DISTRICT OF COLUMBIA
DCRB
RETIREMENT BOARD

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

Annual Comprehensive Financial Report

FOR THE FISCAL YEARS ENDED SEPTEMBER 30, 2022 AND 2021

Annual Comprehensive Financial Report

For the fiscal years ended September 30, 2022 and 2021

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
(202) 343-3200
www.dcrb.dc.gov

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INTRODUCTORY SECTION

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900 7th Street, NW,2nd Floor
Washington, DC 20001
www.dcrb.dc.gov

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

March 28, 2022

Board of Trustees
District of Columbia Retirement Board
900 7th Street NW Washington, DC
20001

Dear Board Members:

It is my pleasure to submit the Annual Comprehensive Financial Report (ACFR or Report) of the District of Columbia Retirement Board (DCRB or Agency) for the fiscal year (FY) ended September 30, 2022. This ACFR 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, must 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 is to 'lead by serving others' and includes two overarching goals: (1) *to prudently invest and manage the assets of the Fund for the exclusive benefit of its members,* and (2) *to provide Plan members with accurate and timely annuity payments and excellent services*. DCRB's priority is to invest and manage the Fund, which is held in trust for the exclusive benefit of all Plan members and their eligible survivors and beneficiaries. 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 6.25%. This target is intended to sustain the Fund's viability over the long-term investment horizon. As of September 30, 2022, DCRB's actuarial funded status level was 98.8% and 114.7% for the Teacher's Retirement Fund and the Police Officers and Fire Fighters' Retirement Fund, respectively, and a total actuarial funded status level of 109.9%, for all Plans. Additionally, as of September 30, 2022, the Fund generated an annualized gross return of 8.24% since its inception in October 1982. For fiscal year 2022, the net return was -12.5% due to weak market conditions and below average performance during the fiscal year. As we strive to achieve long-term, sustainable risk-adjusted net return, we will continue to review investment manager performance against benchmark returns, rebalance the portfolio to maintain compliance with asset allocation targets and ranges, as well as monitor and evaluate investment manager fees.

In FY 2023, as part of DCRB's monitoring of prospective and current investment managers, we will devote substantial time and attention to evaluating investment managers' commitment and willingness to embrace diversity and inclusion in their hiring decisions, investment decision-making processes, and their ownership and corporate governance structures. In collaboration with our investment consultant and other industry partners, we will continue to identify promising emerging diverse fund managers and engage our existing partners to evaluate their efforts to promote diversity and inclusion.

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.

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 "best in class" 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 improve benefits administration by collaborating with our District partners to increase the quality of data used to calculate benefits, and by automating the transfer of that information to DCRB, where possible.

DCRB frequently meets with all stakeholders to discuss improvements in the transition from active employment to retirement, and to promote collaboration amongst all the agencies involved in the retirement process. The collaboration with our District partners to increase the quality of data used to calculate benefits will contribute to additional member specific initiatives and faster processing times, wherever possible. We have commenced specific feasibility exercises and actionable initiatives to secure all active member data in one source system in the near and long-term, build end-to-end retirement process maps and better define roles, responsibilities, and lines of authority for all agencies involved in the retirement administration process.

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 by the Funds. 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 develop independent solutions that will manage the entire participant life cycle and the pension calculation and claims processing. DCRB continues to be committed to an IT investment in Customer Relationship Management, Case Management, Records Management, and Member Services Communication systems, and we are beginning to explore future system options, including partnering with the District's Office of Chief Technology Officer. DCRB has set out to collaborate with the employer agencies on resolving the accuracy and timely delivery of efficient data. This is an absolute requirement prior to DCRB expending significant amounts of capital on a viable integrated benefits administration pension system.

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 maintained 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 ACFR, 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 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 ACFR. DCRB's financial statements are audited annually. DCRB received an unmodified, or "clean," opinion for FY 2022, which is reflected in the opinion letter of the Financial Section herein. 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, 2022 for FY 2024 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 ACFR were provided by Bolton, whose selection was approved by DCRB's Board of Trustees. The actuarial valuation results are presented inthe Actuarial Section of this ACFR.

Northern Trust, the custodian as of September 30, 2022, 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) 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. It should be noted that because the cost of a control should not exceed the benefits to be derived, the objective is to provide reasonable, rather than absolute assurance, that the financial statements are free of any material misstatements. Additional disclosures that are specifically required by statute are also included in this ACFR.

Recognition

For the fourteenth consecutive year, DCRB was awarded on February 11th, 2023, the Government Finance Officers Association's (GFOA) Certificate of Achievement for Excellence in Financial Reporting for its Fiscal Year ended 2021 Annual Comprehensive Financial Report (ACFR), the highest form of recognition in governmental accounting and financial reporting. To be awarded a Certificate of Achievement, an organization must publish an easily readable and efficiently organized ACFR. 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 ACFR 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 a select number of public retirement systems that received the Public Pension Coordinating Council's (PPCC) Public Pension Standards 2022 Award in recognition of meeting professional standards for Plan design funding 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

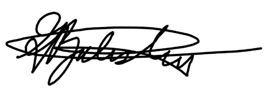
Conclusion

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 ACFR of the District of Columbia Retirement Board for the fiscal year ended September 30, 2022, please direct them to my office at any time.

Respectfully submitted,



Gianpiero (JP) Balestrieri, 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, see page 71 for the Schedule of Fees and Commissions related to investment professionals wo provide services to the Board.

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, 2022

District of Columbia Retirement Board

- Board of Trustees
  - Executive Director — Gianpiero Balestrieri
    - Chief Investment Officer — Patrick Sahm
    - Pension Administrator — Daniel Hernandez
    - General Counsel — Vacant
    - Chief Financial Officer — Munetsi Musara
    - Director of Information Technology — Ram Murthy
    - Director of Stakeholder Communication and Outreach — Vacant

Auditor	Actuary	Investment Consultant
WatsonRice Accountants & Advisors	Bolton Employee Benefits, Actuarial & Investment Consulting	Meketa Investment Group

Board of Trustees
As of September 30, 2022

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.

