717
Total Investments Measured at NAV	6,447,811
Total Investments	<u>\$ 8,453,602</u>

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

	September 30, 2019	Unfunded Commitments	Redemption Frequency	Redemption Notice
Domestic Equity	\$ 1,995,366	\$ -	Daily, 3 times per month	None
International Equity	2,121,942	-	Monthly	2-5 days
Fixed Income	2,066,786	-	Daily, Monthly	3-30 days
Real Estate	263,717	365,899	None	N/A
Total Investments Measured at NAV	<u>\$ 6,447,811</u>	<u>\$ 365,899</u>		

#### Investments derivative instruments

	Market Value September 30, 2019
Forwards	\$ 155,131
Liabilities - Forwards	(148,900)
Liabilities - Swaps	(33,127)
Rights/Warrants	6,755
Swaps	15,392
Total	<u>\$ (4,749)</u>

## Notes to Financial Statements

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

The components of the net pension liability (asset) of the District Retirement Funds at September 30, 2020 and 2019 were as follows:

(Dollars in thousands)

	2020		2019	
	TRF	POFRF	TRF	POFRF
Total Pension Liability	\$ 2,640,803	\$ 6,023,843	\$ 2,494,291	\$ 5,604,573
Plan Fiduciary Net Position	2,411,390	6,620,190	2,264,482	6,256,363
Net Pension Liability/(Asset)	<u>\$ 229,413</u>	<u>\$ (596,347)</u>	<u>\$ 229,809</u>	<u>\$ (651,790)</u>
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	91.31%	109.90%	90.79%	111.63%

**Actuarial Assumptions** - The total pension liability was determined based on an actuarial valuation as of September 30, 2020 and 2019 using the following actuarial assumptions, applied to all periods included in the measurement:

#### Teachers' Retirement Fund

Actuarial cost method	Entry age normal
Amortization method	Level dollar, closed
Asset valuation method	5-year smoothed market
Inflation	3.50%
Salary increases	5.50% - 8.63%; includes 4.25% wage inflation
Investment rate of return	6.50% net of pension plan investment expense
Mortality (Healthy)	RPH-2014 Blue Collar Mortality with generational projection using Scale BB (1 year setback for males)
Mortality (Disabled)	RPH-2014 Disabled Mortality (6 year setback for males, set forward 7 years for females)
Cost of Living Adjustments	3.00% for those hired on or after 11/1/1996, 3.50% for those hired before 11/1/1996

#### Police and Fire Fighters' Retirement Fund

Actuarial cost method	Entry age normal
Amortization method	Level dollar, closed
Asset valuation method	5-year smoothed market
Inflation	3.50%
Salary Increases	4.25% - 7.38%; includes 4.25% wage inflation
Investment Rate of Return	6.50% net of pension plan investment expense
Mortality (Healthy)	RPH-2014 Blue Collar Mortality with generational projection using Scale BB (1 year setback for males)
Mortality (Disabled)	RPH-2014 Disabled Mortality (6 year setback for males, set forward 7 years for females)
Cost of Living Adjustments	3.00% for those hired on or after 11/1/1996, 3.50% for those hired before 11/1/1996

## Notes to Financial Statements

### NOTE 5: NET PENSION LIABILITY/(ASSET) (continued)

All assets and liabilities are computed as of September 30, 2020. Demographic information was collected as of June 30, 2020. The actuarial assumptions used were based on the results of the most recent actuarial experience investigation for the period October 1, 2011 to September 30, 2015, dated July 18, 2017.

The discount rate used to measure the total pension liability was 6.5%. 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 and revised in 2017. 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.

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, 2020 and 2019 are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Domestic Equity	20.0 %	7.2 %
International Developed Equity	16.0	7.8
Emerging Market Equity	10.0	8.8
U.S. Core Fixed Income	11.0	2.1
Treasury Inflation-Protected Securities	6.0	2.1
Bank Loans	3.0	4.5
Emerging Market Debt	4.0	4.3
High Yield Bonds	4.0	4.9
Foreign Bonds	2.0	2.3
Absolute Return	4.0	4.0
Private Equity	9.0	9.1
Real Estate	6.0	7.0
Infrastructure	3.0	6.4
Natural Resources	2.0	7.7
<b>Total Portfolio</b>	<b>100.0 %</b>	

## Notes to Financial Statements

### 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 Fire Fighters' Retirement Fund, calculated using the discount rate of 6.5%, as well as what the Fund's net pension liability calculated using a discount rate that is one percentage point lower (5.5%) or one percentage point higher (7.5%) than the current rate:

(Dollars in thousands)

FY2020	1% Decrease 5.50%	Current Discount Rate 6.50%	1% Increase 7.50%
Teachers' Retirement Fund Net Pension Liability / (Asset)	\$ 697,957	\$ 229,413	\$ (140,586)
Police Officers and Fire Fighters' Retirement Fund Net Pension Liability / (Asset)	\$ 494,053	\$ (596,347)	\$ (1,457,860)

FY2019	1% Decrease 5.50%	Current Discount Rate 6.50%	1% Increase 7.50%
Teachers' Retirement Fund Net Pension Liability / (Asset)	\$ 669,520	\$ 229,809	\$ (117,925)
Police Officers and Fire Fighters' Retirement Fund Net Pension Liability / (Asset)	\$ 372,957	\$ (651,790)	\$ (1,460,879)

### NOTE 6: CONTINGENCIES

DCRB is party to various legal proceedings, many of which occur in the normal course of its operations. These legal proceedings are not likely to have a material adverse impact on the Funds' financial position as of September 30, 2020 and 2019.

### NOTE 7: SUBSEQUENT EVENTS

As a result of the incidence of COVID-19, economic uncertainties may negatively impact the financial position and results of operations of the Funds. The duration of these uncertainties and the ultimate financial effects cannot be reasonably estimated at this time.

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## **FINANCIAL SECTION - REQUIRED SUPPLEMENTARY INFORMATION**

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## Schedules of Changes in the Net Pension Liability (Asset) and Related Ratios

(Dollars in thousands)

Teachers' Retirement Fund	2020	2019	2018	2017	2016	2015	2014
<b>Total Pension Liability</b>							
Service Cost	\$ 80,242	\$ 72,429	\$ 67,877	\$ 65,911	\$ 61,599	\$ 53,297	\$ 50,409
Interest	159,186	144,165	137,704	131,657	124,370	118,378	112,204
Difference Between Expected and Actual Experience	(2,364)	103,719	(19,505)	(37,230)	2,656	(7,246)	-
Changes in Assumptions	-	-	-	14,106	-	-	-
Benefit Payments	(85,679)	(81,471)	(78,430)	(72,069)	(69,093)	(64,076)	(59,832)
Refunds	(4,873)	(6,418)	(6,126)	(6,166)	(6,205)	(5,576)	(5,790)
Net Change in Total Pension Liability	146,512	232,424	101,520	96,209	113,327	94,777	96,991
Total Pension Liability - Beginning	2,494,291	2,261,867	2,160,347	2,064,138	1,950,811	1,856,034	1,759,043
Total Pension Liability - Ending (a)	2,640,803	2,494,291	2,261,867	2,160,347	2,064,138	1,950,811	1,856,034
<b>Fund Fiduciary Net Position</b>							
Contributions - District Government	58,888	53,343	59,046	56,781	44,469	39,513	31,636
Contributions - Plan Member	42,356	40,432	40,324	34,364	33,591	31,621	28,751
Net Investment Income (Loss)	138,924	85,047	94,129	239,554	152,262	(72,647)	132,086
Other Income	803	883	1,038	907	1,033	385	522
Benefit Payments	(85,679)	(81,471)	(78,430)	(72,069)	(69,093)	(64,076)	(59,832)
Administrative Expense	(3,511)	(3,440)	(4,474)	(4,721)	(4,746)	(4,543)	(3,787)
Refunds	(4,873)	(6,418)	(6,126)	(6,166)	(6,205)	(5,576)	(5,790)
Change in Fiduciary Net Position	146,908	88,376	105,507	248,650	151,311	(75,323)	123,586
Fund Fiduciary Net Position - Beginning	2,264,482	2,176,106	2,070,599	1,821,949	1,670,638	1,745,961	1,622,375
Fund Fiduciary Net Position - Ending (b)	2,411,390	2,264,482	2,176,106	2,070,599	1,821,949	1,670,638	1,745,961
Net Pension Liability (Asset) - Ending (a) - (b)	\$ 229,413	\$ 229,809	\$ 85,761	\$ 89,748	\$ 242,189	\$ 280,173	\$ 110,073
Ratio of Fund Fiduciary Net Position to Total Pension Liability (Asset) - (b) / (a)	91.31%	90.79%	96.21%	95.85%	88.27%	85.64%	94.07%
Covered Payroll	\$ 490,756	\$ 466,792	\$ 470,749	\$ 447,762	\$ 438,079	\$ 417,090	\$ 378,926
Net Pension Liability (Asset) as a Percentage of Covered Payroll	46.75%	49.23%	18.22%	20.04%	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.

## Schedules of Changes in the Net Pension Liability (Asset) and Related Ratios

(Dollars in thousands)

Police and Fire Fighters' Retirement Fund	2020	2019	2018	2017	2016	2015	2014
<b>Total Pension Liability</b>							
Service Cost	\$ 209,411	\$ 180,928	\$ 182,641	\$ 196,629	\$ 198,020	\$ 192,114	\$ 176,102
Interest	359,706	338,288	318,719	300,626	282,285	257,943	235,097
Difference Between Expected and Actual Experience	(8,567)	(57,642)	(84,452)	(188,549)	(106,840)	(2,477)	-
Changes in Assumptions	-	-	-	67,256	-	-	-
Benefit Payments	(140,044)	(121,342)	(106,794)	(92,537)	(79,137)	(63,634)	(52,784)
Refunds	(1,236)	(1,533)	(1,580)	(1,647)	(2,179)	(1,396)	(1,637)
Net Change in Total Pension Liability	419,270	338,699	308,534	281,778	292,149	382,550	356,778
Total Pension Liability - Beginning	5,604,573	5,265,874	4,957,340	4,675,562	4,383,413	4,000,863	3,644,085
Total Pension Liability - Ending (a)	6,023,843	5,604,573	5,265,874	4,957,340	4,675,562	4,383,413	4,000,863
<b>Fund Fiduciary Net Position</b>							
Contributions - District Government	93,061	91,284	105,596	145,631	136,115	103,430	110,766
Contributions - Plan Member	37,880	38,243	34,478	33,424	32,785	33,679	32,821
Net Investment Income (Loss)	381,607	232,987	316,842	655,310	415,157	(187,283)	338,894
Other Income	2,207	2,435	2,356	2,468	2,810	1,012	1,342
Benefit Payments	(140,044)	(121,342)	(106,794)	(92,537)	(79,137)	(63,634)	(52,784)
Administrative Expense	(9,648)	(9,481)	(11,570)	(12,838)	(12,918)	(11,939)	(9,730)
Refunds	(1,236)	(1,533)	(1,580)	(1,647)	(2,179)	(1,396)	(1,637)
Change in Fiduciary Net Position	363,827	232,593	339,328	729,811	492,633	(126,131)	419,672
Fund Fiduciary Net Position - Beginning	6,256,363	6,023,770	5,684,442	4,954,631	4,461,998	4,588,129	4,168,457
Fund Fiduciary Net Position - Ending (b)	6,620,190	6,256,363	6,023,770	5,684,442	4,954,631	4,461,998	4,588,129
Net Pension Liability (Asset) - Ending (a) - (b)	\$ (596,347)	\$ (651,790)	\$ (757,896)	\$ (727,102)	\$ (279,069)	\$ (78,585)	\$ (587,266)
Ratio of Fund Fiduciary Net Position to Total Pension Liability (Asset) - (b) / (a)	109.90%	111.63%	114.39%	114.67%	105.97%	101.79%	114.68%
Covered Payroll	\$ 473,513	\$ 460,686	\$ 454,209	\$ 441,904	\$ 438,114	\$ 446,201	\$ 426,135
Net Pension Liability (Asset) as a Percentage of Covered Payroll	(125.94)%	(141.48)%	(166.86)%	(164.54)%	(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.

**Schedules of Employer Contributions**

(Dollars in thousands)

Teachers' Retirement Fund					
Fiscal Year Ended September 30	Actuarially Determined Employer Contribution	Actual Employer Contribution	Contribution Deficiency (Excess)	Covered Payroll	Actual Contributions as a Percentage of Covered Payroll
2011	\$ -	\$ -	\$ -	\$ 384,455	0.00 %
2012	-	-	-	381,235	0.00
2013	6,407	6,407		369,071	1.74
2014	31,636	31,636		378,926	8.35
2015	39,513	39,513		417,090	9.47
2016	44,469	44,469		438,079	10.15
2017	56,781	56,781		447,762	12.68
2018	59,046	59,046		470,749	12.54
2019	53,343	53,343		466,792	11.43
2020	58,888	58,888		490,756	12.00

**Notes to Schedule:**

Valuation Date: For the fiscal year 2020 and prior, actuarially determined contribution amounts are calculated as of the beginning of the fiscal year. Actual contributions are based on valuations as of October 1, two years prior to the end of fiscal year in which contributions are reported. Actuarial valuations are performed every year. The assumptions shown below are from the currently approved assumptions and assumptions used to determine all contributions in the past may not have been the same.

Actuarial cost method	Entry age normal
Amortization method	Level dollar, closed
Remaining amortization period	Remaining amortization periods range from 11 to 20 years
Asset valuation method	5-year smoothed market
Inflation	3.50%
Salary increases	5.50% to 8.63%; includes wage inflation of 4.25%
Investment rate of return	6.50%, net of pension plan investment expense
Mortality	Pre-retirement and post-retirement mortality rates were based on the RPH 2014 Blue Collar Mortality Table projected generationally with Scale BB, set back 1 year for males. Post-disability mortality rates were based on the RPH-2014 Disabled Mortality Table set back 6 years for males and set forward 7 years for females.
Cost of living adjustments	3.50% for those hired before 11/1/1996 (Limited to 3.0% for those hired on or after 11/1/1996)

**Schedules of Employer Contributions**

(Dollar amounts in thousands)

Police Officers and Firefighters' Retirement Fund							
Fiscal Year Ended September 30	Actuarially Determined Employer Contribution	Actual Employer Contribution	Contribution Deficiency (Excess)	Covered Payroll	Actual Contributions as a Percentage of Covered Payroll		
2011	\$ 127,200	\$ 127,200	\$ -	\$ 421,221	30.20 %		
2012	116,700	116,700	-	414,877	28.13		
2013	96,314	96,314	-	413,380	23.30		
2014	110,766	110,766	-	426,135	25.99		
2015	103,430	103,430	-	446,201	23.18		
2016	136,115	136,115	-	438,114	31.07		
2017	145,631	145,631	-	441,904	32.96		
2018	105,596	105,596	-	454,209	23.25		
2019	91,284	91,284	-	460,686	19.81		
2020	93,061	93,061	-	473,513	19.65		

**Notes to Schedule:**

Valuation Date: For the fiscal year 2020 and prior, actuarially determined contribution amounts are calculated as of the beginning of the fiscal year. Actual contributions are based on valuations as of October 1, two years prior to the end of fiscal year in which contributions are reported. Actuarial valuations are performed every year. The assumptions shown below are from the currently approved assumptions and assumptions used to determine all contributions in the past may not have been the same.

Actuarial cost method	Entry age normal
Amortization method	Level dollar, closed
Remaining amortization period	Remaining amortization periods range from 11 to 20 years
Asset valuation method	5-year smoothed market
Inflation	3.50%
Salary increases	4.25% to 7.38%; includes wage inflation of 4.25%
Investment rate of return	6.50%, net of pension plan investment expense
Mortality	Pre-retirement and post-retirement mortality rates were based on the RPH 2014 Blue Collar Mortality Table projected generationally with Scale BB, set back 1 year for males. Post-disability mortality rates were based on the RPH-2014 Disabled Mortality Table set back 6 years for males and set forward 7 years for females.
Cost of living adjustments	3.50% for those hired before 11/1/1996 (Limited to 3.0% for those hired on or after 11/1/1996)

Schedule of Investment Returns

Annual Money-Weighted Rates of Return, Net of Fees

	FY 2020	FY 2019	FY 2018	FY 2017	FY 2016	FY 2015	FY 2014
Total Portfolio	5.270 %	3.840 %	5.340 %	12.970 %	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.

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**Schedules of Administrative Expenses**

For the years ended September 30, 2020 and 2019

	2020	2019
<b>Personal Services</b>		
Salaries	\$ 6,130,728	\$ 6,057,962
Fringe Benefits	1,602,527	1,481,507
<b>Total personal services</b>	<b>7,733,255</b>	<b>7,539,469</b>
<b>Nonpersonal Services</b>		
Office Supplies	43,854	70,296
Telephone	89,202	45,611
Rent	1,695,053	1,967,723
Travel	110,525	183,023
Professional Fees	892,099	1,148,521
Postage	12,685	14,239
Printing	12,712	8,846
Insurance	130,474	116,875
Dues and Memberships	42,273	41,038
Audit Costs	(10,005)	290,680
Actuarial Fees	177,532	137,533
Legal Fees	366,248	322,963
Investment Fees	17,908,934	16,807,130
Contractual Services (STAR)	2,386,721	1,967,689
Equipment and Rental	88,838	59,474
Depreciation	11,688	-
<b>Total non-personal services</b>	<b>23,958,833</b>	<b>23,181,641</b>
<b>Total administrative expenses</b>	<b>31,692,088</b>	<b>30,721,110</b>
<b>Investment expenses</b>	<b>(18,532,838)</b>	<b>(17,800,245)</b>
<b>Net administrative expenses</b>	<b>\$ 13,159,250</b>	<b>\$ 12,920,865</b>



**Schedules of Investment Expenses**

For the years ended September 30, 2020 and 2019

	2020	2019
Investment Managers*	\$ 16,881,482	\$ 15,766,206
Investment Administrative Expense	582,237	879,187
Investment Consultants	596,133	751,428
Investment Custodian	472,986	403,424
Total Investment Expenses	<u>\$ 18,532,838</u>	<u>\$ 17,800,245</u>

\*Investment managers' fees include mainly traditional managers' fees, as well as some non-traditional managers.