Lyle Blanchard
Council Appointee
Current Term:
2021 - 2025

Joseph Bress
Council appointee
Current Term:
2020 - 2024

Joseph Clark
Mayoral Appointee
Chair
Current Term:
2018 - 2022

Mary Collins
Elected Retired Teacher
Current Term:
2022 - 2026

Christopher Finelli
Elected Active
Firefighter
Current Term:
2022- 2026

Geoffrey Grambo
Elected Retired
Firefighter
Current Term:
2021- 2025

Danny Gregg
Elected Retired Police
Officer
Current Term:
2021 - 2025

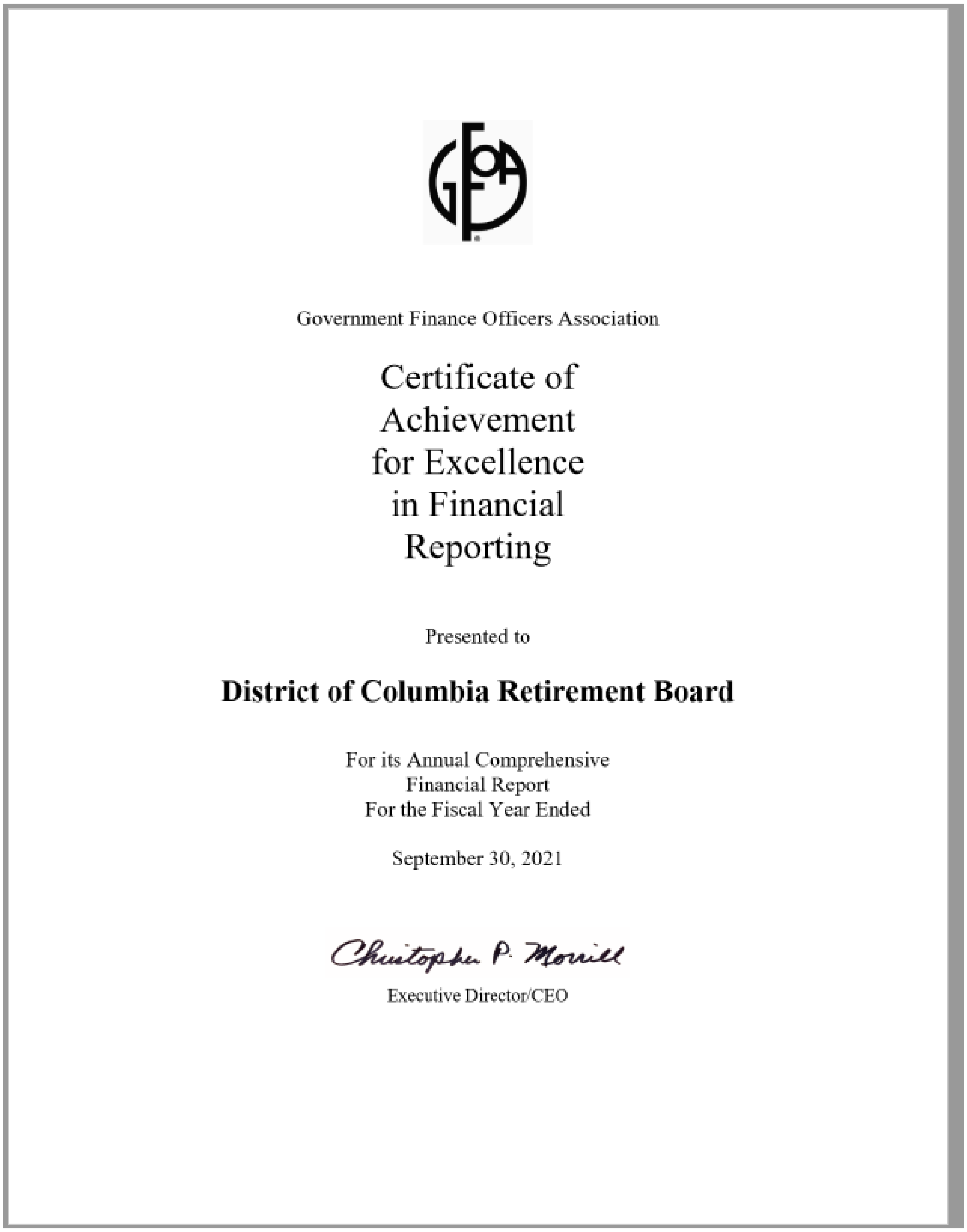
Tracy Harris
Mayoral Appointee
Treasurer
Current Term:
2019 - 2023

Board of Trustees
As of September 30, 2022

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 Annual Comprehensive Financial Report for the Fiscal Year ended September 30, 2021. The Certificate of Achievement is awarded to a government entity for publishing an easily readable and efficiently organized annual comprehensive financial report that satisfies both generally accepted accounting principles and applicable legal requirements. DCRB's Finance Department has won this award for the past fourteen years. We believe our current annual comprehensive report continues to meet the Certificate of Achievement Program's requirements.



Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

District of Columbia Retirement Board

For its Annual Comprehensive Financial Report For the Fiscal Year Ended

September 30, 2021

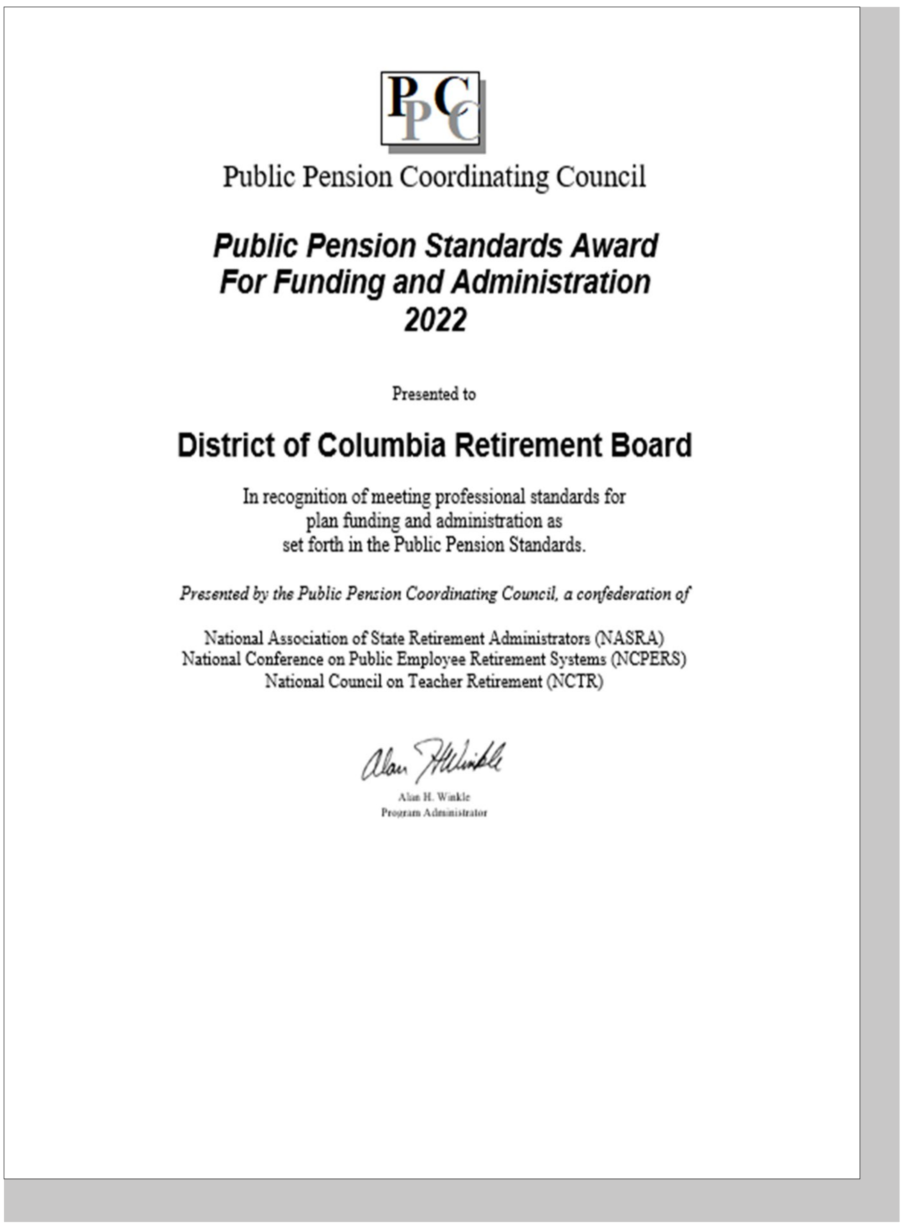
Christopher P. Morrill

Executive Director/CEO

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, 2022. 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

Public Pension Standards Award
For Funding and Administration
2022

Presented to

District of Columbia Retirement Board

In recognition of meeting professional standards for
plan funding and administration 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)

Alan H. Winkle
Program Administrator

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FINANCIAL SECTION

FINANCIAL STATEMENTS

FINANCIAL SECTION - REQUIRED SUPPLEMENTARY INFORMATION

FINANCIAL SECTION - SUPPLEMENTARY INFORMATION

WatsonRice
Accountants & Advisors
4550 Forbes Blvd, Suite 130
Lanham, MD 20706
phone: 202.778.3450
www.watsonrice.com

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

Opinions

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 Statements of Fiduciary Net Position as of September 30, 2022 and 2021, and the related Combining Statements of Changes in Fiduciary Net Position for the years then ended, and the related notes to the Funds combining financial statements, which collectively comprise the Funds' basic financial statements.

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, 2022 and 2021, 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.

Basis for Opinion

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the Funds and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

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, 2022 ans 2021, and the changes in its financial position for the years 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.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error..

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Funds' ability to continue as a going concern for one year from the date of the financial statements, including any currently known information that may raise substantial doubt shortly thereafter.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS and *Government Auditing Standards* will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS and *Government Auditing Standards*, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit 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, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Funds' ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Required Supplementary Information

U.S. GAAP requires 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 December 19, 2022 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. Watson Rice LLP
December 19, 2022

Management's Discussion and Analysis (Unaudited)

INTRODUCTION

This discussion and analysis provide 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, 2022, 2021, and 2020, 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 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.

FINANCIAL HIGHLIGHTS

- DCRB's combined total net position decreased by $1.5 billion, or 13.4% during fiscal year 2022.

Management's Discussion and Analysis (Unaudited)

- DCRB's net of fees rate of return on investments during fiscal year 2022 was -12.5% compared with 2021 rate of return of 20.9%. This was due to weak market conditions and below average performance in 2022.
- DCRB had a net pension liability of $298.6 million for TRF and a net pension asset of $261.3 million for POFRF. As a percentage of covered payroll, the net pension liability was 51.6% for TRF and the net pension asset was 49.6% for POFRF as of September 30, 2022.
- The Funding status for TRF and POFRF were 89.6% and 103.9%, respectively.

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.

The following Condensed and Combining Statements of Fiduciary Net Position present financial information for the combined Funds and compare fiscal years 2022, 2021, and 2020.

(Dollars in thousands)

	2022	2021 Restated	2020	2022 Percent Change	2021 Restated Percent Change
Assets					
Cash and Short-Term Investments	$ 228,526	$ 87,331	$ 33,041	161.7 %	164.3 %
Receivables	18,529	10,087	51,495	83.7	(80.4)
Prepaid Expenses	-	294	157	(100.0)	87.3
Investments at Fair Value	9,265,761	10,876,794	8,986,818	(14.8)	21.0
Net Capital Assets	325	75	75	333.3	-
Right to Use Asset, net	10,059	11,627	-	(13.5)	100.0
Total Assets	9,523,200	10,986,208	9,071,586	(13.3)	21.1
Liabilities					
Accounts Payable and Other Liabilities	8,424	9,916	7,011	(15.0)	41.4
Due to Federal Government	658	624	1,198	5.4	(47.9)
Due to District of Columbia Government	-	-	174	-	(100.0)
Investment Payables	29,446	27,163	31,623	8.4	(14.1)
Right to Use Lease Obligation	11,302	12,803	-	(11.7)	100.0
Total Liabilities	49,830	50,506	40,006	(1.3)	26.2
Net Position Restricted for Pensions	$ 9,473,370	$ 10,935,702	$ 9,031,580	(13.4) %	21.1 %

Assets

In fiscal year 2022, cash and short-term investments increased by $141.2 million (161.7%) while receivables increased by $8.4 million (83.7%) over fiscal year 2021. The increase in cash and short-term investments was attributable to a decision to hold a larger cash position given rising interest rates and above-average market volatility, while the increase in receivables was a result of including the investments and dividends receivable of $9.3 million separately in fiscal year 2022 where as this balance was rolled up into investments in prior years.

In fiscal year 2022, investment assets decreased by $1,611.0 million (14.8%) over fiscal year 2021. This was due to lower-than-expected returns due to weak market conditions and performance over the fiscal year 2021. The net of fee rate of return on investments was -12.5% during fiscal year 2022 compared to 20.9% in fiscal year 2021.

Management's Discussion and Analysis (Unaudited)

During fiscal year 2022, the Board implemented GASB 87, Leases. As a result, most leases that were recorded off the balance sheet are now required to be reflected on the balance sheet. A right-to-use lease asset was recognized in fiscal year 2021. During fiscal year 2022, the right-to-use asset decreased by $1.6 million or -13.5% because of the annually required amortization.

Liabilities

Accounts payable and other liabilities include accrued investment manager fees, accrued payroll, and other accrued administrative expenses. In fiscal year 2022, accounts payable and other liabilities decreased by $1.5 million (15.0%) from fiscal year 2021 and the primary driver of this was the impact that the implementation of GASB 87 had on deferred rent, whereby deferred rent was replaced with the right-to-use lease obligation. The right-to-use lease obligation represents the net present value of the Board's future minimum lease payments which decreased by $1.5 million from the fiscal year 2021 balance. Investment payables increased by $2.3 million (8.4%) from fiscal year 2021 because of increases in the Plan's investment purchase payable accounts.

Investment and administrative assets and liabilities are commingled and allocated between TRF and POFRF funds based on their proportionate net position in the pool. Please see "Allocation" on **page 19** of Notes to Financial Statements for details.

The following Condensed and Combining Statements of Changes in Fiduciary Net Position present financial information for the combined Funds and compare fiscal years 2022, 2021, and 2020.

(Dollars in thousands)

	2022	2021 Restated	2020	2022 Percent Change	2021 Restated Percent Change
Additions					
Contributions:					
District Government	$ 184,025	$ 180,411	$ 151,949	2.0 %	18.7 %
Plan Members	83,911	83,122	80,236	0.9	3.6
Net Investment (Loss) Income	(1,434,126)	1,905,258	520,531	(175.3)	266.0
Other Income	3,209	3,538	3,010	(9.3)	17.5
Total (Reductions) Additions	(1,162,981)	2,172,329	755,726	(153.5)	187.4
Deductions					
Annuitant Benefit Payments	275,336	245,859	225,723	12.0	8.9
Refunds	7,413	5,837	6,109	27.0	(4.5)
Administrative Expenses	16,602	16,511	13,159	0.6	25.5
Total Deductions	299,351	268,207	244,991	11.6	9.5
Change in Fiduciary Net Position	$ (1,462,332)	$ 1,904,122	$ 510,735	(176.8) %	272.8 %

Additions

Additions to net position are comprised of employer contributions, employee contributions, net investment income, and other income. For fiscal year 2022, these additions totaled -$1,163.0 million, a decrease of 153.5% or $3,335.3 million from the fiscal year 2021 amount of $2,172.3 million. The decrease was due to weak market conditions that resulted in lower-than-expected returns in fiscal year 2022 and this was the primary reason for there being a total reduction to the net position figure for fiscal year 2022.

Management's Discussion and Analysis (Unaudited)

Employer contributions in fiscal year 2022 totaled $184.0 million, an increase of $3.6 million (2.0%) from the fiscal year 2021 amount of $180.4 million. The employer contributions were determined for TRF and POFRF separately by the actuarial valuations based on the experience study completed in 2017 for 2022, 2021, and 2020. In 2022, 40.8% of employer contribution was for TRF and 59.2% was for POFRF. The employer contributions for TRF and POFRF were 39.1% and 60.9% in 2021, and 38.8% and 61.2% in 2020, respectively. A new experience study was completed in 2021 and the actuarial valuations from this study will be used to determine employer contributions beginning in 2023.