## Schedules of Payments to Consultants

For the years ended September 30, 2020 and 2019

Professional/Consultant	Nature of Service	FY 2020	FY 2019
<b>Administrative Consultants</b>			
U.S. Treasury Office of D.C. Pensions	Benefit Payment Processing	\$ 2,386,721	\$ 1,967,689
Morgan, Lewis & Bockius	Legal Counsel	315,310	322,963
MVS Inc.	Information Technology Consulting	178,150	-
Software Information Resource Corp.	Information Technology Consulting	139,480	275,015
Softech & Associates, Inc.	Information Technology Consulting	132,503	142,000
Cavanaugh Macdonald Consulting	Actuarial Services	121,920	137,533
Bolton Partners, Inc.	Actuarial Services	115,404	-
Office of Contract and Procurement	Procurement Services	105,500	136,971
Polihire Strategy Corp.	Recruitment Consulting	78,960	-
McConnell & Jones LLP	Audit Costs	54,880	-
Equinix, Inc.	Information Technology Consulting	40,000	109,311
Mobomo, LLC	Information Technology Consulting	38,388	72,382
CliftonLarsonAllen LLC	Financial Audit	36,008	68,000
Convergence, Inc.	Investment Consulting	31,575	60,000
DC Net	Information Technology Consulting	27,057	56,082
ODGroup, Inc. dba Orion Development	Professional Services	26,599	53,556
NGEN LLC	IT Audit Costs	24,215	44,750
International Foundation of Employee	CAPPP Training for Trustees	22,743	44,000
Capitol Document Solutions	Information Technology Consulting	21,682	40,980
DLT Solutions, Inc.	Information Technology Consulting	21,217	40,289
Advent Software, Inc.	Investment Consulting	18,699	39,552
Diligent Corp	Information Technology Consulting	17,883	31,575
DC Office of the Secretary	Record Retention Project	12,831	-
XO Holdings	Information Technology Consulting	10,370	27,860
Election-America, Inc.	Trustee Elections	6,907	25,842
Kofax, Inc.	Information Technology Consulting	5,876	23,874
D.C. Office of the Chief Technology	Information Technology Consulting	5,000	22,507
eVestment Alliance	Online Investment Service	3,223	20,689
TW Telecom	Information Technology Consulting	2,574	20,203
vTech Solutions, Inc.	Benefits Staffing Services	1,938	-
SyDar of DC. LLC	Professional Services	1,450	-
RSM US LLP formerly RSM McGladrey,	Financial System Consulting	-	19,314
SecureAuth Corporation	IT Software Maintenance	-	18,585
Networking for Future, Inc.	Information Technology Consulting	-	14,155
Harris, Mackessy & Brennan, Inc.	Information Technology Consulting	-	13,685
D.C. Department of Human	Information Technology Consulting	-	11,882
The Newberry Group, Inc.	Information Technology Consulting	-	9,434
Incapsulate, LLC	IT Software Maintenance	-	8,725
Carahsoft Technology Corporation	Information Technology Consulting	-	-
Julia Ann Nicholson	Board Governance Training	-	-
HBP, Inc.	Graphic Design for Publications	-	5,906
Phoenix Graphics, Inc.	Professional Services	-	3,550
Groom Law Group	Legal Counsel	-	5,390
Treyniqua Dickey	Professional Services Professional	-	2,840
Oquendo Computer Services	Services	-	2,825

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Professional/Consultant	Nature of Service	FY 2020	FY 2019
Neal R. Gross & Co, Inc.	Professional Services	-	1,089
Corporate Investigations, Inc.	Professional Services	-	1,072
Midtown Personnel, Inc.	Benefits Consulting	-	-
Emergent Systems Exchange, LLC	License Subscription	-	-
<b>Total Administrative Consultants</b>		<b>\$ 4,005,063</b>	<b>\$ 3,902,075</b>
<b>Investment Consulting</b>			
Meketa Investment Group	Traditional investment consulting	596,133	620,000
Insightful Pension Consulting Group	Investment consultant	-	113,928
Abel Solutions	Traditional investment consulting	-	17,500
<b>Total Investment Consultants</b>		<b>596,133</b>	<b>751,428</b>
<b>Total Payments to Consultants</b>		<b><u>\$ 4,601,196</u></b>	<b><u>\$ 4,653,503</u></b>

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## Introduction

The District of Columbia Retirement Board (the “Board”) is charged with the responsibility to prudently manage the assets of the District of Columbia Teachers’ Retirement Fund and the District of Columbia Police Officers and Fire Fighters’ Retirement Fund, underlying two defined benefit pension plans (collectively referred as to the “Fund”). The Board works with an independent investment consultant who possesses specialized experience and resources in asset allocation, investment manager due diligence, performance evaluation and risk management. The Board’s investment consultant and traditional investment managers acknowledge their fiduciary responsibility in writing. Investment managers are accorded discretion constrained by general and specific investment manager policy guidelines.

### Investment Objectives and Policies

The Board targets investment returns that meet or exceed the actuarial investment return at a level of risk commensurate with the expected return level and consistent with prudent investment practices. The current actuarial investment return target is 6.5%, net of investment management fees and administrative expenses. In addition to meeting or exceeding the actuarial return target over the long-term, a secondary return objective is to exceed the annualized total return of the Board’s strategic asset allocation benchmarks, which include the “Long-Term Policy Benchmark” and the “Interim Policy Benchmark.”

As of September 30, 2020, the Long-Term Policy Benchmark and actual allocation weights were as follows:

Asset Class	Performance Benchmark	Target	Weight
Cash & Fixed Income	Fixed Income Benchmark <sup>1</sup>	30%	33%
U.S. Equities	Russell 3000 Index	20%	22%
Developed Int’l. Markets Equities	MSCI World Index ex-U.S. (net)	16%	17%
Real Assets	CPI-U + 5.5%	11%	8%
Emerging Markets Equities	MSCI Emerging Markets Index (net)	10%	11%
Private Equity	MSCI All-Country World Index + 3% (quarter lag)	9%	6%
Absolute Return	3-Month LIBOR + 5%	4%	3%

As a long-term investor, the Board believes it can generate the highest risk-adjusted returns through a diversified portfolio with an emphasis on equity investments. Although equities are generally more volatile in the short-term than other asset classes, if properly diversified, they are expected to deliver higher total returns over the Fund’s multi-decade time horizon. In addition, while the Board generally believes in the value of active management, it utilizes lower-cost passive investment strategies (e.g., index funds) in more efficient markets where active managers have a lower likelihood of generating excess returns.

<sup>1</sup> The Fixed Income Benchmark is a composite of 36.7% Bloomberg Barclays (BB) U.S. Aggregate Index, 20.0% BB U.S. TIPS Index, 13.3% BB U.S. High-Yield Constrained Index, 10.0% Credit Suisse Levered Loan Index; 6.7% BB Global Aggregate ex U.S. Index, and 13.3% JPM GBI-EM Global Diversified Index.

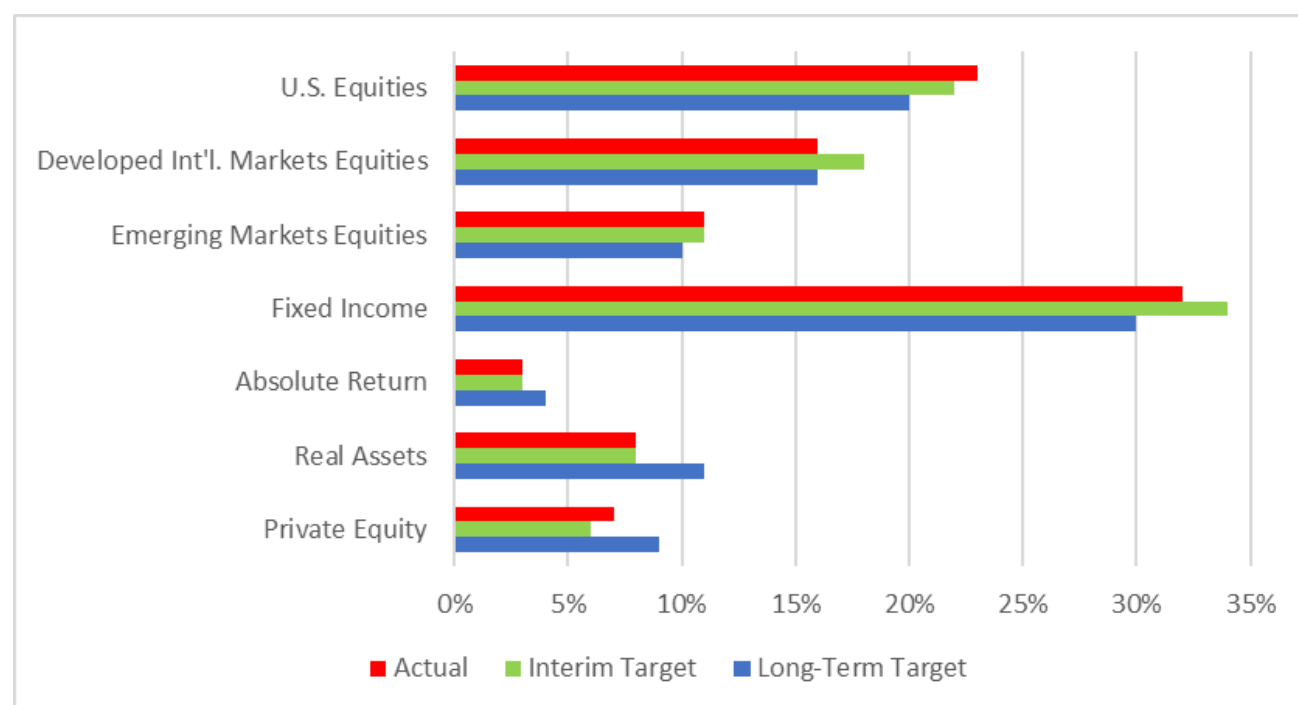
## Report on Investment Activity

### Asset Allocation

As of September 30, 2020, all the Fund's asset classes were within their respective target allocation ranges. The chart below shows the Fund's Actual, Interim, and Long-Term Asset Allocation targets. The Interim Policy target distributes the underweight to alternative investments (absolute return, private equity, and real assets) across traditional investments (fixed income and public equities) in line with the Fund's Long-Term Policy target.

### Actual, Interim Target and Policy Asset Allocations

As of September 30, 2020



The underweight in private equity is driven by a deliberate, measured pace of new commitments and a high volume of realizations from more mature funds over the last few years. The current underweight should moderate by 2023-2024, as new funds draw capital and mature funds reduce distributions. In the meantime, the Board is focused on a measured pace of new commitments, subject to the availability of compelling opportunities, strong fit with the existing investment program, and attractive market characteristics.



## Report on Investment Activity

### Fiscal Year 2020 Global Market Review

On a cumulative basis, U.S. equities rose 15%, developed international equities were flat, and emerging markets equities grew 11%. The Bloomberg Barclays U.S. Aggregate Bond Index, a broad measure of U.S. fixed income markets, gained 7%. Strong benchmark performance masks an incredibly volatile year – made even more remarkable by the pandemic's impact on lives, economics, and financial markets.

The fiscal year started with global equity markets continuing their strong run during the fourth quarter of 2019. Bullish sentiment carried over from the first three quarters of 2019 as global central banks continued to provide meaningful stimulus primarily attributable to low inflation, persistent weakness in global economic growth and manufacturing. U.S. equity markets, as represented by the Russell 3000 Index<sup>1</sup>, climbed 9%, developed international equity markets, as represented by the MSCI World ex U.S. Index<sup>2</sup>, rose 8%, and emerging markets equities, as represented by the MSCI Emerging Markets Index<sup>3</sup>, gained 12%. It was one of the best quarters for the global equity markets in recent history.

Following the strong performance of 2019, the most significant story of 2020 began to unfold in China: COVID-19. As increasing case counts and death rates in Wuhan captured major international attention, the virus had already begun its global spread. Disruption to global supply chains, investor confidence levels, and everyday life as we all knew it drove market volatility to highs not seen since the Global Financial Crisis. Equity markets tumbled steeply in the first quarter of 2020. U.S. equities experienced their worst quarter since 2008, falling 21%. Developed international and emerging markets equities plummeted 23% and 24%, respectively. Diversified bond holdings provided minimal protection, with the Bloomberg Barclays U.S. Aggregate Bond Index advancing 3.1%. A flight-to-quality boosted the returns of risk-free US Government Bonds.

As rapidly as markets declined during the first quarter of 2020, the second quarter rebound was equally swift. Following unprecedented monetary easing and the Congressional passage of a \$2.2 trillion economic stimulus package known as the CARES Act at the end of March, U.S. stocks posted second quarter gains of 22%, with emerging markets equities and developed international markets following suit, adding 18% and 15%, respectively. Lower interest rates and other Federal Reserve actions helped U.S. bond markets add another 3%. The impact of widespread stay-at-home orders and business closures proved less detrimental to company earnings than initially expected but record high unemployment claims diverged from stock markets and the real economy.

Markets closed the fiscal year with another strong result, as the recovery marched on through the third quarter of 2020. Investors looked ahead to the coming U.S. presidential election and the next phase of economic stimulus. Markets experienced a significant rotation out of high-growth stocks and into value stocks in late September, as President Trump was diagnosed with COVID-19 and volatility roared back. However, the Russell 3000 closed the quarter up another 9%, developed international market stocks gained 5%, and emerging market stocks added 10%. Markets remain generally hopeful that therapies and vaccines will lift the economy, markets, and spirits in 2021.

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<sup>1</sup> The Interim Policy Benchmark is the best gauge for relative performance over time periods of up to ten years and the Long-Term Policy Benchmark for time periods exceeding ten years.

<sup>2</sup> The Russell 3000 Index measures the performance of the 3,000 largest public U.S. companies and represents approximately 98% of the U.S. equity market.

<sup>3</sup> The MSCI World ex U.S. Index measures the equity market performance of 22 developed markets outside of the U.S.

## Report on Investment Activity

### Fiscal Year 2020 Investment Results

As of September 30, 2020, total plan assets stood at \$9.0 billion after the payment of all benefits and administrative expenses, a \$511 million increase from the end of the prior fiscal year. The Fund generated the following gross returns as of September 30, 2020<sup>1</sup>:

- Fiscal Year: +5.4% per year, underperforming the Interim Policy Benchmark by 1.2%
- Last 5 Years: +7.4% per year, underperforming the Interim Policy Benchmark by 0.5%
- Last 10 Years: +6.9% per year, underperforming the Interim Policy Benchmark by 0.1%
- Since Inception<sup>2</sup>: +8.5% per year, underperforming the Long-Term Policy Benchmark by 1.0% and outperforming the current actuarial benchmark (6.5%) by 2.0%

Underperformance was driven by several factors, including subpar results by several active mandates, led by the absolute return allocation and our value-oriented strategies. A stronger U.S. dollar over the period also dented non-U.S. investments.

Exhibit 1 shows the gross returns for the Fund and each asset class over the one, three, five, and ten-year time periods ending September 30, 2020. The returns were calculated by the Board's custodial bank, The Northern Trust Company ("Northern Trust") and are time-weighted returns computed in compliance with the CFA Institute's Global Investment Performance Standards (GIPS). Benchmark returns for each asset class are presented for relative performance comparison purposes.

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<sup>1</sup> The Interim Policy Benchmark measures relative performance over time periods of up to ten years.

<sup>2</sup> The Fund's inception date is October 1982.

## Report on Investment Activity

### Exhibit 1: Investment Performance (Gross of Fees)

As of September 30, 2020

Asset Class	1-Year	3-Year	5-Year	10-Year	20-Year	30-Year
<b>Total Fund</b>	5.4%	4.9%	7.4%	6.9%	5.1%	7.8%
<i>Interim Policy Benchmark</i> <sup>1</sup>	6.6%	5.6%	7.9%	7.0%	5.3%	8.1%
<i>Long-Term Policy Benchmark</i> <sup>2</sup>	-	-	-	7.2%	5.3%	8.1%
<b>Cash and Cash Equivalents</b>	1.0%	1.7%	1.3%	0.9%	1.8%	3.4%
<i>3-month U.S. Treasury Bills</i>	1.1%	1.7%	1.2%	0.6%	1.6%	2.7%
<b>Fixed Income</b>	5.3%	4.1%	4.5%	3.5%	5.2%	6.1%
<i>Fixed Income Benchmark</i> <sup>3</sup>	5.7%	4.5%	4.7%	3.5%	4.9%	-
<b>U.S. Equities</b>	15.5%	11.4%	13.5%	13.5%	7.0%	10.5%
<i>Russell 3000 Index</i>	15.0%	11.7%	13.7%	13.5%	6.6%	10.5%
<b>Developed Int'l Markets Equities</b>	1.2%	1.4%	6.0%	5.0%	4.2%	6.2%
<i>MSCI World Index ex U.S.(net)</i>	0.2%	0.6%	5.3%	4.3%	4.0%	5.5%
<b>Emerging Markets Equities</b>	6.6%	1.0%	8.1%	-	-	-
<i>MSCI Emerging Markets Index (net)</i>	10.5%	2.4%	9.0%	-	-	-
<b>Absolute Return</b>	(-10.6)%	0.1%	0.5%	3.5%	-	-
<i>HFR Fund-Weighted Composite</i>	4.4%	2.9%	4.1%	3.7%	-	-
<i>3-Month LIBOR+5%</i> <sup>4</sup>	6.6%	7.1%	6.6%	4.4%	-	-
<b>Private Equity</b>	3.9%	9.3%	8.6%	10.9%	5.1%	8.5%
<i>Cambridge Associates Global PE &amp; VC Index (quarter lag)</i> <sup>5</sup>	9.3%	13.9%	12.0%	13.6%	8.3%	15.1%
<i>MSCI All Country World Index+3% (quarter lag)</i> <sup>6</sup>	5.2%	9.3%	9.6%	12.4%	6.8%	11.4%
<b>Real Assets</b>	(-8.0)%	1.2%	5.3%	7.8%	3.9%	2.9%
<i>Real Assets Interim</i> <sup>7</sup>	(-9.9)%	1.4%	4.9%	-	-	-
<i>CPI-U+5.5% (quarter lag)</i>	6.1%	7.2%	7.1%	7.2%	-7.6%	7.9%

<sup>1</sup> As of 9/30/20, the Interim Policy Benchmark is a composite of 21.8% Russell 3000 Index, 17.5% MSCI World Index ex U.S. (net), 10.9% MSCI Emerging Markets (net); 11.8% Barclays U.S. Aggregate Index, 4.3% Barclays U.S. Corporate High Yield Index, 3.2% Credit Suisse Leveraged Loan Index, 2.1% Barclays Global Aggregate ex US Index, 4.3% JPM GBI-EM Global Diversified Index, 7.9% Barclays U.S. TIPS Index, 3.3% HFR Fund-Weighted Composite, 5.6% Cambridge Associates Global Private Equity and Venture Capital Index (quarter lag), 5.3% Real Estate Interim; 1.2% Cambridge Associates Upstream Energy & Royalties and Private Equity Energy Index (quarter lag), 0.8% Cambridge Associates Infrastructure Index (quarter lag).

<sup>2</sup> As of 9/30/20, the Long-Term Policy Benchmark is a composite of 20% Russell 3000 Index, 16% MSCI World Index ex U.S. (net), 10% MSCI Emerging Markets (net); 11% Barclays U.S. Aggregate Index, 4% Barclays U.S. Corporate High Yield Index, 3% Credit Suisse Leveraged Loan Index, 2% Barclays Global Aggregate ex US Index, 4% JPM GBI-EM Global Diversified Index, 6% Barclays U.S. TIPS Index, 4% 3-Month LIBOR+5%, 9% MSCI ACWI + 3%, 11% CPI + 5.5%.

<sup>3</sup> The Fixed Income Benchmark is a composite of 36.7% Barclays U.S. Aggregate Index, 20.0% Barclays U.S. TIPS Index, 13.3% Barclays U.S. High-Yield Constrained Index, 10.0% Credit Suisse Levered Loan Index; 6.7% Barclays Global Aggregate ex U.S. Index, and 13.3% JPM GBI-EM Global Diversified Index.

<sup>4</sup> Prior to 9/30/13, 3-month LIBOR.

<sup>5</sup> Prior to 12/31/07, Cambridge Associates U.S. Private Equity & Venture Capital Index (quarter lag).