Plan member contributions in fiscal year 2022 totaled $83.9 million, an increase of $0.8 million (0.9%) over the fiscal year 2021 amount of $83.1 million. Member contributions consist of amounts paid by members for future retirement benefits and increased for three reasons: salary increases, purchases of service (POS), and an increase in active, contributing participants.

For fiscal year 2022, there was a net investment loss of $1,434.1 million, a decrease of $3,339.3 million (175.3%) from fiscal year 2021's net investment income of $1,905.3 million. The investment returns net of fees was -12.5% in 2022, 20.9% in fiscal year 2021, and 5.3% in fiscal year 2020. Investment management fees reflected in the statement of changes in fiduciary net position were $22.0 million and $27.9 million for fiscal years 2022 and 2021, respectively. The decline is consistent with the unfavorable investment performance in 2022 compared with fiscal year 2021. These fees represent only amounts billed by public and certain private managers during the year. These fees do not include amounts earned by certain managers, who report investment performance net of fees. Overall, the Board estimates that public managers fees range from 0.01% to 0.65% (an estimated average of 0.15%) of net asset position. It is estimated that fees with private managers range on average from 0.55% to 2.5% which include fees on capital calls as well as performance based fees. Investments with public managers represent approximately 80% of total investments.

Other income in fiscal year 2021 totaled $3.2 million, which was a 9.3% decrease from the fiscal year 2021 amount of $3.5 million. Other income consists mainly of reimbursements of administrative expenses from the U.S. Treasury, which do not fluctuate significantly from year to year.

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 2022, these deductions totaled $299.4 million, an increase of $31.1 million (11.6%) over the fiscal year 2021 amount of $268.2 million.

Benefit payments for 2022 totaled $275.3 million, an increase of $29.4 million (12.0%) over the fiscal year 2021 amount of $245.9 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 251 members in fiscal year 2022, 187 members in fiscal year 2021, and 242 members in fiscal year 2020. This fiscal year 2022 increase in retirees was in the POFRF. Benefit payments made on behalf of retirees, disabled, and other beneficiaries comprised 92.0% of the funds' expenses in fiscal year 2022 and 91.7% in fiscal year 2021.

Refunds of member contributions in fiscal year 2022 totaled $7.4 million, an increase of $1.6 million (27.0%) over the fiscal year 2021 amount of $5.8 million. Refunds are typically higher in the TRF than in the POFRF because the annual turnover for teachers is higher than for public safety employees. These refunds of member contributions are at the discretion of the member and vary from year to year.

Management's Discussion and Analysis (Unaudited)

Administrative expenses in fiscal year 2022 totaled $16.6 million, an increase of $0.9 million (0.6%) from the fiscal year 2021 amount of $16.5 million. Administrative expenses consist of administrative personnel costs, payments to the U.S. Treasury for processing monthly retiree benefit payment services, professional fees, rent expenses, and other miscellaneous operational expenses. The primary drivers of the administrative expense increase were personnel services and professional fees.

Funding Status

As of September 30, 2022 (the date of the most recent actuarial valuation), the funding status was 89.60% for TRF and 103.94% for 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.

As of September 30, 2022, the actuarial determined liability was $2.9 billion for the TRF and $6.6 billion for the POFRF for a total of $9.5 billion. The fair value of these assets as of September 30, 2022, included on the financial statements of DCRB, was $2.6 billion for the TRF and $6.9 billion for the POFRF for a total of $9.5 billion.

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

Combining Statements of Fiduciary Net Position

As of September 30, 2022 and 2021
(Dollars in thousands)

	2022 Teachers' Retirement Fund	2022 Police Officers and Fire Fighters' Retirement Fund	2022 Total	2021 Restated Teachers' Retirement Fund	2021 Restated Police Officers and Fire Fighters' Retirement Fund	2021 Restated Total
ASSETS						
Cash and Short-Term Investments	$ 62,042	$ 166,484	$ 228,526	$ 23,513	$ 63,818	$ 87,331
Receivables:						
Federal Government	264	708	972	491	1,334	1,825
Investment Receivables	1,012	2,717	3,729	1,031	2,802	3,833
Interest and Dividends Receivable	2,523	6,772	9,295	-	-	-
Employee Contributions	2,576	1,951	4,527	2,482	1,947	4,429
Other Receivables	2	4	6	-	-	-
Total Receivables	6,377	12,152	18,529	4,004	6,083	10,087
Prepaid Expenses	-	-	-	79	215	294
Investments at Fair Value:						
Domestic Equity	545,974	1,465,355	2,011,329	712,790	1,935,591	2,648,381
International Equity	654,546	1,756,754	2,411,300	863,837	2,345,761	3,209,598
Fixed Income	647,119	1,736,819	2,383,938	827,171	2,246,197	3,073,368
Real Assets	342,330	918,789	1,261,119	269,777	732,581	1,002,358
Private Equity	325,217	872,858	1,198,075	253,826	689,263	943,089
Total Investments at Fair Value	2,515,186	6,750,575	9,265,761	2,927,401	7,949,393	10,876,794
Capital Assets	160	431	591	26	71	97
Less Depreciation	72	194	266	6	16	22
Net Capital Assets	88	237	325	20	55	75
Right to Use Asset, net	2,731	7,328	10,059	3,156	8,471	11,627
Total Assets	2,586,424	6,936,776	9,523,200	2,958,173	8,028,035	10,986,208
LIABILITIES						
Accounts Payable and Other Liabilities	2,259	6,165	8,424	2,654	7,262	9,916
Due to Federal Government	179	479	658	168	456	624
Investment Payables	7,993	21,453	29,446	7,311	19,852	27,163
Right to Use Lease Obligation	3,068	8,234	11,302	3,475	9,328	12,803
Total Liabilities	13,499	36,331	49,830	13,608	36,898	50,506
Net Position Restricted for Pensions	$ 2,572,925	$ 6,900,445	$ 9,473,370	$2,944,565	$ 7,991,137	$10,935,702

See accompanying Notes to Combining Financial Statements.

Combining Statements of Changes in Fiduciary Net Position

For the Years Ended September 30, 2022 and 2021
(Dollars in thousands)

	2022 Teachers' Retirement Fund	2022 Police Officers and Fire Fighters' Retirement Fund	2022 Total	2021 Restated Teachers' Retirement Fund	2021 Restated Police Officers and Fire Fighters' Retirement Fund	2021 Restated Total
Additions						
Contributions:						
District Government	$ 75,060	$ 108,965	$ 184,025	$ 70,478	$ 109,933	$ 180,411
Plan Members	46,914	36,997	83,911	45,689	37,433	83,122
Total Contributions	121,974	145,962	267,936	116,167	147,366	263,533
Investment Income						
Net (Depreciation) Appreciation in Fair Value of Investments	(408,303)	(1,095,540)	(1,503,843)	503,073	1,364,095	1,867,168
Interest	7,360	19,772	27,132	7,535	20,480	28,015
Dividends	10,063	27,026	37,089	6,594	17,906	24,500
Other Investment Income	7,456	20,022	27,478	3,623	9,829	13,452
Total Gross Investment Income	(383,424)	(1,028,720)	(1,412,144)	520,825	1,412,310	1,933,135
Less:						
Investment Expenses	5,967	16,015	21,982	7,503	20,374	27,877
Net Investment Income	(389,391)	(1,044,735)	(1,434,126)	513,322	1,391,936	1,905,258
Other Income	871	2,338	3,209	953	2,585	3,538
Total (Reductions) Additions	(266,546)	(896,435)	(1,162,981)	630,442	1,541,887	2,172,329
Deductions						
Annuitant Benefit Payments	95,352	179,984	275,336	89,404	156,455	245,859
Refunds	5,236	2,177	7,413	3,417	2,420	5,837
Administrative Expenses	4,508	12,094	16,602	4,444	12,067	16,511
Total Deductions	105,096	194,255	299,351	97,265	170,942	268,207
Change in Fiduciary Net Position	(371,642)	(1,090,690)	(1,462,332)	533,177	1,370,945	1,904,122
Net Position Restricted for Pensions:						
Beginning of Year	2,944,567	7,991,135	10,935,702	2,411,390	6,620,190	9,031,580
End of Year	$ 2,572,925	$ 6,900,445	$ 9,473,370	$ 2,944,567	$ 7,991,135	$ 10,935,702

See accompanying Notes to 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 Annual Comprehensive 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, disability retirement, 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 and supporting documentation 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 conditions apply for part-time teachers. Substitute teachers and employees of the Department of School Attendance and Work Permits are not covered.