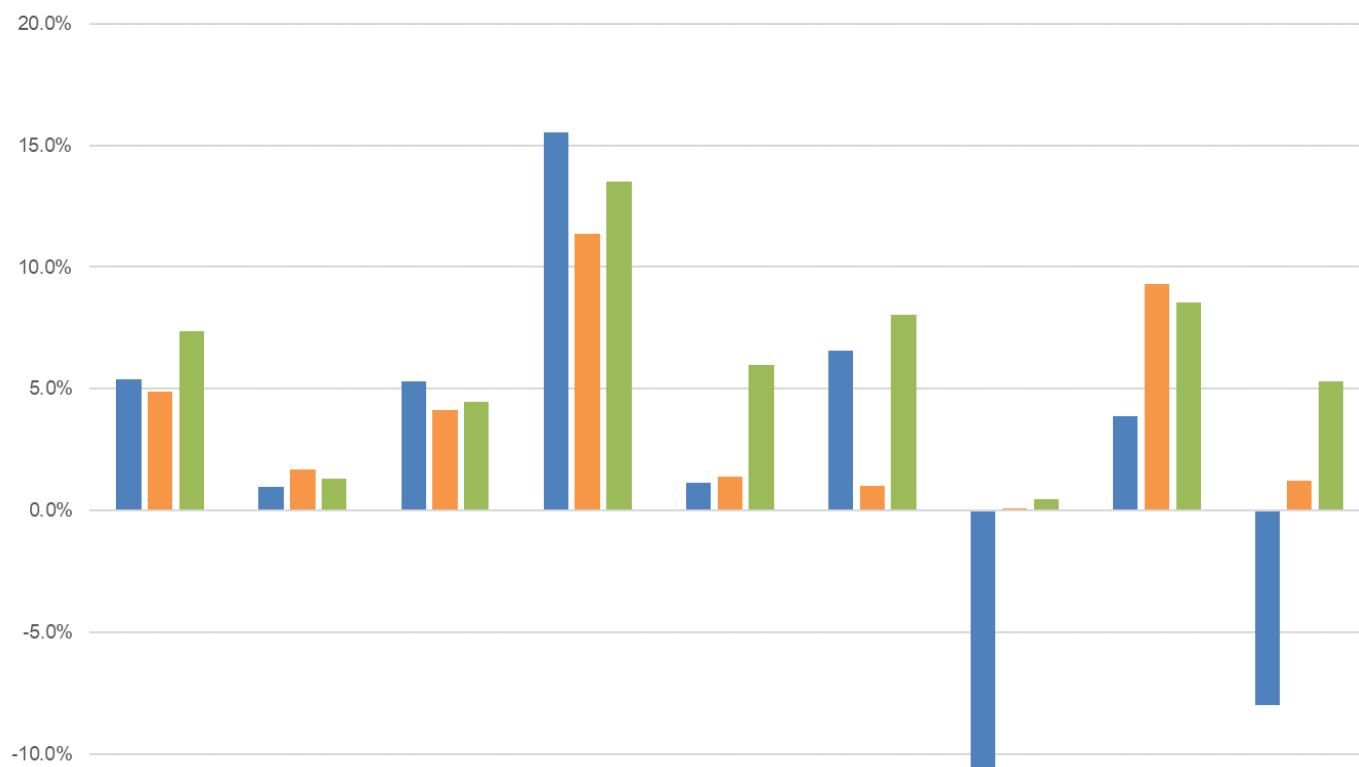
<sup>6</sup> Prior to 12/31/07, Russell 3000 + 3% (quarter lag).

<sup>7</sup> As of 9/30/20, the Real Assets Interim Benchmark is a composite of 46.7% FTSE EPRA/NAREIT Global Net, 26.3% Cambridge Associates Real Estate Index (quarter lag), 10.8% Cambridge Associates Infrastructure Index (quarter lag), and 16.2% Cambridge Associates Upstream Energy & Royalties and Private Equity Energy Index (quarter lag).

## Report on Investment Activity

### Exhibit 2: Historical Investment Performance

As of September 30, 2020

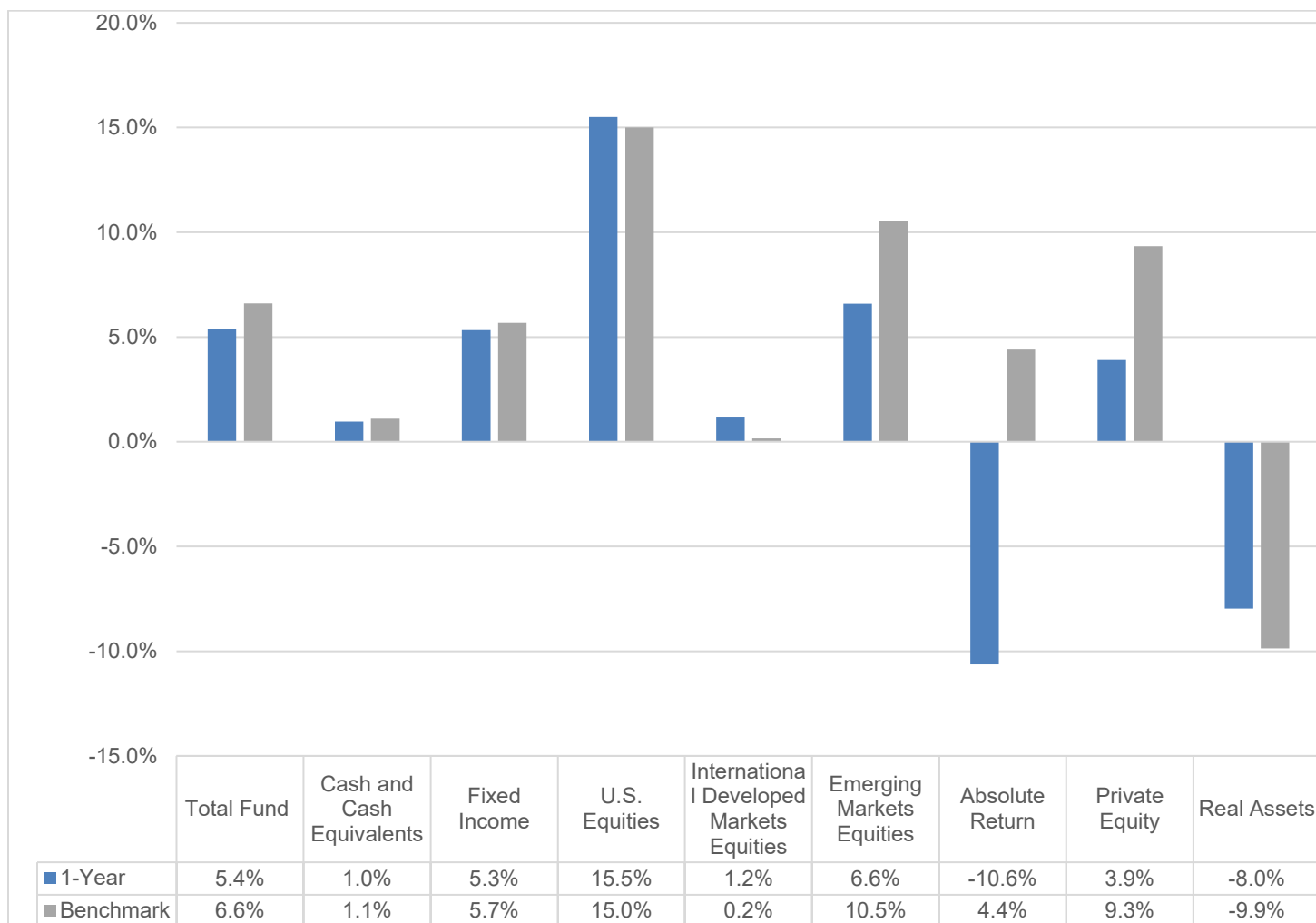


	Total Fund	Cash and Cash Equivalents	Fixed Income	U.S. Equities	International Developed Markets Equities	Emerging Markets Equities	Absolute Return	Private Equity	Real Assets
■ 1-Year	5.4%	1.0%	5.3%	15.5%	1.2%	6.6%	-10.6%	3.9%	-8.0%
■ 3-Year	4.9%	1.7%	4.1%	11.4%	1.4%	1.0%	0.1%	9.3%	1.2%
■ 5-Year	7.4%	1.3%	4.5%	13.5%	6.0%	8.1%	0.5%	8.6%	5.3%

## Report on Investment Activity

### Exhibit 3: 1-Year Performance vs. Benchmark

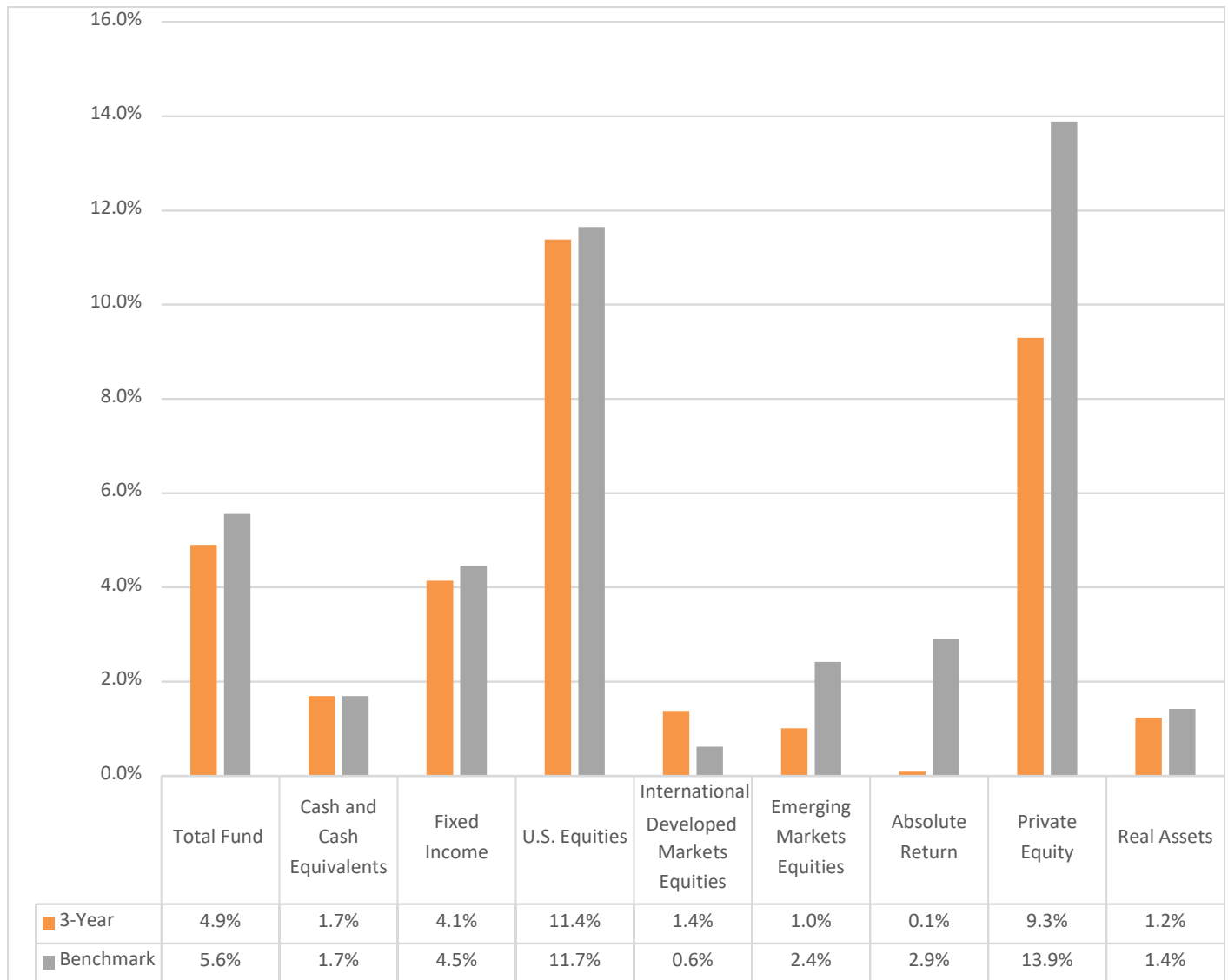
As of September 30, 2020



## Report on Investment Activity

### Exhibit 4: 3-Year Performance vs. Benchmark

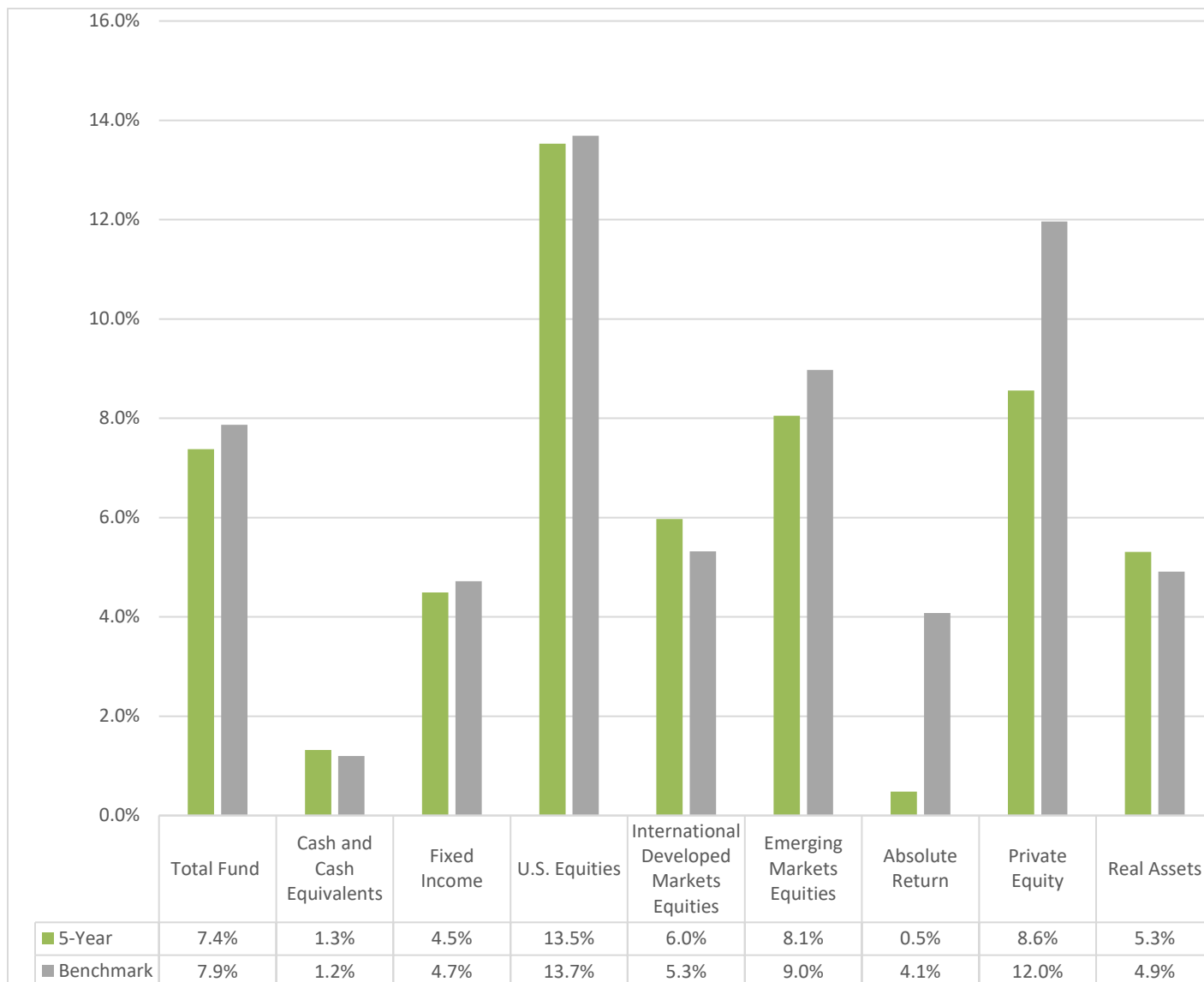
As of September 30, 2020



## Report on Investment Activity

### Exhibit 5: 5-Year Performance vs. Benchmark

As of September 30, 2020





## Report on Investment

### Investment Summary

As of September 30, 2020

(Dollars in thousands)

Asset Class	Market Value	Percent of Fund
Domestic Equity	\$ 2,359,926	26.3 %
International Equity	2,422,003	27.0
Fixed Income	2,912,034	32.4
Real Assets	697,516	7.8
Private Equity	595,339	6.6
Total	<u>\$ 8,986,818</u>	<u>100.0 %</u>

### List of Largest Holdings

As of September 30, 2020

Top 10 Public Equity Holdings (Dollars in thousands)				
Rank	Security Name	Shares	Market Value	
1	Apple Inc	764,466	\$	88,533
2	Microsoft Corp	380,075	\$	79,941
3	Amazon.com Inc	23,971	\$	75,478
4	Alibaba Group Holding Ltd	228,151	\$	67,072
5	Tencent Holdings Ltd	696,124	\$	45,944
6	Taiwan Semiconductor Manufacturing Co Ltd	2,998,499	\$	44,829
7	Alphabet Inc	30,196	\$	44,312
8	Samsung Electronics Co Ltd	813,506	\$	42,359
9	Nestle SA	306,918	\$	36,526
10	Facebook Inc	133,392	\$	34,935

Top 10 Fixed Income Holdings (Dollars in thousands)						
Rank	Security Name	Moody's Quality Rating	Par Value	Interest Rate (%)	Maturity Date	Market Value
1	US Treasury Inflation IX Treasury Bond	Aaa	\$ 28,093	0.69	01/15/2024	\$ 29,849
2	US Treasury NTS 0.375%	Aaa	\$ 26,112	0.41	07/15/2025	\$ 28,333
3	US Treasury Inflation Indexed 0.125%	Aaa	\$ 25,135	0.13	01/15/2030	\$ 27,776
4	US Inflation Indexed Treasury Notes	Aaa	\$ 25,557	0.27	01/15/2025	\$ 27,266
5	US Treasury Notes	Aaa	\$ 25,573	0.14	07/15/2024	\$ 27,048
6	US Treasury NTS TIPS	Aaa	\$ 23,892	0.42	07/15/2023	\$ 25,064
7	US Treasury NTS Inflation Indexed 0.625%	Aaa	\$ 23,287	0.65	04/15/2023	\$ 24,358
8	US Treasury NTS Inflation Indexed DTD 04-15-2017 0.1	Aaa	\$ 23,589	0.13	04/15/2022	\$ 24,001
9	US Treasury NTS Inflation Indexed NTS .12	Aaa	\$ 22,815	0.14	01/15/2023	\$ 23,510
10	US Treasury NTS Inflation Indexed NTS .12	Aaa	\$ 22,758	0.14	07/15/2022	\$ 23,343

## Report on Investment

### Schedule of Fees and Commissions

As of September 30, 2020

During the fiscal year 2020, the Board paid the following fees and commissions:

Expense Category	Amount (Dollars in thousands)	Percent of Fund
Investment Managers *	\$ 16,881	0.188 %
Investment Administrative Expense	582	0.006
Investment Consultants	596	0.007
Investment Custodian	473	0.005
Brokerage Commissions **	656	0.007
Total	<u>\$ 19,188</u>	<u>0.214 %</u>

\* Table includes fees paid to traditional investment managers and some non-traditional managers. Traditional investment managers are those that invest primarily in public equity, real assets, and fixed income securities. Fees for non-traditional, private market managers are often netted against investment income. As a result, those expenses, including performance-based fees, are not included.

\*\* Includes separate account and commingled fund relationships.

Manager	Total Shares Traded	Total Commission	Commission (Cost per Share)	Commission (Basis Points)	Number of Trades	Trade Value (Dollars in millions)
Channing Capital Management	13,993,123	\$ (304,831)	(2.2)	(8)	1,968	\$ 404
Sands Capital Management	949,851	(16,179)	(1.7)	(1)	276	111
Altrinsic/Perterra Int'l	10,865,592	(200,919)	(1.8)	(15)	603	137
LSV Emerging Markets	78,747,001	(53,234)	(0.1)	(5)	2,304	108
Northern Truist Global REIT	57,762,214	28,340	0.0	2	2,620	131
Northern Trust R3000	71,447,830	84,730	0.1	0	6,488	2,201
State Street Global Advisors-CAD	513,794	(2,603)	(0.5)	(2)	675	11
State Street Global Advisors-EAFE	15,838,577	(37,757)	(0.2)	(2)	9,544	182
State Street Global Advisors-EM	180,646,410	(153,691)	(0.1)	(5)	14,276	330
Total	<u>430,764,392</u>	<u>\$ (656,144)</u>	<u>(0.2)</u>	<u>(2)</u>	<u>38,754</u>	<u>\$ 3,615</u>

## Report on Investment

### Other Updates

During the Fiscal Year 2020, the Board didn't make any strategic asset allocation changes. Over the course of the year, the DCRB Investment team and the investment consultant, Meketa Investment Group ("Meketa"), focused on monitoring and rebalancing the Fund's asset allocation in response to record volatility, completing 86 rebalancing transactions. In addition, the DCRB Investment team worked with Meketa on building out the private market investment program, completing a search for an emerging market debt manager, and advancing the Board's efforts to hire emerging and diverse managers. The DCRB Investment team and Meketa also spent a significant amount of time monitoring the Board's existing investment managers and renegotiated fee structures with several firms.

In Fiscal Year 2021, the Board will focus on reviewing the long-term asset allocation and will continue its efforts to partner with high-performing investment managers, including emerging and/or diverse firms.

Beginning with Fiscal Year 2020, this report is required by the *Diverse Emerging Fund Managers and Reporting Requirements Amendment Act of 2020* (D.C. Law 23-161) to include reporting on Sudan and Iran investments and the Board's methods for hiring and utilizing diverse emerging fund managers.

### Environmental, Social, and Governance (ESG)

The DCRB Investment team and Meketa continued the incorporation of the Board's ESG policy, adopted in November 2013, into the investment and operational due diligence processes. This area continues to be a focus when evaluating prospective and existing investment managers.

### Private Market Commitments

Within the alternative investments program, the Board committed a total of approximately \$355 million to six private equity and real assets limited partnerships during Fiscal Year 2020. In private equity, this included funds focused on U.S., Canadian, and Latin American buyouts, and U.S. growth equity. In real assets, the Board committed to two U.S. real estate funds.

### Diverse Emerging Fund Managers

The Board has supported diverse and emerging investment managers for over twenty years and works closely with Meketa to identify promising emerging diverse fund managers. As defined by District law, the Board has two diverse emerging fund managers in its portfolio. More detailed information is in the Board's Diverse Emerging Fund Managers Report in Exhibit 6 on page 72.

### Sudan Divestment

During Fiscal Year 2020, the Board did not hold or acquire any direct investments with companies doing business with Sudan. More detailed information is in the Board's Sudan Investment Report in Exhibit 7 on page 73.

### Iran Divestment

During Fiscal Year 2020, the Board did not hold or acquire any direct investments with companies doing business with Iran. More detailed information is in the Board's Iran Investment Report in Exhibit 8 on page 74.

### Investment Service Providers

For this fiscal year, there were no investment-related service provider changes.

## Report on Investment

### Exhibit 6: Diverse Emerging Fund Managers

#### Introduction

As part of the Board's prospective and monitoring of current investment managers, the Board is devoting more time and attention to its commitment and willingness to embrace diversity and inclusion in its hiring decisions, investment decision-making process, and ownership structure.

The following tables provide a detailed look at the Board's exposure to diverse and emerging investment managers as of the end of the fiscal year. For purposes of this report, the Diverse Emerging Fund Managers and Reporting Requirements Amendment Act of 2020 (D.C. Law 23-161) defines a "diverse emerging fund manager" to mean an asset management firm with (i) total assets under management that do not exceed \$2 billion (subject to annual adjustment based on inflation and industry growth rates); and (ii) substantial diversity among its senior leadership or firm ownership, as determined by the Board<sup>1</sup>. Diverse managers are defined by the Board as firms having substantial ownership and/or senior leadership participation from minorities, women, disabled individuals, and/or veterans.

#### Methods

Although the Board has supported diverse and emerging investment managers for more than two decades, over the last ten years, the Board has worked with Meketa to proactively identify and invest with institutional-quality investment firms that have demonstrated a commitment to embrace diversity and inclusion. The Board leverages Meketa's direct sourcing and network approach in the industry and also requires the investment consultant to maintain a database of all qualified investment management firms, including diverse managers. Through the consultant's Emerging and Diverse Manager Investment Committee, DCRB's exposure has been expanded to over 1,000 small and diverse firms.

A majority of the Board's investment managers meet this criterion and made considerable progress in building diverse organizations. However, given the Board's minimum investment sizes, and a requirement for the Board's investment not to comprise no more than 20% of any investment fund, only two diverse firms currently meet the law's emerging manager criteria (\$2 billion or less in total firm assets under management).

At the same time, there is potential to do more. For example, there is a significant opportunity to engage with the Board's existing investment managers to discuss and document their diversity and inclusion efforts. The results from the Board's investment consultant's inaugural diversity and inclusion survey, which is expected in the first half of 2021, will be a helpful tool to better understanding existing managers' initiatives and their ability to influence greater diversity and inclusion in their hiring and investment decisions as well as firm ownership. In addition, the Board's investment consultant will continue to identify promising emerging diverse fund managers, particularly in the private markets, where the Board's size constraints are generally less restrictive. Furthermore, the Board plans to enhance its website to facilitate diverse emerging fund managers connecting with the Board's investment consultant for an introductory meeting.

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<sup>1</sup> See D.C. Code § 1-901.02(2B).

## Report on Investment

### Results

#### Diverse Emerging Fund Managers

(Dollars in thousands)

Firm Name	Market Value as of 9/30/2020	Total Assets Under Management	Diverse Firm Ownership	Gender Diversity <sup>3</sup> (Senior Leadership)	Racial Diversity <sup>4</sup> (Senior Leadership)	% of Total Assets as of 9/30/2020
Channing Capital <sup>1</sup>	\$ 197,515	\$ 1,863,300	100 %	33 %	100 %	2.20 %
Homestead Capital <sup>2</sup>	3,897	1,108,594	50	17	17	0.04

#### Racial Diversity Breakdown (Senior Leadership)

Firm Name	American Indian/Alaskan Native	Asian	Black/African American	Hawaiian/Pacific Islander	Hispanic/Latino	Multi-Racial
Channing Capital	0 %	0 %	67 %	0 %	33 %	0 %
Homestead Capital	0	0	0	0	100	0

#### Exhibit 7: Sudan Divestment

The Prohibition of the Investment of Public Funds in Certain Companies Doing Business with the Government of Sudan Act of 2007 (D.C. Code §§1-335.01 et. seq.) requires the Board to report on the following:

**(1) All investments sold, redeemed, divested, or withdrawn in compliance with Section 1-335.03(a).**

The Board did not have any direct holdings of securities of companies on the Scrutinized Companies List during the last year that needed to be sold, redeemed, divested, or withdrawn from any investments in order to comply with Section 1-335.03(a) of the Act.

**(2) All prohibited investments under Section 1-335.03(b).**

The Board did not directly acquire any securities of companies on the Scrutinized Companies List during the last year.

**(3) Any progress made under Section 1-335.03(d).**

In accordance with Section 1-335.03(d), the Board submitted letters to the managers of actively-managed investment funds with indirect holdings of securities of companies on the Scrutinized Companies List requesting that they consider either removing such securities from the fund or creating a similar actively-managed fund with indirect holdings devoid of such securities. Despite the Board's requests, the managers of these funds have neither removed those securities from the funds nor created similar actively managed funds absent such securities.

**(4) A list of any investments held by the Public Fund that would have been divested under Section 1-335.03 but for Section 1-335.03(e), including a statement of reasons why a sale or transfer of the investments is inconsistent with the fiduciary responsibilities of the District of Columbia Retirement Board and the circumstances under which the District of Columbia Retirement Board anticipates that it will sell, transfer, or reduce the investment.**

The Board does not hold any investments that would have been divested under Section 1-335.03, but for Section 1-335.03(e).

<sup>1</sup> Total Assets Under Management data is based on eVestment Alliance.

<sup>2</sup> Total Assets Under Management data is based on Regulatory AUM as reported by manager.

<sup>3</sup> Gender diversity is based on percentage of Total Firm identifying as Female.

<sup>4</sup> Racial diversity is based on percentage of Total Firm identifying as American Indian/Alaskan Native, Asian, Black/African American, Hawaiian/Pacific Islander, Hispanic/Latino, or Multi-Racial

## Report on Investment

### Exhibit 8: Iran Divestment

The *Prohibition of the Investment of Public Funds in Certain Companies Doing Business with the Government of Iran and Sudan Divestment Conformity Act of 2008* (D.C. Code §§1-336.01 et. seq.) requires the Board to report on the following:

- (1) ***Any prohibited investments sold, redeemed, divested, or withdrawn in compliance with Section 1-336.03(a).***

The Board did not have any direct holdings of securities of companies on the Scrutinized Companies List during the last year that needed to be sold, redeemed, divested, or withdrawn from any investments in order to comply with Section 1-336.03(a).

- (2) ***Any prohibited investments acquired under Section 1-336.03(b).***

The Board did not directly acquire any securities of companies on the Scrutinized Companies List during the last year.

- (3) ***Any progress made under Section 1-336.03 [c] regarding indirect exposure.***

In accordance with Section 1-336.03[c], the Board submitted letters to the managers of actively-managed investment funds with indirect holdings of securities of companies on the Scrutinized Companies List requesting that they consider either removing such securities from the fund or creating a similar actively-managed fund with indirect holdings devoid of such securities. Despite the Board's requests, the managers of these funds have neither removed those securities from the funds nor created similar actively managed funds absent such securities.

- (4) ***A list of all publicly traded securities held directly by the public fund.***

A current listing of the Board's direct holdings in publicly traded securities is shown on pages 75 through 79.

- (5) ***A list of any investments held by the Public Fund that would have been divested under Section 1-336.03(a), but for Section 1-336.03(d), including a statement of reasons why a sale or transfer of the investments is inconsistent with the fiduciary responsibilities of the District of Columbia Retirement Board and the circumstances under which the District of Columbia Retirement Board anticipates that it will sell, transfer, or reduce the investment.***

The Board did not hold any direct investments that would have been divested under Section 1-336.03(a) but for Section 1-336.03(d).

## Report on Investment

### List of Direct Holdings in Publicly Traded Securities

As of September 30, 2020

CUSIP	SECURITY NAME
57475YAB7	MASERGY COMMUNICATIONS, INC. TERM LOAN
345370CA6	FORD MTR CO DEL 7.45% DUE 07-16-2031 BEO
49387TAR7	KRONOS ACQUISITION HLDGS INC KRONOS
727610AN7	PVTPL PLASTIPAK HLDGS INC BNDS 6.25% DUE
75026JAE0	PVTPL RADIATE HOLDCO FINANCE 6.5% DUE
84752HAA4	PVTPL SPECIALTY STL HOLDCO INC FLTG DU
92552VAK6	PVTPL VIASAT INC SR NT 144A 5.625% 09-15
00216HAB8	ATI HOLDINGS LLC ATI PHYSICAL THERAPY
345370CW8	FORD MTR CO DEL 9.0% DUE
14282LAF0	PVTPL CARLSON TRAVEL INC 6.75% DUE 12-15
LX1718506	IVORY MERGER SUB,INC TL DUE 03-06-2026 B
86881WAD4	SURGERY CTR HLDGS INC 10.0% DUE
85999ABY6	PVTPL STERLING ENTERTAINMENT
92552VAN0	VIASAT INC 6.5% DUE
68403UAA1	OPTIMAS OE SOLUTIONS HLDG LLC / OPTIMAS
LX1610588	EPIC HEALTH SERVICES, INC. TERM LOAN
LX1895999	SKILLSOFT CORPORATION TERM LOAN DUE 12-1
24701PAD8	DELIVER BUYER INC TLB LIEN1 DUE 05-01-20
45827MAA5	INTELLIGENT PACKAGING LTD FINCO INC /
26658NAH2	DURAVANT LLC TERM LOAN
51374RAE1	LANAI HOLDINGS III, INC. INITIAL TERM
40060QAA3	PVTPL GTCR AP FIN INC 8% DUE 05-15-2027
29278MAA3	ENERGY VENTURES GOM LLC / ENVEN FIN CORP
LX1894836	SKILLSOFT CORPORATION SECOND OUT TERM LO
26483NAN0	THE DUN BRADSTREET CORPORATION TERM LOAN
08949LAB6	PVTPL BIG RIV STL LLC/BRS FIN CORP
01741RAF9	ALLEGHENY TECHNOLOGIES INC SR STEP UP
91759UAM7	UTEX INDS INC TERM LOAN B DUE 05-21-2021
34984VAC4	FORUM ENERGY TECHNOLOGIES INC SR SECD NT
897787AA5	TRUCK HERO INC 8.5% DUE
88827AAA1	PVTPL TITAN CO-BORROWE SR NT 7.75%
82967NAW8	PVTPL SIRIUS XM RADIO INC 5.375% 07-15-2
42979BAA2	DEFAULTED HIGH RIDGE BRANDS CO 0.0%
20752TAA2	CONNECT FINCO SARL/CONNECT U S FINCO L
48088LAB3	PVTPL JOSEPH T RYERSON & SON INC 144A
LX1671887	PEAK 10 HOLDING CORPORATION TERM LOAN
784999617	PVTPL SPECIALTY STEEL HOLDCO INC COMSTK
21925AAE5	PVTPL CORNERSTONE CHEMICAL CO BNDS 6.75%
LX1531834	PACKAGING COORDINATORS MIDCO, INC. TL



## Report on Investment

### Investment Appendix: List of Direct Holdings in Publicly Traded Securities (Continued)

CUSIP	SECURITY NAME
89616RAB5	PV TPL TRIDENT TPI HLDGS INC SR NT 144A
056623AA9	PV TPL BAFFINLAND IRON MINES CORP/BAFFINL
55303BAC7	MH SUB I LLC TERM LN (SECOND LIEN) SENI
04683P100	A TD NEW HLDGS INC COM
LX1664601	DRAGON MERGER SUB, LLC TERM LOAN (SECOND
LX1660005	PDC BRANDS TL LIEN2 DUE 06-27-2025 BEO
89616RAA7	TRIDENT TPI HLDGS INC 6.625% DUE
682322AE2	ONE CALL CORP CORP BOND 11.0% 07-01-2024
553283AB8	MPH ACQUISITION HLDGS LLC 7.125% DUE
04624VAA7	ASSURED PARTNERS INC 7.0% DUE
62999AVK3	PV TPL NEW STAR METALS INC. SENIOR
24701PAC0	DELIVER BUYER INC (AKA MHS HOLDINGS INC)
362393AA8	GTT COMMUNICATIONS INC 7.875% DUE
50118YAB5	KUEHG CORP. TERM LOAN (SECOND LIEN ) SE
LX1808992	CIRCA RESORT & CASINO TERM BANK LOAN 07
03021BAE4	AMERICAN TIRE DISTRIBUTORS INC TERM LOAN
88033GDJ6	PV TPL TENET HEALTHCARE CORP 6.125% DUE
05549DAH1	AVEANNA HEALTHCARE LLC NEW TERM LOAN
91759UAP0	UTEX INDS INC TERM LOAN SECOND LIEN DUE
88651BAK8	TIERPOINT, LLC TERM LOAN SENIOR SECURED
52201CAF8	LEARNING CARE GROUP (US) NO 2 INC INCREM
01741RAH5	ALLEGHENY TECHNOLOGIES INC 5.875% DUE
345370CX6	FORD MTR CO DEL 9.625% DUE
05549DAB4	EPIC HEALTH SERVICES, INC. TERM LOAN DUE
LX1686885	TEN-X, LLC TERM LOAN (SECOND LIEN)
03690AAC0	ANTERO MIDSTREAM PARTNERS LP/5.375% 0
05549DAF5	AVEANNA HEALTHCARE LLC INCREMENTAL TERM
04649VAU4	ASURION, LLC (FKA ASURION CORPORATION) T
156431AL2	PV TPL CENTURY ALUM CO SR SECD NT 144A
893647BB2	TRANSDIGM INC 6.375% DUE
75026JAC4	PV TPL RADIATE HOLDCO/FINANCE 4.5% DUE
LX1740260	RA ACQUISITION PURCHASER LLC PIK TOGGLE
14282LAG8	PV TPL CARLSON TRAVEL INC 11.5% DUE 12-15
LX1736615	DENTAL CORPORATION OF CANADA INC 2ND
84749AAA5	PV TPL SPECIALTY BLDG PRODS HLDGS LLC/SBP
65342RAD2	PV TPL NFP CORP 6.875% DUE 08-15-2028
90385KAF8	ULTIMATE SOFTWARE GROUP INC THE INCREMEN
431318AQ7	PV TPL HILCORP ENERGY I L P / HILCORP FIN
29373TAA2	PV TPL ENTERPRISE MERGER SUB INC SR NT
03764BAB1	PV TPL APEX TOOL GROUP LLC / BC MTN FIN

## Report on Investment

### Investment Appendix: List of Direct Holdings in Publicly Traded Securities (Continued)

CUSIP	SECURITY NAME
45004KAC0	IRI HOLDINGS, INC. TERM LOAN SENIOR
26658NAF6	DURAVANT LLC TERM LOAN 07-18-2025
03021BAJ3	AMERICAN TIRE DISTRIBUTORS, INC. TERM
00489LAC7	PVTPL ACRISURE LLC / ACRISURE FIN INC SR
14282LAE3	PVTPL CARLSON TRAVEL INC 8.5% DUE
LX1634968	TRUCK HERO INC TERM LOAN SECOND LIEN DUE
3RR999004	SKILLSOFT CORP COMMON CL A
185899AG6	PVTPL CLEVELAND-CLIFFS INC NEW 6.75% DUE
52201CAC5	LEARNING CARE GROUP, INC.- TERM LOAN B
88033GCE8	TENET HEALTHCARE CORP 8.125% DUE
78471RAA4	PVTPL SRS DISTR INC 8.25% DUE 07-01-2026
84611WAB0	PVTPL SP FINCO LLC SR 6.75%
893830BK4	PVTPL TRANSOCEAN INC SR NT 7.25%
82873LAA3	PVTPL SIMMONS FOODS INC / SIMMONS
7YU999ED6	CTII HOLDINGS INC
48128TAA0	PVTPL JPW INDS HLDG CORP SR SECD NT
541056AA5	PVTPL LOGAN MERGER SUB INC 5.5% DUE
52201CAE1	LEARNING CARE GROUP, INC. TERM LOAN
48244EAJ3	KUEHG CORP (FKA KC MERGERSUB, INC.) TLB
66727WAA0	DEFAULTED NORTHWEST ACQUISITIONS 0.0%
10524MAN7	BRAND ENERGY & INFRASTRUCTURE SERVICES,
73107GAA1	PVTPL POLARIS INTER CORP 8.5% 12-01-2022
749999249	REAALL CMN STOCK
893647AX5	TRANSDIGM INC 6.5% DUE
44332PAD3	HUB INTL LTD 7.0% DUE
38740TAB7	GRANITE HOLDINGS US ACQUISITION CO.
61174X109	MONSTER BEVERAGE CORP NEW COM
81762P102	SERVICENOW INC COM USD0.001
852234103	SQUARE INC CL A CL A
98954M200	ZILLOW GROUP INC COM USD0.0001 CLASS C
02079K305	ALPHABET INC CAPITAL STOCK USD0.001 CL A
90138F102	TWILIO INC CL A CL A
461202103	INTUIT COM
98978V103	ZOETIS INC COM USD0.01 CL 'A'
22160N109	COSTAR GROUP INC COM
452327109	ILLUMINA INC COM
60468T105	MIRATI THERAPEUTICS INC COM
39874R101	GROCERY OUTLET HLDG CORP COM
81141R100	ADR SEA LTD ADR
016255101	ALIGN TECHNOLOGY INC COM