Certain former DCPS Teachers Retirement plan members employed by D.C. Public Charter School are also eligible to be participants if they elect to continue Plan participation within 90 days of last day of service with DCPS.

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 ageof 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	2022	2021
Service Retired, Disabled and Beneficiaries		
(Post June 30, 1997)	4,065	4,072
Active Plan Members	6,088	6,050
Vested Terminations	1,718	1,514
Total Participants	11,871	11,636

Police Officers and Fire Fighters' Retirement Fund	2022	2021
Service Retired, Disabled and Beneficiaries		
(Post June 30, 1997)	4,373	4,115
Active Plan Members	5,133	5,242
Vested Terminations	356	342
Total Participants	9,862	9,699

Total	2022	2021
Service Retired, Disabled and Beneficiaries		
(Post June 30, 1997)	8,438	8,187
Active Plan Members	11,221	11,292
Vested Terminations	2,074	1,856
Total Participants	21,733	21,335

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 2022 and 2021 were equal to the amounts computed 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, related to capital assets and leases have been reclassified for comparative purposes to conformto 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. The allocation percentages were 27.14% for TRF and 72.86% for POFRF as of September 30, 2022.

Recent Accounting Pronouncements

GASB 87, *Leases,* was postponed by eighteen months and requires adoption for all fiscal years that begin subsequent to June 15, 2021. DCRB adopted this statement during the year ended September 30, 2022.

GASB Statement No. 96, *Subscription-based Information Technology Arrangements*, was issued in May 2020. The Statement provides guidance on the accounting and financial reporting for subscription-based information technology arrangements. The requirements of this Statement are effective for reporting periods beginning after June 15, 2022. DCRB will evaluate the impact of the Statement and will adopt it, if applicable.

GASB Statement No. 100, *Accounting Changes and Error Corrections – an amendment of GASB Statement No. 62*, was issued in June 2022. The Statement objective is to enhance accounting and financial reporting requirements for accounting changes and error corrections to provide more understandable, reliable, relevant, consistent, and comparable information for making decisions or assessing accountability. The requirements of this Statement are effective for reporting periods beginning after June 15, 2023. DCRB will evaluate the impact of the Statement and will adopt it, if applicable.

GASB Statement No. 101, *Compensated Absences*, was issued in June 2022. The Statement objective is to better meet the information needs of financial statement users by updating the recognition and measurement guidance for compensated absences. The requirements of this Statement are effective for reporting periods beginning after December 15, 2023. DCRB will evaluate the impact of the Statement and will adopt it, 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: LEASES

The Board is a lessee for a building lease entered on September 1, 2005, including the term of the First Amendment to the Lease, which extended the lease to February 28, 2029.

Effective September 1, 2021, the Board has recognized a right-to-use asset and liability of $14.3 million related to this agreement. The Board used the Districts' incremental borrowing rate of 1.57478% to compute the initial leased asset and liability amounts recognized.

Notes to Financial Statements

Right-to-use leased asset

Right-to-use leased asset activity for the years ended September 30, 2022 and 2021 is as follows (in thousands):

	30-Sep-21	Additions	Deductions	30-Sep-22
Right-to-use leased asset				
Building	$ 14,259	$ -	$ -	$ 14,259
Less: accumulated amortization	2,632	1,568	-	4,200
	$ 11,627	$ (1,568)	$ -	$ 10,059

	30-Sep-20	Additions	Deductions	30-Sep-21
Right-to-use leased asset				
Building	$ 14,259	$ -	$ -	$ 14,259
Less: accumulated amortization	-	2,632	-	2,632
	$ 14,259	$ (2,632)	$ -	$ 11,627

Lease Liabilities

The net present value of the Board's minimum future lease payments for the non-cancelable lease as of September 30, 2022, is as follows (in thousands):

Future Lease Payments Table			
2023	$ 1,568	$ 167	$ 1,735
2024	1,636	142	1,778
2025	1,707	115	1,822
2026	1,780	88	1,868
2027	1,855	59	1,914
2028	2,756	33	2,789
	$ 11,302	$ 604	$ 11,906

Notes to Financial Statements

NOTE 5: 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.

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

Asset Class	Target Allocation		Allowable Ranges	
	2022	2021	2022	2021
Public Equities	***46 %***	***46 %***	***34 - 58 %***	***34 - 56 %***
U.S. Equities	20	20	15 - 25	15 - 25
International Developed Market Equities	16	16	12 - 20	12 - 20
Emerging Market Equities	10	10	7 - 13	7 - 13
Fixed Income	***25***	***24***	***11 - 37***	***11 - 37***
U.S. Core Fixed Income	7	7	3 - 11	3 - 11
U.S. Long-Term Government Bonds	3	3	0 - 10	0 - 10
Treasury Inflation-Protected Securities	5	4	0 - 10	0 - 10
Bank Loans	2	2	0 - 4	0 - 4
Emerging Market Debt	4	4	0 - 8	0 - 8
High Yield Bonds	2	2	0 - 4	0 - 4
Foreign Bonds	2	2	0 - 4	0 - 4
Alternatives	***28***	***29***	***15 - 45***	***19 - 39***
Absolute Return	-	2	-	0 - 5
Private Equity	9	9	4 - 14	4 - 14
Private Credit	3	3	0 - 8	0 - 8
Real Assets	16	15	10 - 20	10 - 20
Real Estate	8	7	6 - 10	4 - 10
Infrastructure/Opportunistic	6	6	4 - 8	4 - 8
Natural Resources	2	2	1 - 3	1 - 3
Cash	***1***	***1***	***0 - 5***	***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.

Notes to Financial Statements

NOTE 5: INVESTMENTS (continued)

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.