## Report on Investment

### Investment Appendix: List of Direct Holdings in Publicly Traded Securities (Continued)

CUSIP	SECURITY NAME
90353T100	UBER TECHNOLOGIES INC COM USD0.00001
64110L106	NETFLIX INC COM STK
934550203	WARNER MUSIC GROUP CORP CL A CL A
22266L106	COUPA SOFTWARE INC COM
594918104	MICROSOFT CORP COM
28176E108	EDWARDS LIFESCIENCES CORP COM
023135106	AMAZON COM INC COM
16119P108	CHARTER COMMUNICATIONS INC NEW CL A CL A
G06242104	ATLASSIAN CORPORATION PLC COM USD0.1 CL
339750101	FLOOR & DECOR HLDGS INC CL A CL A
57667L107	MATCH GROUP INC NEW COM
00724F101	ADOBE SYS INC COM
92826C839	VISA INC COM CL A STK
803607100	SAREPTA THERAPEUTICS INC COM
833445109	SNOWFLAKE INC CL A CL A
252131107	DEXCOM INC COM
30303M102	FACEBOOK INC COM USD0.000006 CL 'A'
553498106	MSA SAFETY INC COM
431571108	HILLENBRAND INC COM STK
22002T108	CORPORATE OFFICE PPTY'S TR COM
76169B102	REXNORD CORP COM USD0.01
50189K103	LCI INDUSTRIES COM
103304101	BOYD GAMING CORP COM
P73684113	ONESPAWORLD HLDGS LTD
12709P103	#REORG/CABOT NAME CHANGE WITH CUSIP CHAN
860630102	STIFEL FINL CORP COM
489170100	KENNAMETAL INC. CAPITAL STOCK
389375106	GRAY TELEVISION INC COM CL B
546347105	LOUISIANA-PACIFIC CORP. COMMON STOCK,
237266101	DARLING INGREDIENTS INC COMSTK
06652V208	BANNER CORP COM NEW COM NEW
109641100	BRINKER INTL INC COM
57164Y107	MARRIOTT VACATIONS WORLDWIDE CORP COM
75970E107	RENASANT CORP COM
693656100	PVH CORP COM USD1
01748X102	ALLEGiant TRAVEL CO COM
57776J100	MAXLINEAR INC COMMON STOCK
415864107	HARSCO CORP., COMMON STOCK, \$1.25 PAR
729132100	PLEXUS CORP COM
564563104	MANTECH INTL CORP CL A CL A
97650W108	WINTRUST FINL CORP COM
05368V106	AVIENT CORPORATION
902104108	IL-VI INC COM

## Report on Investment

### Investment Appendix: List of Direct Holdings in Publicly Traded Securities (Continued)

CUSIP	SECURITY NAME
04316A108	ARTISAN PARTNERS ASSET MGMT INC CL A CL
01741R102	ALLEGHENY TECHNOLOGIES INC COM
89469A104	TREEHOUSE FOODS INC COM
117043109	BRUNSWICK CORP., COMMON STOCK
262037104	DRIL-QUIP INC COM
784635104	SPX CORP COM
001744101	AMN HEALTHCARE SVCS INC COM
453836108	INDEPENDENT BK CORP MASS COM
816850101	SEMTECH CORP COM
87161C501	SYNOVUS FINL CORP COM NEW COM NEW
71943U104	PHYSICIANS RLTY TR COM
536797103	LITHIA MTRS INC CL A CL A
477839104	JOHN BEAN TECHNOLOGIES CORP COM STK
488401100	KEMPER CORP DEL COM
440327104	HORACE MANN EDUCATORS CORP COMMON STOCK
78469X107	SPX FLOW INC COM
74736A103	QTS RLTY TR INC COM CL A COM CL A
65336K103	NEXSTAR MEDIA GROUP INC CL A CL A

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## ACTUARIAL SECTION

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Employee Benefits, Actuarial & Investment Consulting

January 28, 2021

Board Members  
District of Columbia Retirement Board  
900 7<sup>th</sup> Street NW, Suite 200  
Washington, DC 20001

*RE: Actuarial Certification of October 1, 2020 Valuation for D.C. Retirement Board*

Dear Board Members:

Bolton Partners, Inc., under contract with the District of Columbia Retirement Board (DCRB), performed actuarial valuations of the District of Columbia (D.C.) Police Officers and Firefighters' Retirement Plan and the D.C. Teachers' Retirement Plan as of October 1, 2020. The date of the most recent valuation prior to this was October 1, 2019. Valuations are conducted annually for DCRB. In this study, we relied on participant and financial data supplied by DCRB staff, the D.C. Office of Pay and Retirement Services, and the U.S. Department of the Treasury. We examined such data for reasonableness and consistency.

Actuarial funding of the Plans is based on the Entry Age Normal Cost method. Under this method, the District must contribute the level percent of pay that – combined with the actuarial value of assets, expected investment earnings, and future employee contributions – will pay for the benefits of the current participants by the time the current workforce leaves employment as well as a payment to amortize any unfunded accrued liability.

The funding policy adopted by the Board in 2012 and revised in 2017 has two main goals:

- To maintain an increasing or stable ratio of Plan assets to accrued liabilities and reach a 100 percent minimum funded ratio;
- To develop a pattern of stable or declining contribution rates when expressed as a percentage of member payroll as measured by valuations prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board, with a minimum employer contribution equal to the lesser of the normal cost determined under the Entry Age Normal cost method and the current active member contribution rate.

The funding policy not only states the overall funding goals and benchmarks for the Plan, but also sets the methods and assumptions. In 2017 the funding policy was revised to:

- Amortize the legacy Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2017 over a closed 15-year period on a level dollar basis.
- In subsequent valuations, all benefit changes, assumption and method changes and experience gains and/or losses that have occurred since the previous valuation will be amortized over a closed 20- year period from the date it is established.



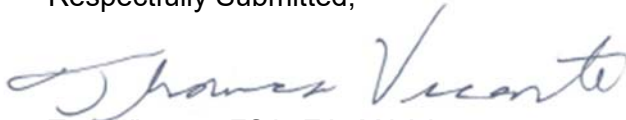
In addition, the amortization of the unfunded accrued liability uses the level dollar approach.

For actuarial valuation purposes, Plan assets are determined at Actuarial Value, recognizing 20% of the difference between the expected market value and the actual end of year market value of assets. The purpose of this is to smooth contributions, allowing investment gains and losses to offset each other over time.

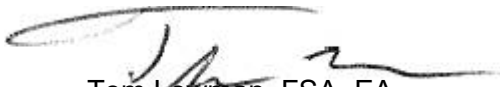
We provided most of the information used in the supporting schedules in the Actuarial and Statistical Sections, as well as the Schedule of Funding Progress and the employer contributions shown in the Schedule of Employer Contributions in the Financial Section. We certify that the valuation was performed in accordance with generally accepted actuarial principles and practices.

The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in the subject valuation report.

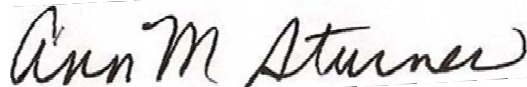
Respectfully Submitted,



Tom Vicente, FSA, EA, MAAA  
Senior Consulting Actuary



Tom Lowman, FSA, EA  
Vice President, Bolton Retirement



Ann Sturner, FSA, EA, MAAA  
Senior Consulting Actuary





## Required Actuarial Certification

Under District of Columbia Code §1-907 for Fiscal Year 2022

Certification	Code Section	Teachers	Police	Fire	Police/ Fire Combined	Total District
FY2022 Employer Normal Cost Rate	N/A	8.27%	33.62%	36.08%	34.45%	20.81%
FY2022 Unfunded Accrued Liability Cost Rate	N/A	3.99%	(14.01)%	(12.40)%	(13.47)%	(4.37)%
Estimated FY2022 Covered Payroll	N/A	\$575,288,000	\$350,779,000	\$178,131,000	\$528,910,000	\$1,104,198,000
FY2022 Employer Normal Cost	1-907.03(a)(3)(A)	\$47,576,000	\$117,932,000	\$64,270,000	\$182,202,000	\$229,778,000
FY2022 Unfunded Accrued Liability Payment	1-907.03(a)(3)(C)	\$22,948,000	\$(49,146,000)	\$(22,090,000)	\$(71,236,000)	\$(48,288,000)
FY2022 District Payment before 1-907.02 (c)	N/A	\$70,524,000	\$68,786,000	\$42,180,000	\$110,966,000	\$181,490,000
FY2020 Shortfall/Overpayment	1-907.02(c)	\$4,536,000	\$(751,000)	\$(1,249,000)	\$(2,001,000)	\$2,535,000
FY2022 District Payment	N/A	\$75,060,000	\$68,035,000	\$40,931,000	\$108,965,000	\$184,025,000
Present Value of Future Benefits	1-907.03(a)(3)(B)	\$3,349,028,000	\$5,735,268,000	\$2,735,487,000	\$8,470,756,000	\$11,819,783,000
Current Value of Assets	1-907.03(a)(3)(D)	\$2,411,390,000	\$4,576,808,000	\$2,043,382,000	\$6,620,190,000	\$9,031,580,000
Actuarial Value of Assets	1-907.03(a)(3)(E)	\$2,431,075,000	\$4,615,243,000	\$2,060,770,000	\$6,676,013,000	\$9,107,088,000

### Actuarial Assumptions

The actuarial assumptions used for the valuation represent the actuary's best estimates of the future experience for the plans.



Tom Vicente, FSA, EA,  
MAAA January 28, 2021



## Outline of Actuarial Assumptions and Methods

The economic and demographic assumptions were adopted by the Board on June 22, 2017. The assumptions were reviewed and concluded that they were generally valid and reasonable.

**Valuation date:** All assets and liabilities are computed as of October 1, 2020. Demographic information was collected as of June 30, 2020. For valuation purposes (e.g., age, service), all members are treated as if remaining in the System as of October 1, 2020.

**Investment rate of return:** 6.50% per annum, compounded annually (net of investment expenses).

**Inflation assumption:** 3.50% per annum.

**Payroll growth assumption:** 4.25% per annum.

**Percent married:** 64% of Teachers are assumed to be married and 80% of Police Officers and Firefighters are assumed to be married, with a wife 3 years younger than a husband. Active members are assumed to have one dependent child aged 10.

**Actuarial method:** The valuation is completed on the entry age normal cost method calculated on an individual basis with level percentage of pay normal cost.

**Amortization of Unfunded Actuarial Accrued Liability:** The unfunded actuarial accrued liability (UAAL) is amortized on a level dollar basis based on the following funding policy adopted by the Board in 2012 and amended in 2017:

- Amortize the legacy UAAL as of October 1, 2017 over a closed 15-year period.
- Amortize the assumption and method changes and experience gains for October 1, 2017 valuation over a closed 20-year period from the valuation date.
- Amortize all subsequent benefit changes, assumption and method changes and experience gains and losses over a closed 20-year period from the date established.

**Assets:** The method of valuing assets is intended to recognize a “smoothed” market value of assets. Under this method, the difference between actual return on market value from investment experience and the expected return on market value is recognized over a five-year period. The actuarial value of assets is constrained to an 80% to 120% corridor around market value of assets. In addition, there is an adjustment made for the effect of the adjustment pursuant to D.C. Code §1-907.02(c).

**Withdrawal assumption:** For Teachers and Firefighters, it was assumed that 15% of the vested members who terminate elect to withdraw their contributions while the remaining 85% elect to leave their contributions in the Plan in order to be eligible for a benefit at their retirement date. For Police Officers, it was assumed that 25% of the vested members who terminate elect to withdraw their contributions while the remaining 75% elect to leave their contributions in the plan.

**Other assumptions:** To value the post-retirement death benefit for Police Officers and Firefighters, the benefit form for all retirements (normal or disabled) is assumed to be a 67.8% Joint and Survivor annuity for all participants (based on 40% of average pay survivor benefits). One-fourth of all Police Officers and Firefighter active deaths are assumed to occur in the line of duty.

**Cost-of-living adjustment (COLA):** The cost of living, as measured by the Consumer Price Index (CPI), will increase at a rate of 3.5% per year for members hired before November 1, 1996, and 3.0% per year for members hired on or after November 1, 1996.

**Credited service and date of entry:** Service is credited as elapsed time from date of hire. The entry date for participation is date of service.

**Military service:** All Police and Fire members are assumed to have 0.40 years of military service at retirement.

## Outline of Actuarial Assumptions and Methods (Continued)

**Administrative expenses:** For Teachers, budgeted administrative expenses of 1.2% of payroll are added to the normal cost rate. For Police Officers and Firefighters, budgeted administrative expenses of 2.1% of payroll are added to the normal cost rate.

**Mortality:** The RPH-2014 Blue Collar Mortality Table projected generationally with Scale BB, set back 1 year for males is used for healthy active members, retirees, and beneficiaries. The RPH-2014 Disabled Mortality Table set back 6 years for males and set forward 7 years for females is used for disabled retirees. Mortality improvement is anticipated under these assumptions.

**Liability for terminated non-vested participants:** The Inactive with Deferred Benefits liability includes a liability for terminated non-vested participants who are due a refund of their contributions. The liability is equal to the refund amount as of the valuation date.

## Outline of Actuarial Assumptions and Methods

### Teachers

**Salary Increases:** Representative values of the assumed annual rates of future salary increases are as follows, and include inflation at 4.25% per annum:

Pay Increase Assumptions for an Individual Member					
Years of Service	Merit & Seniority		Inflation & Productivity (Economy)		Total Increase (Next Year)
5	4.20 %		4.25 %		8.63 %
10	3.20		4.25		7.59
15	1.20		4.25		5.50
20	1.20		4.25		5.50
25	1.20		4.25		5.50
30	1.20		4.25		5.50
35	1.20		4.25		5.50

**Separations from Active Service:** Representative values of the assumed annual rates of withdrawal, service retirement, and disability are shown in the following tables:

Percent of Members Separating Within the Next Year					
Sample Ages	5 years of service and up*		Service Retirement		Disability
	Male	Female	Under 30 yrs	30 & up yrs	
25	18.00 %	18.00 %			0.01 %
30	16.00	16.00			0.02
35	12.00	10.00			0.03
40	12.00	8.00			0.07
45	8.00	6.50			0.12
50	8.00	6.50	5.00 %	5.00 %	0.20
55	8.00	6.50	9.00	22.00	0.25
60			27.00	28.00	0.30
62			22.00	25.00	0.30
65			25.00	35.00	
70			30.00	30.00	
71			25.00	30.00	
75			100.00	100.00	

\* Members of any age with less than 5 years of service have withdrawal rates of 18% to 26% for males, and 16% to 23% for females.

## Outline of Actuarial Assumptions and Methods

### Police Officers

**Salary Increases:** Police Officers are assumed to receive longevity increases applied to individual base pay after 25, and 30 years of service. Representative values of the assumed annual rates of future salary increases before longevity increases are as follows and include inflation at 4.25% per annum:

Pay Increase Assumptions for an Individual Member			
Years of Service	Merit & Seniority	Inflation & Productivity (Economy)	Total Increase (Next Year)
5	2.00 %	4.25 %	6.34 %
10	2.00	4.25	6.34
15	2.00	4.25	6.34
20	1.75	4.25	6.07
25	0.75	4.25	5.03
30	0.00	4.25	4.25

**Separations from Active Service:** Representative values of the assumed annual rates of withdrawal, service retirement, and disability are shown in the following tables:

Percent of Members Separating Within the Next Year						
Sample Ages	5 years of service and up <sup>1</sup>		Disability Retirement <sup>2</sup>		Years of Service	Disability
	Male	Female	Male	Female		
20	5.00 %	5.00 %	0.03 %	0.02 %		
25	5.00	5.00	0.06	0.05		
30	4.25	4.50	0.11	0.10		
35	1.50	3.50	0.16	0.15		
40	1.50	1.50	0.23	0.30	20	15.00 %
45	1.50	1.50	0.32	0.40	25	22.00
50	1.50	1.50	0.42	0.60	30	38.00
55	1.50	1.50	0.44	0.70	35	18.00
60	1.50	1.50	0.51	1.00	40	16.00

<sup>1</sup> Members of any age with less than 5 years of service have withdrawal rates of 6% to 13% for males, and 5% to 11% for females.

<sup>2</sup> It is assumed that 75% of the disabilities are due to accidents in the line of duty and the "percent of disability" is assumed to be 100%.

<sup>3</sup> 100% of active members are assumed to retire at age 65, regardless of service.

## Outline of Actuarial Assumptions and Methods

### Firefighters

**Salary Increases:** Firefighters are assumed to receive longevity increases applied to individual base pay after 15, 20, 25, and 30 years of service. Representative values of the assumed annual rates of future salary increases before longevity increases are as follows and include inflation at 4.25% per annum:

Pay Increase Assumptions for an Individual Member			
Years of Service	Merit & Seniority	Inflation & Productivity (Economy)	Total Increase (Next Year)
5	3.00 %	4.25 %	7.38 %
10	3.00	4.25	7.38
15	3.00	4.25	7.38
20	1.25	4.25	5.55
25	1.25	4.25	5.55
30	1.25	4.25	5.55
35	1.25	4.25	5.55

**Separations from Active Service:** Representative values of the assumed annual rates of withdrawal, service retirement, and disability are shown in the following tables:

Percent of Members Separating Within the Next Year				
Sample Ages	Withdrawal (5 years of service and up <sup>1</sup> )	Disability Retirement <sup>2</sup>	Years of Service	Service Retirement <sup>3</sup>
20	3.00 %	0.01 %		
25	3.00	0.05		
30	2.60	0.18		
35	1.80	0.25		
40	1.40	0.30	20	12.50 %
45	1.20	0.35	25	12.50
50	1.20	0.40	30	22.00
55	0.80	0.45	35	40.00
60	0.60	0.50	40	40.00

<sup>1</sup> Members of any age with less than 5 years of service have withdrawal rates of 4.0% to 7.5%.

<sup>2</sup> It is assumed that 75% of the disabilities are due to accidents in the line of duty and the "percent of disability" is assumed to be 100%.

<sup>3</sup> 100% of active members are assumed to retire at age 60, regardless of service.

## **Provisions as Interpreted for Valuation Purposes**

### **Teachers' Retirement Plan**

#### **Effective Date**

Established on September 18, 1998, the Plan applies to benefit payments based on service accrued after June 30, 1997. The U.S. Department of the Treasury is responsible for paying all benefits accrued before this date.

#### **Definitions**

##### ***Affiliated Employers***

District of Columbia Public Schools

##### ***Covered Members***

Teachers and other educational employees in a salary class position ET 1-15 under the District of Columbia Public Schools (DCPS) system become members automatically on their date of employment. Covered members who leave the DCPS system to work for a D.C. public charter school may elect to remain in the Plan. Substitute teachers and rehired retirees are not covered.

##### ***Service Credit***

One year of teaching service is given for each year of employment with DCPS. Service credit may also include purchased prior civilian government service and outside teaching service. For purposes of retirement eligibility and benefit accrual, creditable Federal and District service is aggregated in determining total creditable service.

##### ***Average Salary***

Highest 36 consecutive months of pay, divided by three.

##### ***Vested***

Members who accrue five or more years of creditable DCPS teaching service are vested for benefits. If a vested member leaves service, they may leave their Member Contributions with the Plan for a future deferred vested benefit when reaching eligibility for retirement (deferred vested in this report).