As of September 30, 2022, the investment pool held the following debt instruments:

(Dollars in thousands)

Investment Type	Rating*		Fair Value	Duration (Years)	Percentage of Portfolio	
Bank Loans	B	$	5,694	(0.03)	0.24	%
	B-		3,615	0.00	0.15	
	CCC+		21,209	0.01	0.89	
	CCC		31,758	(0.05)	1.33	
	NR		50,956	(0.00)	2.13	
Corporate Bonds - US	BB+		13,495	0.39	0.56	
(including convertible bonds)	BB-		11,757	0.31	0.49	
	B+		3,942	0.11	0.16	
	B		27,368	0.58	1.14	
	B-		18,585	0.47	0.78	
	CCC+		57,178	1.11	2.39	
	CCC		29,105	0.65	1.22	
	CCC-		2,415	0.06	0.10	
	NR		28,309	0.13	1.18	
Corporate Bonds - Foreign	B+		1,671	0.23	0.07	
	B-		14,561	2.04	0.61	
	CCC		8,460	1.01	0.35	
U.S. Treasury	AA+		962,634	0.63	40.27	
Fixed Income Pooled Funds	NR		1,097,485	N/A	45.92	
Total Fixed Income		$	2,390,195		100.00	%

* Using quality ratings provided by Standard & Poor's

Notes to Financial Statements

NOTE 5: INVESTMENTS (continued)

As of September 30, 2021, the Investment Pool held the following debt instruments:

(Dollars in thousands)

Investment Type	Rating*	Fair Value	Duration (Years)	Percentage of Portfolio
Bank Loans	B+	$ 3,281	(0.05)	0.11 %
	B	8,199	0.11	0.27
	B-	15,679	0.18	0.51
	CCC+	13,846	0.13	0.45
	CCC	10,463	0.06	0.34
	CCC-	8,098	0.07	0.26
	NR	66,111	0.67	2.15
Corporate Bonds - US	BB+	11,396	0.39	0.37
(including convertible bonds)	BB	1,038	0.05	0.03
	BB-	331	0.01	0.01
	B+	15,553	0.32	0.51
	B	38,637	0.76	1.26
	B-	7,987	0.13	0.26
	CCC+	41,675	0.83	1.36
	CCC	25,637	0.53	0.83
	CCC-	8,397	0.18	0.27
	D	5,776	0.09	0.19
	NR	25,255	0.02	0.82
Corporate Bonds - Foreign	B+	5,789	0.05	0.19
	B-	13,581	0.13	0.44
	CCC	6,979	0.05	0.23
U.S. Treasury	AA+	743,563	0.04	24.19
Fixed Income Pooled Funds	NR	1,996,097	N/A	64.95
Total Fixed Income		$ 3,073,368		100.00 %

* Using quality ratings provided by Standard & Poor’s

Notes to Financial Statements

NOTE 5: 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, 2022 and 2021, total investments in foreign currencies were approximately $266 million and $219 million, respectively.

As of September 30, 2022, the investments that were denominated in a currency other than the United States Dollar, are summarized below:

(Dollars in thousands)

International Securities	Equity	Fixed Income	Private Equity	Real Assets	Short-term and Other	Total Non-U.S. Dollar
Euro	$ -	$ -	$ 116,211	$ 60,386	$ 42	$ 176,639
Canadian Dollar	-	-	50,631	-	-	50,631
British Pound Sterling	-	-	30,020	-	8,316	38,336
	$ -	$ -	$ 196,862	$ 60,386	$ 8,358	$ 265,606

As of September 30, 2021, the investments that were denominated in a currency other than the United States Dollar, are summarized below:

(Dollars in thousands)

International Securities	Equity	Fixed Income	Private Equity	Real Assets	Short-term and Other	Total Non-U.S. Dollar
Euro	$ -	$ -	$ 89,350	$ 51,014	$ 69	$ 140,433
Canadian Dollar	-	-	50,951	-	-	50,951
British Pound Sterling	-	-	27,207	-	-	27,207
	$ -	$ -	$ 167,508	$ 51,014	$ 69	$ 218,591

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 2022 and 2021.

Notes to Financial Statements

NOTE 5: 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 2022.

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 Al or PI 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 5: 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, 2022 and 2021.

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.

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 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, investments in private funds have been placed under Level 3 based on management's reevaluation of its valuation methodology.

The tables on pages 42 and 43 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 5: 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 and fixed income securities classified in Level 3 are valued with last trade data having limited trading volume. Real assets classified in Level 3 are real asset investments generally valued using the income approach by internal manager reviews or independent external appraisers. 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.

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 42 and 43.

Domestic and International Equities – DCRB has investments in 5 funds with a domestic focus and 4 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.

Real Assets – DCRB has made commitments to purchase partnership interests in real assets funds as part of its long-term asset allocation plan for private markets. As shown in the table on page 42, it is fully funded as of September 30, 2022. This represents commingled public investments in 2 real asset funds.

Notes to Financial Statements

NOTE 5: INVESTMENTS (continued)

Investments Measured at Fair Value (Dollars in thousands)

	September 30, 2022	Quoted Prices in Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Investments by Fair Value Level				
Domestic Equity	$ 256,673	$ 236,079	$ 8,322	$ 12,272
International Equity	208,485	6,913	-	201,572
Fixed Income	694,966	-	296,952	398,014
Real Assets	1,062,838	-	-	1,062,838
Private Equity	1,198,075	-	-	1,198,075
Total Investments by Fair Value Level	3,421,037	$ 242,992	$ 305,274	$ 2,872,771
Investment Measured at the Net Asset Value (NAV)				
Domestic Equity	1,754,656			
International Equity	2,202,815			
Fixed Income	1,688,971			
Real Assets	198,281			
Total Investments Measured at NAV	5,844,723			
Total Investments	**$ 9,265,761**			

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, 2022	Unfunded Commitments	Redemption Frequency	Redemption Notice
Domestic Equity	$ 1,754,656	$ -	Daily, Quarterly	0 - 5 day
International Equity	2,202,815	-	Daily, Monthly	1 - 10 days
Fixed Income	1,688,971	-	Daily, Monthly	0 - 5 days
Real Assets	198,281	-	Daily, Quarterly	0- 45 days
	$ 5,844,723	$ -		

Investments derivative instruments (Dollars in thousands)

	Fair Value September 30, 2022
Forwards	$ 43,038
Liabilities - Forwards	(43,219)
Rights/warrants	11,632
Swaps	(394)
Total	$ 11,056

Notes to Financial Statements

NOTE 5: INVESTMENTS (continued)

Investments measured at Fair Value (Dollars in thousands)

	September 30, 2021	Quoted Prices in Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Investments by Fair Value Level				
Domestic Equity	$ 364,556	$ 352,395	$ 4,828	$ 7,333
International Equity	269,135	15,946	-	253,189
Fixed Income	689,418	-	304,004	385,414
Real Assets	674,001	-	-	674,001
Private Equity	943,089	-	-	943,089
Total Investments by Fair Value Level	2,940,199	$ 368,341	$ 308,832	$ 2,263,026
Investment Measured at the Net Asset Value (NAV)				
Domestic Equity	2,283,825			
International Equity	2,940,463			
Fixed Income	2,383,950			
Real Assets	328,357			
Total Investments Measured at NAV	7,936,595			
Total Investments	**$ 10,876,794**			

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, 2021	Unfunded Commitments	Redemption Frequency	Redemption Notice
Domestic Equity	$ 2,283,825	$ -	Daily, Quarterly	0 - 5 days
International Equity	2,940,463	-	Daily, Monthly	1 - 10 days
Fixed Income	2,383,950	-	Daily, Monthly	0 - 5 days
Real Assets	328,357	-	Daily, Quarterly	0 - 45 days
	$ 7,936,595	$ -		

Investments derivative instruments (Dollars in thousands)

	Fair Value September 30, 2021
Forwards	$ 63,187
Liabilities - Forwards	(59,009)
Rights/warrants	7,223
Swaps	38,829
Total	$ 50,230

Notes to Financial Statements

NOTE 6: NET PENSION LIABILITY (ASSET)

The components of the net pension liability (asset) of the District Retirement Funds at September 30, 2022 and 2021 were as follows:

(Dollars in thousands)

	2022		2021	
	TRF	POFRF	TRF	POFRF
Total Pension Liability	$ 2,871,570	$ 6,639,124	$ 2,698,618	$ 6,181,614
Plan Fiduciary Net Position	2,572,925	6,900,445	2,944,565	7,991,137
Net Pension Liability (Asset)	$ 298,645	$ (261,321)	$ (245,947)	$ (1,809,523)
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability/Asset	89.60%	103.94%	109.11%	129.27%

Actuarial Assumptions - The total pension liability was determined based on an actuarial valuation as of September 30, 2022 and 2021 using the following actuarial assumptions, applied to all periods included in the measurement:

Teachers' Retirement Fund	2022	2021
Actuarial cost method	Entry age normal	Entry age normal
Amortization method	Level dollar, closed	Level dollar, closed
Asset valuation method	5-year smoothed market	5-year smoothed market
Inflation	3.00%	3.00%
Salary increases	4.00% - 7.10%	4.00% - 7.10%
Investment rate of return	6.25%, net of pension plan investment expense	6.25%, net of pension plan investment expense
Mortality (Healthy)	Pub-2010 General Employee and Healthy Retiree Mortality with generational projection using MP-2021 improvement scale	Pub-2010 General Employee and Healthy Retiree Mortality with generational projection using MP-2020 improvement scale
Mortality (Disabled)	Pub-2010 General Disabled Retiree Mortality with generational projection using MP-2021 improvement scale	Pub-2010 General Disabled Retiree Mortality with generational projection using MP-2020 improvement scale
Cost of living adjustments	3.00% for members hired on or after November 1,1996	3.00% for members hired on or after November 1,1996

Notes to Financial Statements

NOTE 6: NET PENSION LIABILITY (ASSET) (continued)

Police and Firefighters' Retirement Fund	2022	2021
Actuarial cost method	Entry age normal	Entry age normal
Amortization method	Level dollar, closed	Level dollar, closed
Asset valuation method	5-year smoothed market	5-year smoothed market
Inflation	3.0%	3.0%
Salary increases	6.25% - 7.25% for police, 4.50% - 6.05% for firefighters	6.15% - 7.25% for police, 4.25% - 6.05% for firefighters
Investment rate of return	6.25%, net of pension plan investment expense	6.25%, net of pension plan investment expense
Mortality (Healthy)	Pub-2010 Public Safety Employee and Healthy Retiree Mortality with males set forward 1 year, with generational projection using MP-2021 improvement scale	Pub-2010 Public Safety Employee and Healthy Retiree Mortality with males set forward 1 year, with generational projection using MP-2020 improvement scale
Mortality (Disabled)	Pub-2010 Public Safety Disabled Retiree Mortality with generational projection using MP-2021 improvement scale	Pub-2010 Public Safety Disabled Retiree Mortality with generational projection using MP-2020 improvement scale
Cost of living adjustments	3.0% for members hired on or after November 1,1996	3.0% for members hired on or after November 1,1996

All assets and liabilities are computed as of October 1, 2022. Demographic information was collected as of June 30, 2022. The actuarial assumptions used were based on the results of the most recent actuarial experience investigation for the period July 1, 2015 to June 30, 2020, dated October 12, 2021.

The discount rate used to measure the total pension liability was 6.25% for both 2022 and 2021. 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 2021. 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.

Notes to Financial Statements

NOTE 6: NET PENSION LIABILITY (ASSET) (continued)

The long-term expected rate of return on pension plan investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of geometric real rates of return for each major asset class included in the pension plan's target asset allocation as of September 30, 2022 and 2021 are summarized in the following table:

Asset Class	Target Allocation 2022	Target Allocation 2021	Long-Term Expected Real Rate of Return 2022	Long-Term Expected Real Rate of Return 2021
Domestic Equity	20.0 %	20.0 %	6.8 %	6.8 %
International Developed Equity	16.0	16.0	7.5	7.1
Emerging Market Equity	10.0	10.0	8.4	8.1
U.S. Core Fixed Income	7.0	7.0	2.4	1.8
U.S. Long-Term Government Bonds	3.0	3.0	2.8	2.5
Treasury Inflation - Protected Securities	5.0	4.0	2.4	1.8
Bank Loans	2.0	2.0	4.0	4.0
Emerging Market Debt	4.0	4.0	4.2	3.7
High Yield Bonds	2.0	2.0	4.4	4.2
Foreign Bonds	2.0	2.0	2.3	1.7
Absolute Return	0.0	2.0	0.0	4.3
Private Equity	9.0	9.0	10.0	9.1
Private Credit	3.0	3.0	7.1	6.8
Real Estate	8.0	7.0	7.1	7.2
Infrastructure	6.0	6.0	7.3	7.0
Natural Resources	2.0	2.0	8.5	8.3
Cash	1.0	1.0	1.7	1.1
Total	100.0 %	100.0 %	86.9 %	85.5 %

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 6.25% for both 2022 and 2021, as well as what the Fund's net pension liability calculated using a discount rate that is one percentage point lower or one percentage point higher than the current rate:

Notes to Financial Statements

NOTE 6: NET PENSION LIABILITY (ASSET) (continued)

(Dollars in thousands)

2022	1% Decrease (5.25%)	Current Discount Rate (6.25%)	1% Increase (7.25%)
Teachers' Retirement Fund			
Net Pension Liability(Asset)	$ 808,893	$ 298,308	$ (105,854)
Police Officers and Firefighters' Retirement Fund			
Net Pension Asset	$ 867,473	$ (262,227)	$ (1,163,603)

2021	1% Decrease (5.25%)	Current Discount Rate (6.25%)	1% Increase (7.25%)
Teachers' Retirement Fund			
Net Pension Liability(Asset)	$ 242,924	$ (246,266)	$ (632,285)
Police Officers and Firefighters' Retirement Fund			
Net Pension Asset	$ (734,961)	$ (1,810,380)	$ (2,666,327)

NOTE 7: 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, 2022 and 2021.

NOTE 8: 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.

DCRB has evaluated events subsequent to September 30, 2022 and through December 19, 2022, the date the financial statements were available to be issued and determined that there have not been any events that have occurred that would require adjustments to the financial statements.