#### **Contributions**

##### ***Member Contributions***

Members hired before November 1, 1996 are required to contribute 7% of annual pay. Members hired on or after November 1, 1996 contribute 8% of annual pay. Interest is not credited to each Member's accumulated contributions.

##### ***Refund of Member Contributions***

In the event a member leaves service prior to retirement, vested members may leave their contributions in the Plan or request a refund. Nonvested members must take a refund.

## Provisions as Interpreted for Valuation Purposes

### Teachers' Retirement Plan (Continued)

#### **Service Retirement**

##### ***Eligibility***

The Age and Service Credit requirements to be eligible for a full Service Retirement are listed below:

Members Hired Before November 1, 1996	
Age	Service Credit
55	30 years, including 5 years DCPS service
60	20 years, including 5 years DCPS service
62	5 years DCPS service

Members Hired On and After November 1, 1996	
Age	Service Credit
Any Age	30 years, including 5 years DCPS service
60	20 years, including 5 years DCPS service
62	5 years DCPS service

##### ***Benefit***

For members hired before November 1, 1996:

- 1.5% of Average Salary times service through 5 years, plus
- 1.75% of Average Salary times service from 6 through 10 years, plus
- 2.0% of Average Salary times service over 10 years.

For members hired on or after November 1, 1996:

- 2.0% of Average Salary times service.

All members receive a minimum benefit of 1.0% of Average Salary plus \$25 for each year of service.

#### **Involuntary Service Retirement**

##### ***Eligibility***

The Age and Service Credit requirements to be eligible for an Involuntary Service Retirement are listed below:

All Members, Regardless of Date of Hire	
Age	Service Credit
Any Age	25 years, including 5 years DCPS service
50	20 years, including 5 years DCPS service

##### ***Benefit***

Service Retirement Benefit is reduced by 1/6% per month (or 2% per year) that the date of retirement precedes age 55.



## **Provisions as Interpreted for Valuation Purposes**

### **Teachers' Retirement Plan (Continued)**

#### **Disability Retirement**

##### ***Eligibility***

Active members with five or more years of school service credit are eligible (vested) for disability retirement. To be eligible, the member must be found to be incapable of satisfactorily performing the duties of his/her position.

##### ***Benefit***

Equal to Service Retirement benefit. Minimum benefit is the lesser of a) or b):

- a) 40% of Average Salary
- b) Calculated benefit amount projecting service to age 60

#### **Survivor Benefits**

##### ***Lump Sum***

##### ***Eligibility***

Death before completion of 18 months of school service or death without an eligible spouse, domestic partner, dependent child, or parent.

##### ***Benefit***

Refund of member contributions.

#### ***Spouse or Domestic Partner Only***

##### ***Eligibility***

Death before retirement and married/recognized domestic partner for at least two years or have a child by the marriage or partnership.

##### ***Benefit***

55% of Service Retirement benefit. Minimum benefit is the lesser of a) or b):

- a) 55% of 40% of Average Salary
- b) 55% of the calculated benefit amount projecting service to age 60.

#### ***Spouse or Domestic Partner & Dependent Children***

##### ***Child Benefit***

A benefit per child is equal to the smallest of a) or b) or c):

- a) 60% of Average Salary divided by the number of eligible children
- b) \$7,210\* (if hired before 1/1/1980), \$6,963\* (if hired between 1/1/1980 and 10/31/1996), or \$6,781\* (if hired on or after 11/1/1996) per child
- c) \$21,805\* (if hired before 1/1/1980), \$21,057\* (if hired between 1/1/1980 and 10/31/1996), or \$20,507\* (if hired on or after 11/1/1996) divided by the number of children.

## Provisions as Interpreted for Valuation Purposes

### Teachers' Retirement Plan (Continued)

#### Survivor Benefits (Continued)

##### ***Dependent Children Only***

###### *Eligibility*

Children must be unmarried and under age 18, or 22 if a full-time student; also, any dependent child with a disability incurred before age 18. Death does not have to occur before retirement for the children's benefit.

###### *Benefit*

A benefit per child equal to the smallest of a) or b) or c):

- a) 60% of Average Salary divided by the number of eligible children
- b) \$7,376\* (if hired before 1/1/1980), \$7,123\* (if hired between 1/1/1980 and 10/31/1996), or \$6,937\* (if hired on or after 11/1/1996) per child
- c) \$22,307\* (if hired before 1/1/1980), \$21,541\* (if hired between 1/1/1980 and 10/31/1996), or \$20,979\* (if hired on or after 11/1/1996) divided by the number of children.

##### ***Parents Only***

###### *Eligibility*

Death before retirement and no eligible spouse/domestic partner or children, and parents must have received at least one-half of their total income from the member immediately before the member's death.

###### *Benefit*

55% of Service Retirement benefit. Minimum benefit is the lesser of a) or b):

- a) 55% of 40% of Average Salary
- b) 55% of the calculated benefit amount projecting service to age 60.

#### Deferred Vested Retirement

###### *Eligibility*

Active members with five or more years of DCPS service credit.

###### *Benefit*

Benefit is calculated in the same manner as Service Retirement benefit and may be collected starting at age 62.

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\*Survivor benefit amounts are as of March 1, 2020 and are subject to annual inflation adjustments.

## **Provisions as Interpreted for Valuation Purposes**

### **Teachers' Retirement Plan (Continued)**

#### **Retirement Options**

Retirement and disability benefits are payable for the life of the retired member. Optional reduced benefits may be elected at the time of retirement to provide for continuation of a reduced benefit amount to a designated beneficiary. Optional forms include:

**a) Unreduced Annuity**

Full benefit is paid to the member, with no survivor benefit.

**b) Reduced Annuity with a Maximum Survivor Annuity (to Spouse or Recognized Domestic Partner)**

Reduced benefit paid to the member so that upon the member's death, the spouse or domestic partner will receive 55% of the unreduced normal life annuity. Member's benefit is reduced by 2.5% of retirement benefit, up to \$3,600, plus 10% of any retirement benefit over \$3,600.

**c) Reduced Annuity with a Partial Survivor Annuity (to Spouse or Recognized Domestic Partner)**

Reduced benefit paid to member so that upon the member's death, the spouse or domestic partner will receive a partial annuity that can range from \$1 up to less than 55% of the unreduced normal life annuity amount. The member's benefit is reduced by the same amount as option b, multiplied by the ratio of the chosen benefit percent to the maximum benefit percent (55%).

**d) Reduced Annuity with a Life Insurance Benefit**

Member elects a life insurance amount, payable in a lump sum to designated beneficiary upon member's death. The unreduced annuity is reduced by the amount required to pay for the life insurance premium.

**e) Reduced Annuity with a Survivor Annuity to a Person with an Insurable Interest**

A 55% Joint and Survivor Annuity where the original benefit is reduced by 10% plus an additional 5% for each full 5 years, up to 25 years, that the designated beneficiary is younger than the member. Maximum reduction is 40% for any beneficiary who is 25 or more years younger than the member.

#### **Cost-of-Living Adjustments (COLA)**

Each year on March 1st, benefits which have been paid for at least twelve months preceding March 1st may be increased. The increase is equal to the change in the CPI-W for the prior calendar year. COLA's are included in benefit payments on and after April 1st. If a member's retirement is effective March 1 of the preceding year, the COLA amount will be prorated.

For members hired on or after November 1, 1996, the cost-of-living increase is limited to 3% per year.

## **Provisions as Interpreted for Valuation Purposes**

### **Police Officers and Firefighters' Retirement Plan**

#### **Effective Date**

Established on July 1, 1997. The U.S. Department of the Treasury is responsible for paying all benefits accrued before this date.

#### **Definitions**

##### ***Affiliated Employers***

The District of Columbia Metropolitan Police Department (MPD) and the District of Columbia Department of Fire and Emergency Medical Services (FEMS).

##### ***Covered Members***

Sworn Police Officers and Firefighters become members on their first day of active duty (cadets are not eligible). Membership is not automatic for uniformed EMT Firefighters.

##### ***Service Credit***

One year of service is given for each year of employment with MPD or FEMS. Additional service may be purchased or credited for lateral transfer service, EMT service, prior military service, and certain civilian service. For purposes of retirement eligibility and benefit accrual, creditable Federal and District service is aggregated in determining total creditable service.

##### ***Average Salary***

For members hired before February 15, 1980, the highest 12 consecutive months of pay. For members hired on or after February 15, 1980, the highest 36 consecutive months of pay, divided by 3. Base pay does not include overtime, holiday, or military. Longevity pay is included in Firefighters' base pay but not police officers' base pay.

##### ***Vested***

Members who accrue five or more years of Service Credit are vested for benefits. If these members leave service, they may leave their Member Contribution Accounts with the Plan for a future benefit when reaching eligibility.

#### **Contributions**

##### ***Member Contributions***

Members hired before November 10, 1996, contribute 7.0% of salary. Members hired on or after November 10, 1996, contribute 8.0% of salary. Member contributions, together with any purchased service credit payments, are credited to individual Member Contribution Accounts. No interest is accrued on contributions.

##### ***Refund of Member Contributions***

In the event a member leaves service for a reason other than death or retirement, member contribution accounts are refunded upon request. Nonvested members must take a refund.

## Provisions as Interpreted for Valuation Purposes

### Police Officers and Firefighters' Retirement Plan (Continued)

#### **Service Retirement**

##### ***Eligibility***

The Age and Service Credit requirements to be eligible for a full Service Retirement are listed below:

Members Hired Before November 10, 1996	
Age	Service Credit
Any Age	20 years departmental service (only if hired before 2/15/1980)
50	25 years departmental service
60	5 years departmental service

Members Hired On and After November 10, 1996	
Age	Service Credit
Any Age	25 years departmental service
60	5 years departmental service

##### ***Benefit***

For members hired before November 10, 1996:

- 2.5% of Average Salary times departmental service up to 25 years (20 years if hired before 2/15/1980), plus
- 3.0% of Average Salary times departmental service over 25 years (or 20 years if hired before 2/15/1980), plus
- 2.5% of Average Salary times purchased or credited service.

For members hired on or after November 10, 1996:

- 2.5% of Average Salary times total service.

All members are subject to a maximum benefit of 80% of Average Salary.

#### **Service-Related Disability Retirement**

##### ***Eligibility***

Disabled as a result of an injury or disease that permanently disables him/her for the performance of duty.

##### ***Benefit***

For members hired before February 15, 1980:

2.5% of Average Salary times total years of service, subject to a minimum of 66-2/3% of Average Salary and a maximum of 70% of Average Salary.

For members hired on or after February 15, 1980:

70% of final pay times percentage of disability, subject to a minimum of 40% of final pay.

## **Provisions as Interpreted for Valuation Purposes**

### **Police Officers and Firefighters' Retirement Plan (Continued)**

#### **Nonservice-Related Disability Retirement**

##### ***Eligibility***

Active members with five or more years of departmental service are eligible (vested) for disability retirement. The member is eligible if found that the disability precludes further service with his/her department.

##### ***Benefit***

For members hired before February 15, 1980:

2.0% of Average Salary times total years of service, subject to a minimum of 40% of Average Salary and a maximum of 70% of Average Salary.

For members hired on or after February 15, 1980:

70% of final pay times percentage of disability, subject to a minimum of 30% of final pay.

#### **Survivor Benefits**

##### ***Lump Sum***

###### ***Eligibility***

Death before retirement without an eligible spouse or child.

###### ***Benefit***

Refund of member contributions according to Plan's order of precedence.

##### ***Lump Sum – Death in Line of Duty***

###### ***Eligibility***

Death occurring in the line of duty, not resulting from willful misconduct.

###### ***Benefit***

\$50,000

##### ***Spouse Only – Death in Line of Duty***

###### ***Eligibility***

Member killed in line of duty, after December 29, 1993.

###### ***Benefit***

100% of final pay.

##### ***Spouse Only – Death Not in Line of Duty***

###### ***Eligibility***

Member death, not in line of duty, after December 29, 1993. If retired, must be married for at least one year or have a child by the marriage.

###### ***Benefit***

40% of the greater of a) or b):

- a) Average Salary
- b) Salary for step 6 salary class 1 of the DC Police and Fireman's Salary Act in effect, adjusted for cost-of-living increases if death occurs after retirement.

Benefit cannot be higher than rate of pay at death (or retirement if death occurs after retirement).

## **Provisions as Interpreted for Valuation Purposes**

### **Police Officers and Firefighters' Retirement Plan (Continued)**

#### **Survivor Benefits**

##### ***Spouse or Domestic Partner & Dependent Children***

###### ***Eligibility***

Member death, not in line of duty, after December 29, 1993. If retired, must be married or in a domestic partnership for at least one year or have a child by the marriage or domestic partnership. Children must be unmarried, not in a domestic partnership and under age 18, or 22 if full-time student. Also, any dependent child because of a disability incurred before age 18. Death does not have to occur before retirement for the children's benefit.

###### ***Spouse Benefit***

40% of the greater of a) or b):

- a) Average Salary
- b) Salary for step 6 salary class 1 of the DC Police and Fireman's Salary Act in effect, adjusted for cost-of-living increases if death occurs after retirement.

Benefit cannot be higher than rate of pay at death (or retirement if death occurs after retirement).

###### ***Child Benefit***

A benefit per child is equal to the smallest of a) or b) or c):

- a) 60% of Average Salary divided by the number of eligible children
- b) \$4,340\* (if hired before 11/10/1996) or \$4,245\* (if hired on or after 11/10/1996) per child
- c) \$13,019\* (if hired before 11/10/1996) or \$12,736\* (if hired on or after 11/10/1996) divided by the number of children.

\*Survivor benefit amounts are as of March 1, 2020 and are subject to annual inflation adjustments.

##### ***Dependent Children Only***

###### ***Eligibility***

Children must be unmarried and not in a domestic partnership and under age 18, 22 if fulltime student, or any dependent child incapable of self-support due to a disability incurred before age 18. Death does not have to occur before retirement for the children's benefit.

###### ***Benefit***

75% of Average Salary divided by the number of eligible children, adjusted for cost-of-living increases.

#### **Deferred Vested Retirement**

###### ***Eligibility***

Active members with five or more years of departmental service.

###### ***Benefit***

Benefit is calculated in the same manner as Service Retirement benefit and may be collected starting at age 55.

## **Provisions as Interpreted for Valuation Purposes**

### **Police Officers and Firefighters' Retirement Plan (Continued)**

#### **Retirement Options**

Retirement and disability benefits are payable for the life of the retired member. This includes an unreduced Joint and Survivor Annuity as defined above in the "Survivor Benefits – Spouse and Dependent Children" section.

An optional reduced benefit may be elected at the time of retirement to provide for an additional survivor benefit to a designated beneficiary. Member's original annuity is reduced by 10% and an increased benefit based on the value of that amount is added to the survivor's benefit. If the designated beneficiary is more than five years younger than the member, the additional amount will be reduced by 5% for each full five years that the beneficiary is younger than the member, subject to a maximum reduction of 40%.

#### **Cost-of-Living Adjustments (COLA)**

Each year on March 1st, benefits which have been paid for at least twelve months preceding March 1st may be increased. The amount is equal to the increase in the CPI for the prior calendar year. COLA's are included in benefit payments on and after April 1st. If a member's retirement is effective after March 1 of the preceding year, the COLA amount will be prorated.

For members hired on or after November 10, 1996, the cost of living increase is limited to 3% per year. Members hired before February 15, 1980, receive equalization pay, which is defined as the percentage increase of active employees' salary increases. Equalization increases are not paid to beneficiaries.



## Schedule of Active Member Valuation Data

(Dollars in thousands)

Teachers' Plan					
Valuation Date	Number	Annual Payroll	Annual Average Pay	% increase in Average Pay	
September 30, 2020	5,531	\$ 551,835	\$ 99.8	0.93	%
September 30, 2019	5,226	516,609	98.9	6.38	
September 30, 2018	5,066	470,749	92.9	7.89	
September 30, 2017	5,199	447,762	86.1	1.07	
September 30, 2016	5,141	438,079	85.2	(0.59)	
September 30, 2015	4,866	417,090	85.7	1.77	
September 30, 2014	4,499	378,926	84.2	(0.07)	
September 30, 2013	4,379	369,071	84.3	(0.63)	
September 30, 2012	4,495	381,235	84.8	4.72	
September 30, 2011	4,747	384,455	81.0	13.96	

Police Officers' Plan					
Valuation Date	Number	Annual Payroll	Annual Average Pay	% increase in Average Pay	
September 30, 2020	3,544	\$ 336,479	\$ 94.9	3.31	%
September 30, 2019	3,566	327,734	91.9	10.27	
September 30, 2018	3,567	297,283	83.3	(0.31)	
September 30, 2017	3,583	299,535	83.6	2.27	
September 30, 2016	3,651	298,442	81.7	1.83	
September 30, 2015	3,829	307,373	80.3	2.44	
September 30, 2014	3,902	305,765	78.4	3.04	
September 30, 2013	3,846	292,494	76.1	(0.69)	
September 30, 2012	3,810	291,780	76.6	(1.26)	
September 30, 2011	3,775	292,785	77.6	2.29	

Firefighters' Plan					
Valuation Date	Number	Annual Payroll	Annual Average Pay	% increase in Average Pay	
September 30, 2020	1,833	\$ 170,869	\$ 93.2	2.05	%
September 30, 2019	1,840	168,076	91.3	3.73	
September 30, 2018	1,782	156,926	88.1	6.95	
September 30, 2017	1,729	142,370	82.3	0.69	
September 30, 2016	1,708	139,672	81.8	0.61	
September 30, 2015	1,708	138,828	81.3	1.04	
September 30, 2014	1,649	132,650	80.4	10.73	
September 30, 2013	1,664	120,886	72.6	0.33	
September 30, 2012	1,700	123,097	72.4	0.69	
September 30, 2011	1,786	128,436	71.9	1.51	

### Schedule of Retirees Added-to and Removed-from District Benefit Payrolls (Dollars in thousands)

Fiscal Year Ended	Plan	Added		Removed		Increase due to Plan Amendments	Payrolls at End of Year		Percentage Increase in Annual Allowances	Average Annual Allowances
		Number	Annual Allowances	Number	Annual Allowances		Number	Annual Allowances		
9/30/2020	Teachers	98	\$ 3,471	86	\$ 1,767	\$ 1,824	4,071	\$ 85,368	4.31 %	\$ 21
	Police/Fire	274	15,268	44	1,308	3,719	3,929	146,592	13.71	37
9/30/2019	Teachers	141	4,693	72	1,278	1,890	4,059	81,840	6.93	20
	Police/Fire	301	15,917	43	821	1,993	3,699	128,913	15.28	35
9/30/2018	Teachers	160	4,892	69	977	1,419	3,990	76,535	7.49	19
	Police/Fire	271	13,179	45	909	1,868	3,441	111,824	14.47	32
9/30/2017	Teachers	96	2,599	79	1,211	1,023	3,899	71,201	3.50	18
	Police/Fire	252	11,287	40	678	1,339	3,215	97,686	13.94	30
9/30/2016	Teachers	222	6,844	58	1,021	68	3,882	68,790	9.37	18
	Police/Fire	441	18,205	47	1,022	-1,659	3,003	85,738	22.11	29
9/30/2015	Teachers	183	4,950	66	822	84	3,718	62,899	7.18	17
	Police/Fire	284	12,818	39	424	-630	2,610	70,214	20.13	27
9/30/2014	Teachers	218	6,079	65	955	597	3,601	58,687	10.80	16
	Police/Fire	237	9,465	55	895	350	2,365	58,450	18.01	25
9/30/2013	Teachers	202	5,289	39	436	706	3,448	52,966	11.73	15
	Police/Fire	174	6,054	30	298	344	2,183	49,530	14.05	23
9/30/2012	Teachers	204	4,807	49	594	1,198	3,285	47,407	12.88	14
	Police/Fire	234	8,034	51	557	423	2,039	43,430	22.23	21
9/30/2011	Teachers	226	4,374	37	490	497	3,130	41,996	12.73	13
	Police/Fire	326	6,847	22	238	205	1,856	35,530	23.72	19

## Analysis of Financial Experience

(Dollars in millions)

### Teachers' Retirement Plan

#### Gains & Losses in Accrued Liabilities Resulting from Difference Between Assumed Experience & Actual Experience

Experience Gain / (Loss)	Gain (or Loss)	
	2020	2019
<b>Age &amp; Service Retirements</b>		
If members retire at older ages, there is a gain; if younger ages, a loss.	\$ 1.4	\$ (8.4)
<b>Disability Retirements</b>		
If disability claims are less than assumed, there is a gain; if more claims, a loss.	0.0	(1.1)
<b>Death-in Service Benefits</b>		
If survivor claims are less than assumed, there is a gain; if more claims, there is a loss.	(0.7)	(2.4)
<b>Withdrawal from Employment</b>		
If more liabilities are released by withdrawals than assumed, there is a gain; if smaller releases, a loss.	(19.2)	(11.5)
<b>Pay Increases</b>		
If there are smaller pay increases than assumed, there is a gain; if greater increases, a loss.	50.8	1.0
<b>New Members</b>		
Additional unfunded actuarial accrued liability will produce a loss.	(49.4)	(45.3)
<b>Investment Income</b>		
If there is greater investment income than assumed, there is a gain; if less income, a loss.	4.9	(10.4)
<b>Death after Retirement</b>		
If retirees live longer than assumed, there is a loss; if not as long, a gain.	8.5	14.7
<b>COLA/CPI</b>		
If inflation is different than expected, gains or losses can occur.	12.0	9.9
<b>Other</b>		
Miscellaneous gains and losses resulting from data adjustments, timing of financial transactions, etc.	(1.0)	(8.4)
<b>Gain/(Loss) During Year from Experience</b>	7.3	(61.9)
<b>Non-Recurring Items</b>		
Adjustments for plan amendments, assumption changes, method changes or audit changes.	0.0	(9.0)
<b>Composite Gain/(Loss) During Year</b>	<u>\$ 7.3</u>	<u>\$ (70.9)</u>

## Analysis of Financial Experience

(Dollars in millions)

### Police Officers and Firefighters' Retirement Plan

#### Gains & Losses in Accrued Liabilities Resulting from Difference Between Assumed Experience & Actual Experience

Experience Gain / (Loss)	Gain (or Loss)	
	2020	2019
<b>Age &amp; Service Retirements</b>		
If members retire at older ages, there is a gain; if younger ages, a loss.	\$ (19.1)	\$ (46.2)
<b>Disability Retirements</b>		
If disability claims are less than assumed, there is a gain; if more claims, a loss.	4.1	5.8
<b>Death-in Service Benefits</b>		
If survivor claims are less than assumed, there is a gain; if more claims, there is a loss.	(3.6)	(14.7)
<b>Withdrawal from Employment</b>		
If more liabilities are released by withdrawals than assumed, there is a gain; if smaller releases, a loss.	3.1	(3.1)
<b>Pay Increases</b>		
If there are smaller pay increases than assumed, there is a gain; if greater increases, a loss.	34.2	(130.7)
<b>New Members</b>		
Additional unfunded actuarial accrued liability will produce a loss.	(11.0)	(20.9)
<b>Investment Income</b>		
If there is greater investment income than assumed, there is a gain; if less income, a loss.	19.5	43.8
<b>Death after Retirement</b>		
If retirees live longer than assumed, there is a loss; if not as long, a gain.	(12.1)	42.6
<b>COLA/CPI</b>		
If inflation is different than expected, gains or losses can occur.	10.0	34.1
<b>Other</b>		
Miscellaneous gains and losses resulting from data adjustments, timing of financial transactions, etc.	3.0	103.0
<b>Gain/(Loss) During Year from Experience</b>	28.1	13.7
<b>Non-Recurring Items</b>		
Adjustments for plan amendments, assumption changes, method changes or audit changes.	0.0	52.9
<b>Composite Gain/(Loss) During Year</b>	<u>\$ 28.1</u>	<u>\$ 66.6</u>

**Valuation Balance Sheet**  
**Teachers' Retirement Plan**  
 (Dollars in thousands)

**As of October 1, 2020**

Present and Prospective Assets	
Actuarial Value of Present Assets	\$ 2,431,075
Present Value of Future Members' Contributions	373,243
Present Value of Future Employer Contributions	
Normal contributions	334,982
Unfunded accrued liability contributions	209,728
Total Present and Prospective Assets	<u>\$ 3,349,028</u>

Actuarial Liabilities	
Present Value of benefits payable on account of retired members and survivors of deceased members now drawing retirement benefits	\$ 1,121,326
Present Value of prospective benefits payable on account of inactive members	183,579
Present Value of prospective benefits payable on account of present active members	
Service retirement benefits	1,657,848
Disability retirement benefits	41,710
Survivor benefits	20,317
Separation benefits	324,248
Total Actuarial Liabilities	<u>\$ 3,349,028</u>

**Valuation Balance Sheet****Police Officers and Firefighters' Retirement Plan**  
(Dollars in thousands)**As of October 1, 2020**

Present and Prospective Assets	
Actuarial Value of Present Assets	\$ 6,676,013
Present Value of Future Members' Contributions	468,889
Present Value of Future Employer Contributions	
Normal contributions	1,978,023
Unfunded accrued liability contributions	(652,169)
Total Present and Prospective Assets	<u>\$ 8,470,756</u>

Actuarial Liabilities	
Present Value of benefits payable on account of retired members and survivors of deceased members now drawing retirement benefits	\$ 2,830,585
Present Value of prospective benefits payable on account of inactive members	73,396
Present Value of prospective benefits payable on account of present active members	
Service retirement benefits	4,954,578
Disability retirement benefits	280,033
Survivor benefits	102,154
Separation benefits	230,010
Total Actuarial Liabilities	<u>\$ 8,470,756</u>

## Valuation Solvency Test

(Dollars in thousands)

Valuation Date	Aggregate Accrued Liabilities				Portion of Accrued Liabilities Covered by Reported Asset			
	(1)	(2)	(3)	Reported Assets	(1)	(2)	(3)	
	Active Member Contributions	Retirees, Survivors and Inactive Members	Members (Employer Financed Portion)					
Teachers' Retirement Plan								
10/1/2011	\$ 138,874	\$ 718,884	\$ 687,107	\$ 1,573,654	100 %	100 %	70.3 %	
10/1/2012	137,698	819,842	723,008	1,503,346	100	100	75.5	
10/1/2013	141,792	883,495	733,756	1,622,376	100	100	81.4	
10/1/2014	141,943	968,446	738,841	1,746,030	100	100	86.0	
10/1/2015	144,927	1,053,078	755,300	1,670,976	100	100	62.6	
10/1/2016	152,459	1,108,032	769,149	1,822,113	100	100	73.0	
10/1/2017	156,263	1,154,696	831,532	2,051,006	100	100	89.0	
10/1/2018	165,629	1,234,796	900,889	2,193,598	100	100	88.0	
10/1/2019	228,893	1,263,613	1,001,785	2,264,428	100	100	77.1	
10/1/2020	302,072	1,304,905	1,033,826	2,411,390	100	100	77.8	

<b>Police Officers and Firefighters' Retirement Plan</b>							
10/1/2011	\$ 224,928	\$ 708,364	\$ 2,376,533	\$ 3,593,716	100 %	100 %	92.3 %
10/1/2012	235,924	849,982	2,371,070	3,681,526	100	100	100
10/1/2013	247,202	966,862	2,430,021	4,168,457	100	100	100
10/1/2014	255,735	1,149,515	2,593,287	4,588,319	100	100	100
10/1/2015	262,674	1,388,908	2,631,511	4,462,228	100	100	100
10/1/2016	260,786	1,650,195	2,587,532	4,954,464	100	100	100
10/1/2017	261,428	1,990,699	2,626,132	5,629,911	100	100	100
10/1/2018	267,845	2,258,695	2,697,220	6,015,953	100	100	100
10/1/2019	338,775	2,547,138	2,828,542	6,256,213	100	100	100
10/1/2020	352,281	2,903,981	2,817,790	6,620,190	100	100	100

## STATISTICAL SECTION

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## Summary

### Introduction

The objective of the *Statistical Section* is to provide information to assist readers in understanding and assessing DCRB's overall financial condition when viewing the Financial Statements, Notes to the Financial Statements, the Required Supplementary Information, and the Supplementary Information. The data presented throughout this section incorporates information from prior CAFRs and is useful in evaluating how the financial condition of the Plans has changed over time.

### Financial Trends

The financial trend schedules show financial information about the growth of DCRB's assets and provide a context for how DCRB's financial position has changed over the past 10 years. The financial trend schedules presented are:

- Changes in Net Pension
- Administrative Expenses
- Investment Expenses

### Operating Information

The following schedules provide data of the environment in which DCRB operates. The schedules presented include:

- Annual Salaries and Benefits
- Participant Data
- Average Benefit by Type
- Schedule of Retired Members by Benefit Type and Option Selected

## Schedules of Fiduciary Net Position

(Dollars in thousands)

Teachers' Retirement Fund	2020	2019	2018	2017	2016
<b>Assets</b>					
Cash and Short-Term Investments	\$ 8,814	\$ 20,298	\$ 15,735	\$ 23,675	\$ 13,993
Receivables	15,780	3,918	4,038	19,504	5,002
Prepaid Expenses	42	41	-	-	3
Investments at Fair Value	2,397,395	2,244,990	2,159,823	2,046,711	1,807,998
Collateral from Securities Lending Transactions at Fair Value	-	-	-	-	-
Net Capital Assets	20	-	-	-	-
<b>Total Assets</b>	<b>2,422,051</b>	<b>2,269,247</b>	<b>2,179,596</b>	<b>2,089,890</b>	<b>1,826,996</b>
<b>Liabilities</b>					
Retirement Benefits Payable to U.S. Treasury	-	-	-	459	459
Accounts Payable and Other	1,859	1,704	2,170	866	1,377
Due to Federal Government	320	144	159	301	56
Due to District of Columbia Government	46	-	-	80	501
Investment Payables	8,436	2,917	1,161	17,585	2,654
Obligations Under Securities Lending	-	-	-	-	-
<b>Total Liabilities</b>	<b>10,661</b>	<b>4,765</b>	<b>3,490</b>	<b>19,291</b>	<b>5,047</b>
<b>Net Position Restricted for Pensions</b>	<b>\$ 2,411,390</b>	<b>\$ 2,264,482</b>	<b>\$ 2,176,106</b>	<b>\$ 2,070,599</b>	<b>\$ 1,821,949</b>

Teachers' Retirement Fund	2015	2014	2013	2012	2011
<b>Assets</b>					
Cash and Short-Term Investments	\$ 18,352	\$ 7,236	\$ 26,826	\$ 19,628	\$ 44,847
Receivables	4,872	43,404	28,853	43,975	48,687
Prepaid Expenses	13	54	-	-	-
Investments at Fair Value	1,650,974	1,729,571	1,630,294	1,498,968	1,345,088
Collateral from Securities Lending Transactions at Fair Value	-	6,885	23,566	28,050	124,663
Net Capital Assets	-	-	-	1	3
<b>Total Assets</b>	<b>1,674,211</b>	<b>1,787,150</b>	<b>1,709,539</b>	<b>1,590,622</b>	<b>1,563,288</b>
<b>Liabilities</b>					
Retirement Benefits Payable to U.S. Treasury	-	-	21,503	-	-
Accounts Payable and Other	735	1,163	556	616	953
Due to Federal Government	20	204	78	153	150
Due to District of Columbia Government	401	414	112	616	772
Investment Payables	2,417	32,426	41,162	57,369	95,197
Obligations Under Securities Lending	-	6,982	23,753	28,382	125,504
<b>Total Liabilities</b>	<b>3,573</b>	<b>41,189</b>	<b>87,164</b>	<b>87,136</b>	<b>222,576</b>
<b>Net Position Restricted for Pensions</b>	<b>\$ 1,670,638</b>	<b>\$ 1,745,961</b>	<b>\$ 1,622,375</b>	<b>\$ 1,503,486</b>	<b>\$ 1,340,712</b>

## Schedules of Fiduciary Net Position

(Dollars in thousands)

Police Officers and Fire Fighters' Retirement Fund	2020	2019	2018	2017	2016
<b>Assets</b>					
Cash and Short-Term Investments	\$ 24,227	\$ 56,136	\$ 43,599	\$ 64,541	\$ 37,487
Receivables	35,715	4,702	4,619	44,180	9,233
Prepaid Expenses	115	110	-	-	7
Investments at Fair Value	6,589,423	6,208,612	5,984,412	5,628,706	4,920,614
Collateral from Securities Lending Transactions at Fair Value	-	-	-	-	-
Net Capital Assets	55	-	-	-	-
<b>Total Assets</b>	<b>6,649,535</b>	<b>6,269,560</b>	<b>6,032,630</b>	<b>5,737,427</b>	<b>4,967,341</b>
<b>Liabilities</b>					
Retirement Benefits Payable to U.S. Treasury	-	-	-	217	217
Accounts Payable and Other	5,152	4,733	5,348	3,379	3,751
Due to Federal Government	878	396	296	819	154
Due to District of Columbia Government	128	-	-	216	1,364
Investment Payables	23,187	8,068	3,216	48,354	7,224
Obligations Under Securities Lending	-	-	-	-	-
<b>Total Liabilities</b>	<b>29,345</b>	<b>13,197</b>	<b>8,860</b>	<b>52,985</b>	<b>12,710</b>
<b>Net Position Restricted for Pensions</b>	<b>\$ 6,620,190</b>	<b>\$ 6,256,363</b>	<b>\$ 6,023,770</b>	<b>\$ 5,684,442</b>	<b>\$ 4,954,631</b>

Police Officers and Fire Fighters' Retirement Fund	2015	2014	2013	2012	2011
<b>Assets</b>					
Cash and Short-Term Investments	\$ 57,140	\$ 20,164	\$ 69,232	\$ 54,888	\$ 104,912
Receivables	9,205	111,745	70,820	105,313	104,926
Prepaid Expenses	34	140	-	-	-
Investments at Fair Value	4,405,127	4,546,197	4,144,784	3,666,044	3,146,575
Collateral from Securities Lending Transactions at Fair Value	-	18,097	59,912	68,602	291,625
Net Capital Assets	-	-	-	2	6
<b>Total Assets</b>	<b>4,471,506</b>	<b>4,696,343</b>	<b>4,344,748</b>	<b>3,894,849</b>	<b>3,648,044</b>
<b>Liabilities</b>					
Retirement Benefits Payable to U.S. Treasury	-	-	9,391	-	-
Accounts Payable and Other	1,950	3,038	1,397	1,479	2,150
Due to Federal Government	53	523	190	356	339
Due to District of Columbia Government	1,055	1,062	275	1,438	1,801
Investment Payables	6,450	85,237	104,649	140,307	222,695
Obligations Under Securities Lending	-	18,354	60,389	69,415	293,592
<b>Total Liabilities</b>	<b>9,508</b>	<b>108,214</b>	<b>176,291</b>	<b>212,995</b>	<b>520,577</b>
<b>Net Position Restricted for Pensions</b>	<b>\$ 4,461,998</b>	<b>\$ 4,588,129</b>	<b>\$ 4,168,457</b>	<b>\$ 3,681,854</b>	<b>\$ 3,127,467</b>

## Schedules of Changes in Fiduciary Net Position

(Dollars in thousands)

Teachers' Retirement Fund	2020	2019	2018	2017	2016
<b>Additions</b>					
Contributions:					
District Government	\$ 58,888	\$ 53,343	\$ 59,046	\$ 56,781	\$ 44,469
Plan Members	42,356	40,432	40,324	34,364	33,591
Total Contributions	101,244	93,775	99,370	91,145	78,060
Net Investment Income	138,936	85,047	94,129	239,554	152,262
Other income	803	883	1,038	907	1,033
Total Additions	240,983	179,705	194,537	331,606	231,355
<b>Deductions</b>					
Benefit Payments	85,679	81,471	78,430	72,069	68,634
Retirement Benefits Payable to U.S. Treasury	-	-	-	-	459
Refunds	4,873	6,418	6,126	6,166	6,205
Administrative Expenses	3,511	3,440	4,474	4,721	4,746
Total Deductions	94,063	91,329	89,030	82,956	80,044
<b>Changes in Fiduciary Net Position</b>	<b>\$ 146,920</b>	<b>\$ 88,376</b>	<b>\$ 105,507</b>	<b>\$ 248,650</b>	<b>\$ 151,311</b>

Teachers' Retirement Fund	2015	2014	2013	2012	2011
<b>Additions</b>					
Contributions:					
District Government	\$ 39,513	\$ 31,636	\$ 6,407	\$ -	\$ -
Plan Members	31,621	28,751	28,129	28,639	27,739
Total Contributions	71,134	60,387	34,536	28,639	27,739
Net Investment Income (Loss)	(72,647)	132,086	168,117	190,002	44,364
Other income	385	522	796	672	616
Total Additions (Reductions)	(1,128)	192,995	203,449	219,313	72,719
<b>Deductions</b>					
Benefit Payments	64,076	59,832	54,180	48,145	42,532
Retirement Benefits Payable to U.S. Treasury	-	-	21,503	-	-
Refunds	5,576	5,790	5,250	5,514	4,060
Administrative Expenses	4,543	3,787	3,627	2,880	2,885
Total Deductions	74,195	69,409	84,560	56,539	49,477
<b>Changes in Fiduciary Net Position</b>	<b>\$ (75,323)</b>	<b>\$ 123,586</b>	<b>\$ 118,889</b>	<b>\$ 162,774</b>	<b>\$ 23,242</b>

## Schedules of Changes in Fiduciary Net Position

(Dollars in thousands)

Police Officers and Fire Fighters' Retirement Fund	2020	2019	2018	2017	2016
<b>Additions</b>					
Contributions:					
District Government	\$ 93,061	\$ 91,284	\$ 105,596	\$ 145,631	\$ 136,115
Plan Members	37,880	38,243	34,478	33,424	32,785
Total Contributions	130,941	129,527	140,074	179,055	168,900
Net Investment Income	381,595	232,987	316,842	655,310	415,157
Other income	2,207	2,435	2,356	2,468	2,810
Total Additions	514,743	364,949	459,272	836,833	586,867
<b>Deductions</b>					
Benefit Payments	140,044	121,342	106,794	92,537	78,920
Retirement Benefits Payable to U.S. Treasury	-	-	-	-	217
Refunds	1,236	1,533	1,580	1,647	2,179
Administrative Expenses	9,648	9,481	11,570	12,838	12,918
Total Deductions	150,928	132,356	119,944	107,022	94,234
<b>Changes in Fiduciary Net Position</b>	<b>\$ 363,815</b>	<b>\$ 232,593</b>	<b>\$ 339,328</b>	<b>\$ 729,811</b>	<b>\$ 492,633</b>

Police Officers and Fire Fighters' Retirement Fund	2015	2014	2013	2012	2011
<b>Additions</b>					
Contributions:					
District Government	\$ 103,430	\$ 110,766	\$ 96,314	\$ 116,700	\$ 127,200
Plan Members	33,679	32,821	30,581	30,398	30,474
Total Contributions	137,109	143,587	126,895	147,098	157,674
Net Investment Income (Loss)	(187,283)	338,894	423,581	452,881	81,973
Other income	1,012	1,342	2,047	1,584	1,435
Total Additions (Reductions)	(49,162)	483,823	552,523	601,563	241,082
<b>Deductions</b>					
Benefit Payments	63,634	52,784	45,656	38,924	30,766
Retirement Benefits Payable to U.S. Treasury	-	-	9,391	-	-
Refunds	1,396	1,637	1,960	1,534	1,913
Administrative Expenses	11,939	9,730	8,913	6,718	6,678
Total Deductions	76,969	64,151	65,920	47,176	39,357
<b>Changes in Fiduciary Net Position</b>	<b>\$ (126,131)</b>	<b>\$ 419,672</b>	<b>\$ 486,603</b>	<b>\$ 554,387</b>	<b>\$ 201,725</b>

## Schedules of Administrative Expenses

(Dollars in thousands)

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
<b>Personal services</b>										
Salaries	\$ 6,131	\$ 6,058	\$ 6,420	\$ 6,513	\$ 6,181	\$ 4,760	\$ 4,401	\$ 3,955	\$ 4,114	\$ 3,907
Fringe Benefits	1,602	1,481	1,832	1,613	1,318	1,301	1,244	1,135	954	1,030
Total Personal Services	7,733	7,539	8,252	8,126	7,499	6,061	5,645	5,090	5,068	4,937
<b>Non-personal services</b>										
Office supplies	44	70	94	107	99	126	115	187	157	166
Telephone	89	46	96	107	91	71	56	50	49	14
Rent	1,695	1,968	1,824	1,800	1,754	1,634	1,554	1,513	1,465	1,444
Office support	-	-	-	-	-	-	-	-	1	68
Travel	110	183	194	218	209	206	181	177	148	38
Professional fees	892	1,149	3,666	5,263	6,379	6,225	4,292	3,790	3,069	2,867
Postage	13	14	66	60	27	29	25	138	29	38
Printing	13	9	78	15	53	14	15	91	33	35
Insurance	130	117	149	149	151	150	121	114	121	129
Dues and memberships	42	41	40	42	41	32	34	28	26	37
Audit Costs	(10)	291	191	72	63	85	49	76	71	64
Actuarial Fees	178	138	170	138	180	153	66	146	153	164
Legal Fees	366	323	532	590	337	524	365	529	292	30
Investment Fees*	17,909	16,807	13,076	15,037	12,862	11,377	12,788	6,587	7,753	10,907
Contractual Services (STAR)**	2,387	1,968	1,808	1,866	1,697	1,077	872	941	-	-
Equipment and rental	89	59	199	261	376	966	995	619	179	734
Depreciation	12	-	-	-	-	-	-	3	6	6
Total Nonpersonal Services	23,959	23,182	22,182	25,726	24,320	22,676	21,528	14,989	13,552	16,741
<b>Total Administrative Expenses</b>	<b>\$31,692</b>	<b>\$30,721</b>	<b>\$30,435</b>	<b>\$33,852</b>	<b>\$31,819</b>	<b>\$28,738</b>	<b>\$27,173</b>	<b>\$20,079</b>	<b>\$18,620</b>	<b>\$21,678</b>

\* DCRB Investment staff salaries and benefits included in investment expenses in Schedules of Investment Expenses on page 55 are included in personal services in the above table.

\*\* Contractual services (STAR) were included in Professional fees prior to fiscal year 2013.

## Schedules of Investment Expenses

(Dollars in thousands)

Fiscal Year	Investment Managers*	Investment Administrative	Investment Consultants	Investment Custodian	Total Investment
2020	\$ 16,882	\$ 582	\$ 596	\$ 473	\$ 18,533
2019	15,766	879	751	403	17,800
2018	12,418	753	882	338	14,391
2017	14,361	785	910	237	16,293
2016	11,811	1,051	1,017	275	14,154
2015	10,118	879	1,030	229	12,256
2014	11,400	868	1,019	369	13,656
2013	5,499	934	975	131	7,539
2012	7,116	1,011	686	210	9,023
2011	10,622	874	334	285	12,115

\* Investment managers' fees include mainly traditional managers' fees as well as some non-traditional managers.

## Schedule of Benefits and Refunds

(Dollars in thousands)

As of September 30, 2020

	Teachers' Retirement Fund	Police Officers and Fire Fighters' Retirement Fund	Total
Benefits			
Regular Retiree	\$ 82,151	\$ 124,004	\$ 206,156
Disability	2,516	12,661	15,178
Survivor	1,011	3,378	4,390
Total Benefits	85,679	140,044	225,723
Refunds of Member Contributions	4,873	1,236	6,109
Total Benefits and Refunds	\$ 90,552	\$ 141,280	\$ 231,832



## Schedule of Annual Salaries and Benefits

(Dollars in millions)

Fiscal Year	Police Officers and Firefighters			Police Officers and Firefighters		
Fiscal Year	Teachers	Total	Teachers	Total	Teachers	Total
2020	\$ 491	\$ 965	\$ 85	\$ 147	\$ 232	
2019	467	928	82	129	211	
2018	471	925	77	112	189	
2017	7	890	71	98	169	
2016	438	876	69	86	155	
2015	417	863	63	70	133	
2014	379	817	59	58	117	
2013	369	782	53	50	103	
2012	381	796	47	43	90	
2011	384	805	42	36	78	

## Schedule of Participant Data

(Dollars in thousands)

Fiscal Year	Active			Retired Members, Beneficiaries, Disabled			
	Teachers	Police Officers and Firefighters	Subtotal	Teachers	Police Officers and Firefighters	Subtotal	Total
2020	5,531	5,377	10,908	4,071	3,929	8,000	18,908
2019	5,226	5,406	10,632	4,059	3,699	7,758	18,390
2018	5,066	5,349	10,415	3,990	3,441	7,431	17,846
2017	5,199	5,312	10,511	3,899	3,215	7,114	17,625
2016	5,141	5,359	10,500	3,882	3,003	6,885	17,385
2015	4,866	5,537	10,403	3,718	2,609	6,327	16,730
2014	4,499	5,551	10,050	3,601	2,365	5,966	16,016
2013	4,379	5,510	9,889	3,448	2,183	5,631	15,520
2012	4,495	5,510	10,005	3,285	2,039	5,324	15,329
2011	4,747	5,561	10,308	3,130	1,856	4,986	15,294

## Schedule of Average Benefit by Type

Teachers' Retirement Plan						
Retirement Effective Dates	Years of Credited Service					
	5-9	10-14	15-19	20-24	25-30	30+
Average Monthly Benefit	\$1,009	\$2,258	\$2,933	\$3,826	\$4,810	\$5,810
<b>2020</b> Average Final Average Salary	\$101,961	\$99,134	\$100,749	\$108,761	\$113,518	\$111,979
Number of Active Recipients	5	13	12	19	10	31
Average Monthly Benefit	\$1,423	\$1,886	\$2,722	\$3,569	\$4,604	\$6,021
<b>2019</b> Average Final Average Salary	\$88,477	\$88,300	\$89,069	\$99,236	\$99,339	\$102,848
Number of Active Recipients	40	18	13	26	30	41
Average Monthly Benefit	\$959	\$2,152	\$2,727	\$3,444	\$4,619	\$5,832
<b>2018</b> Average Final Average Salary	\$92,306	\$91,506	\$95,038	\$97,624	\$102,000	\$103,292
Number of Active Recipients	5	16	22	26	35	30
Average Monthly Benefit	\$938	\$2,112	\$2,685	\$3,371	\$4,520	\$5,707
<b>2017</b> Average Final Average Salary	\$92,306	\$91,910	\$95,233	\$97,440	\$102,000	\$103,292
Number of Active Recipients	5	15	22	28	35	35
Average Monthly Benefit	\$920	\$2,192	\$2,695	\$3,37	\$4,431	\$5,595
<b>2016</b> Average Final Average Salary	\$92,306	\$92,608	\$96,609	\$97,857	\$102,000	\$103,292
Number of Active Recipients	5	12	21	23	35	35
Average Monthly Benefit	\$1,050	\$2,140	\$2,774	\$3,338	\$4,387	\$5,805
<b>2015</b> Average Final Average Salary	\$82,018	\$95,786	\$97,605	\$97,032	\$100,959	\$103,420
Number of Active Recipients	15	20	8	26	22	43
Average Monthly Benefit	\$899	\$1,950	\$2,375	\$3,551	\$4,153	\$5,669
<b>2014</b> Average Final Average Salary	\$79,848	\$89,912	\$88,883	\$100,082	\$98,560	\$102,092
Number of Active Recipients	16	21	18	26	47	56
Average Monthly Benefit	\$1,205	\$1,741	\$2,499	\$3,441	\$4,035	\$5,427
<b>2013</b> Average Final Average Salary	\$82,567	\$84,521	\$90,461	\$94,689	\$94,689	\$97,032
Number of Active Recipients	17	18	10	44	36	64
Average Monthly Benefit	\$951	\$1,637	\$2,631	\$3,333	\$4,025	\$5,406
<b>2012</b> Average Final Average Salary	\$76,185	\$82,578	\$90,729	\$93,622	\$94,547	\$96,692
Number of Active Recipients	19	17	8	47	33	62
Average Monthly Benefit	\$947	\$1,628	\$2,361	\$3,097	\$3,774	\$5,216
<b>2011</b> Average Final Average Salary	\$80,717	\$82,641	\$84,659	\$89,318	\$90,961	\$93,310
Number of Active Recipients	11	16	17	46	39	65

## Schedule of Average Benefit by Type

Police Officers and Firefighter's Retirement Plan						
Retirement Effective Dates	Years of Credited Service					
	5-9	10-14	15-19	20-24	25-29	30+
Average Monthly Benefit	\$2,589	\$2,715	\$3,437	\$3,928	\$6,500	\$7,689
<b>2020</b> Average Final Average Salary	\$36,605	\$69,402	\$79,082	\$100,016	\$107,689	\$115,540
Number of Active Recipients	8	4	8	8	136	80
Average Monthly Benefit	\$3,804	\$3,030	\$2,654	\$4,319	\$5,662	\$7,092
<b>2019</b> Average Final Average Salary	\$54,568	\$69,463	\$71,425	\$85,435	\$94,780	\$100,784
Number of Active Recipients	10	7	5	5	251	10
Average Monthly Benefit	\$3,596	\$2,918	\$2,469	\$4,070	\$5,451	\$6,811
<b>2018</b> Average Final Average Salary	\$54,499	\$69,691	\$71,425	\$86,720	\$94,770	\$100,699
Number of Active Recipients	10	6	5	4	251	54
Average Monthly Benefit	\$3,701	\$2,862	\$2,707	\$3,987	\$5,347	\$6,677
<b>2017</b> Average Final Average Salary	\$54,499	\$69,463	\$72,552	\$83,882	\$94,800	\$100,699
Number of Active Recipients	10	7	6	6	254	54
Average Monthly Benefit	\$2,363	\$3,407	\$3,471	\$3,860	\$5,526	\$6,922
<b>2016</b> Average Final Average Salary	\$54,240	\$69,463	\$72,901	\$83,882	\$94,768	\$100,699
Number of Active Recipients	10	7	7	6	253	54
Average Monthly Benefit	\$2,343	\$4,168	\$1,950	\$3,776	\$5,241	\$6,403
<b>2015</b> Average Final Average Salary	\$45,567	\$66,727	\$70,827	\$76,421	\$96,104	\$104,521
Number of Active Recipients	6	7	5	6	182	62
Average Monthly Benefit	\$2,773	\$2,333	-	\$2,561	\$5,439	\$6,906
<b>2014</b> Average Final Average Salary	\$54,678	\$65,126	\$73,476	\$80,064	\$92,091	\$95,990
Number of Active Recipients	6	1	1	6	143	29
Average Monthly Benefit	\$1,795	\$2,686	\$4,404	\$3,622	\$5,409	\$6,504
<b>2013</b> Average Final Average Salary	\$40,134	\$64,784	-	\$77,175	\$94,464	\$103,254
Number of Active Recipients	4	4	-	4	97	48
Average Monthly Benefit	\$2,195	\$25,164	\$3,048	\$3,090	\$5,600	\$6,679
<b>2012</b> Average Final Average Salary	\$46,574	\$65,588	\$74,368	\$78,462	\$92,618	\$96,968
Number of Active Recipients	3	2	3	4	96	38
Average Monthly Benefit	-	-	-	-	-	-
<b>2011</b> Average Final Average Salary	\$61,882	\$66,531	\$78,270	\$82,825	\$95,099	\$99,070
Number of Active Recipients	8	4	3	19	104	33

## Schedule of Retired Members by Type of Benefit and Option Selected

Teachers' Retirement Plan												
Monthly Benefit Payment	Number of Members by Retirement Type						Number of Members by Option Selected					
	A	B	D	E	F	G	Grand Total	1	2	3	4	Grand Total
\$1-250	6			25	1	2	34	12	22			34
\$251-500	38			17	3	2	60	42	16	1	1	60
\$501-750	57	2		13	9	1	82	62	18	1	1	82
\$751-1,000	90	5	1	19	4	1	120	92	23	2	3	120
\$1,001-1,250	58	5	3	17	13	2	98	61	31	2	4	98
\$1,251-1,500	68	4	3	19	22	2	118	67	34	3	14	118
\$1,501-1,750	66	7	13	32	12	1	131	76	47	1	7	131
\$1,751-2,000	66	11	12	27	10		126	82	37	1	6	126
\$2,001-3,000	442	40	116	123	13	2	736	520	211	3	2	736
\$3,001-4,000	934	101	79	39	4		1,157	840	310	5	2	1,157
\$4,001-5,000	1,601	100	13	3			1,717	1,341	369	6	1	1,717
\$5,001-6,000	833	47	4				884	692	190	2		884
\$6,001-7,000	285	16	2	1			304	231	73			304
\$7,001-8,000	103	6					109	93	15	1		109
\$8,001-9,000	47	2					49	41	8			49
\$9,001-10,000	13						13	9	4			13
over \$10,000	5	1					6	4	2			6
<b>Grand Total</b>	<b>4,712</b>	<b>347</b>	<b>246</b>	<b>335</b>	<b>91</b>	<b>13</b>	<b>5,744</b>	<b>4,265</b>	<b>1,410</b>	<b>28</b>	<b>41</b>	<b>5,744</b>

### Type of Retirement:

- A - Retired from Affiliate or Resignation
- B - Termination - Early Involuntary
- C - Partial Total Disability
- D - Disabled not in the Line of Duty
- E - Survivor of a Retired Teacher
- F - Survivor of an Active Teacher
- G - Qualified Domestic Relations Order

### Option Selected:

- 1 - Unreduced Annuity
- 2 - Reduced Annuity with Survivor Option
- 3 - Reduced Annuity with Life Insurance Benefit
- 4 - Reduced Annuity with Insurable Interest

## Schedule of Retired Members by Type of Benefit and Option Selected

Police and Firefighters' Retirement Plan							
Monthly Benefit Payment	Number of Members by Retirement Type						Grand Total
	A	C	D	E	F	G	
\$1-250						3	3
\$251-500	1			25	23	4	53
\$501-750	10			4		22	36
\$751-1,000	4			4		33	41
\$1,001-1,250	6		1	4	3	23	37
\$1,251-1,500	2			4		36	42
\$1,501-1,750	7	1	7	2		34	51
\$1,751-2,000	9	21	9	11	3	23	76
\$2,001-3,000	74	138	128	1,174	22	74	1,610
\$3,001-4,000	733	173	41	405	15	19	1,386
\$4,001-5,000	966	393	43	62		5	1,469
\$5,001-6,000	1,265	129	14	23	2	3	1,436
\$6,001-7,000	1,010	35	3	7	1		1,056
\$7,001-8,000	540	16	3	2	3		564
\$8,001-9,000	285	4		1			290
\$9,001-10,000	126	2			1		129
over \$10,000	189	3					192
<b>Grand Total</b>	<b>5,227</b>	<b>915</b>	<b>249</b>	<b>1,728</b>	<b>73</b>	<b>279</b>	<b>8,471</b>

### Type of Retirement

A - Retired from Affiliate or Resignation

B - Termination - Early Involuntary

C - Partial Total Disability

D - Disabled not in the Line of Duty

E - Survivor of a Retired Police Officer or Firefighter

F - Survivor of an Active Police Officer or Firefighter

G - Qualified Domestic Relations Order

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## **ADDITIONAL DISCLOSURES**

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Names and Addresses of the Board of Trustees .....	125
Schedule of Trustee Sponsored Activities .....	126
Acknowledgments and Credits .....	127



## Schedules of Transactions - Board of Trustees

Trustee Name	Expenditures	
	FY 2020	FY 2019
Janice Adams	\$ -	\$ -
Lyle Blanchard	9,940	7,789
Joseph Bress	8,341	8,447
Joseph Clark	9,964	9,999
Mary Collins	9,964	9,999
Denise Daniels	9,983	9,347
Gary Hankins	9,940	9,999
Tracy Harris	9,932	9,275
Darrick Ross	0	5,000
Greggory Pemberton	9,709	6,087
Nathan Saunders	0	9,983
Edward Smith	0	7,318
Thomas Tippet	4,083	6,521
Michael Warren	0	9,999
Lenda Washington	0	5,454
	<b>\$ 81,858</b>	<b>\$ 115,221</b>

## Names and Addresses of the Board of Trustees

**Janice Adams**

District of Columbia Retirement Board  
900 7th Street, NW, Second Floor  
Washington, D.C. 20001

**Lyle Blanchard**

District of Columbia Retirement Board  
900 7th Street, NW, Second Floor  
Washington, D.C. 20001

**Joseph Bress**

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**Joseph Clark**

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**Mary Collins**

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**Denise Daniels**

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**Gary Hankins**

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**Tracy Harris**

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**Greggory Pemberton**

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**Edward Smith**

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**Michael Warren**

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**Bruno Fernandes**

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### **Schedule of Trustee Sponsored Activities**

No members of the DCRB Board of Trustees attended events sponsored by outside entities in either FY 2019 or FY 2020.

## Acknowledgments and Credits

### On the Cover:

Fire Hazmat unit, photo by DCRB staff

DC Public School Classroom: Photograph by John McDonnell, courtesy, The Washington Post

Police officers, courtesy Metropolitan Police Department

### Page 1, Introductory Section:

Teacher and students, courtesy DC Public Schools

Metropolitan Police Department Recruit graduation – 2016, Courtesy, Metropolitan Police Department

Assistant Fire Chief - Professional Development Edward Smith, outside The John Wilson Building, photo by DCRB staff

### Page 15, Financial Section:

Fire engines near the U.S. Capitol: Courtesy, Fire and EMS Department

Police vehicles, photo by DCRB staff

Roosevelt High School building: Courtesy, DC Public Schools

### Page 59, Investment Section:

DC Firefighter in response, courtesy Fire and EMS Department

Police officers, photo by Metropolitan Police Department

Dunbar High School student hall, courtesy DC Public Schools

### Page 81, Actuarial Section:

Fire Hazmat unit, courtesy fire and EMS Department

DC Police Logo, courtesy Metropolitan Police Department

Interior of Luke Moore High School: Photograph by Nikki Khan; courtesy, The Washington Post

Police vehicles, photo by DCRB staff

### Page 109, Statistical Section:

Fire house and fire engine, photo by DCRB staff

Police motorcycle motorcade, courtesy Metropolitan Police Department

Student at Randle Highlands Elementary, courtesy DC Public Schools



**District of Columbia Retirement Board**  
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