FINANCIAL SECTION - REQUIRED SUPPLEMENTARY INFORMATION

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

Teachers' Retirement Fund	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total Pension Liability									
Service Cost	$ 88,666	$ 87,984	$ 80,242	$ 72,429	$ 67,877	$ 65,911	$ 61,599	$ 53,297	$ 50,409
Interest	165,520	168,636	159,186	144,165	137,704	131,657	124,370	118,378	112,204
Difference Between Expected and Actual Experience	19,354	(16,580)	(2,364)	103,719	(19,505)	(37,230)	2,656	(7,246)	-
Changes in Assumptions	-	(89,404)	-	-	-	14,106	-	-	-
Benefit Payments	(95,352)	(89,404)	(85,679)	(81,471)	(78,430)	(72,069)	(69,093)	(64,076)	(59,832)
Refunds	(5,236)	(3,417)	(4,873)	(6,418)	(6,126)	(6,166)	(6,205)	(5,576)	(5,790)
Net Change in Total Pension Liability	172,952	57,815	146,512	232,424	101,520	96,209	113,327	94,777	96,991
Total Pension Liability - Beginning	2,698,618	2,640,803	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)	2,871,570	2,698,618	2,640,803	2,494,291	2,261,867	2,160,347	2,064,138	1,950,811	1,856,034
Fund Fiduciary Net Position									
Contributions - District Government	75,060	70,478	58,888	53,343	59,046	56,781	44,469	39,513	31,636
Contributions - Plan Member	46,914	45,689	42,356	40,432	40,324	34,364	33,591	31,621	28,751
Net Investment Income (Loss)	(389,391)	513,322	138,924	85,047	94,129	239,554	152,262	(72,647)	132,086
Other Income	871	953	803	883	1,038	907	1,033	385	522
Benefit Payments	(95,352)	(89,404)	(85,679)	(81,471)	(78,430)	(72,069)	(69,093)	(64,076)	(59,832)
Administrative Expense	(4,488)	(4,127)	(3,511)	(3,440)	(4,474)	(4,721)	(4,746)	(4,543)	(3,787)
Refunds	(5,236)	(3,417)	(4,873)	(6,418)	(6,126)	(6,166)	(6,205)	(5,576)	(5,790)
Change in Fiduciary Net Position	(371,622)	533,494	146,908	88,376	105,507	248,650	151,311	(75,323)	123,586
Fund Fiduciary Net Position - Beginning	2,944,884	2,411,390	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)	2,573,262	2,944,884	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)	$ 298,308	$ (246,266)	$ 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)	89.61%	109.13%	91.31%	90.79%	96.21%	95.85%	88.27%	85.64%	94.07%
Covered Payroll	$ 575,288	$ 538,565	$ 490,756	$ 466,792	$ 470,749	$ 447,762	$ 438,079	$ 417,090	$ 378,926
Net Pension Liability (Asset) as a Percentage of Covered Payroll	51.85 %	(45.73)%	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 Firefighters' Retirement Fund	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total Pension Liability									
Service Cost	$ 203,080	$ 217,495	$ 209,411	$ 180,928	$ 182,641	$ 196,629	$ 198,020	$ 192,114	$ 176,102
Interest	380,658	386,386	359,706	338,288	318,719	300,626	282,285	257,943	235,097
Difference Between Expected and Actual Experience	55,933	(189,740)	(8,567)	(57,642)	(84,452)	(188,549)	(106,840)	(2,477)	-
Changes in Assumptions	-	(97,495)	-	-	-	67,256	-	-	-
Benefit Payments	(179,984)	(156,455)	(140,044)	(121,342)	(106,794)	(92,537)	(79,137)	(63,634)	(52,784)
Refunds	(2,177)	(2,420)	(1,236)	(1,533)	(1,580)	(1,647)	(2,179)	(1,396)	(1,637)
Net Change in Total Pension Liability	457,510	157,771	419,270	338,699	308,534	281,778	292,149	382,550	356,778
Total Pension Liability - Beginning	6,181,614	6,023,843	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)	6,639,124	6,181,614	6,023,843	5,604,573	5,265,874	4,957,340	4,675,562	4,383,413	4,000,863
Fund Fiduciary Net Position									
Contributions - District Government	108,965	109,933	93,061	91,284	105,596	145,631	136,115	103,430	110,766
Contributions - Plan Member	36,997	37,433	37,880	38,243	34,478	33,424	32,785	33,679	32,821
Net Investment Income (Loss)	(1,044,735)	1,391,936	381,607	232,987	316,842	655,310	415,157	(187,283)	338,894
Other Income	2,338	2,585	2,207	2,435	2,356	2,468	2,810	1,012	1,342
Benefit Payments	(179,984)	(156,455)	(140,044)	(121,342)	(106,794)	(92,537)	(79,137)	(63,634)	(52,784)
Administrative Expense	(12,047)	(11,208)	(9,648)	(9,481)	(11,570)	(12,838)	(12,918)	(11,939)	(9,730)
Refunds	(2,177)	(2,420)	(1,236)	(1,533)	(1,580)	(1,647)	(2,179)	(1,396)	(1,637)
Change in Fiduciary Net Position	(1,090,643)	1,371,804	363,827	232,593	339,328	729,811	492,633	(126,131)	419,672
Fund Fiduciary Net Position - Beginning	7,991,994	6,620,190	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)	6,901,351	7,991,994	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)	$ (262,227)	$ (1,810,380)	$ (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)	103.95%	129.29%	109.90%	111.63%	114.39%	114.67%	105.97%	101.79%	114.68%
Covered Payroll	$ 528,910	$ 516,881	$ 473,513	$ 460,686	$ 454,209	$ 441,904	$ 438,114	$ 446,201	$ 426,135
Net Pension Liability (Asset) as a Percentage of Covered Payroll	(49.58)%	(350.25)%	(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
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
2021	70,478	70,478	-	538,565	13.09
2022	75,060	75,060	-	575,288	13.05

Notes to Schedule:

Valuation Date: For the fiscal year 2021 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, setback 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 7years for females.
Cost of living adjustments	Increases at the rate of 3.0% per year for all members. Members hired prior to November 10, 1996 and 2.75% per year for members hired on or after November 10, 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
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
2021	109,933	109,933	-	516,881	21.27
2022	108,965	108,965	-	528,910	20.60

Notes to Schedule:

Valuation Date: For the fiscal year 2021 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	Increases at the rate of 3.25% per year for members hired prior to November 10,1996 and 2.75% per year for members hired on or after November 10, 1996.

Schedule of Investment Returns

Annual Money-Weighted Rates of Return, Net of Fees

	FY 2022	FY 2021	FY 2020	FY 2019	FY 2018	FY 2017	FY 2016	FY 2015	FY 2014
Total Portfolio	(12.500)%	20.900 %	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.

FINANCIAL SECTION - SUPPLEMENTARY INFORMATION

Schedules of Administrative Expenses
For the years ended September 30, 2022 and 2021

	2022	2021
Personal Services		
Salaries	$ 7,584,486	$ 7,199,346
Fringe Benefits	1,737,934	1,321,298
Total personal services	**9,322,420**	**8,520,644**
Nonpersonal Services		
Office Supplies	66,480	43,824
Telephone	20,886	20,382
Rent	-	1,907,757
Travel	92,478	47,955
Professional Fees	3,212,258	1,905,038
Postage	8,149	19,925
Printing	6,964	4,517
Insurance	609,531	178,871
Dues and Memberships	40,361	38,580
Audit Costs	100,892	(7,997)
Actuarial Fees	67,616	145,585
Legal Fees	1,172,651	881,944
Investment Fees	20,758,121	26,991,158
Contractual Services (STAR)	2,613,486	2,439,560
Equipment and Rental	159,307	52,024
Depreciation	265,683	21,618
Total non-personal services	**29,194,863**	**34,690,741**
Total administrative expenses	**38,517,283**	**43,211,385**
Investment expenses	**(21,982,253)**	**(27,876,648)**
Net administrative expenses	**$ 16,535,030**	**$ 15,334,737**

Schedules of Investment Expenses

For the years ended September 30, 2022 and 2021

	2022	2021
Investment Managers*	$ 19,704,704	$ 25,863,055
Investment Administrative Expense	1,224,132	885,492
Investment Consultants	713,000	710,000
Investment Custodian	340,417	18,101
Total Investment Expenses	$ 21,982,253	27,876,648

*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, 2022 and 2021

Professional/Consultant	Nature of Service	FY 2022	FY 2021
Administrative Consultants			
U.S. Treasury Office of D.C. Pensions	Benefit Payment Processing	$ 2,580,486	$ 2,439,560
Morgan, Lewis & Bockius	Legal Counsel	739,687	754,286
MVS Inc.	Information Technology Consulting	-	22,548
Funston Advisory Services, LLC	Audit and Consulting Services	294,664	-
Jones Day	Legal Services	1,110,209	-
Bolton Partners, Inc.	Actuarial Services	141,005	159,403
Office of Contract and Procurement	Procurement Services	108,576	238,306
Polihire Strategy Corp.	Recruitment Consulting	35,282	86,282
McConnell & Jones LLP	Audit Costs	-	1,000
Colmore, Inc.	Investment Consulting	119,600	-
NJ3Q Technology, LLC	Information Technology Consulting	12,017	-
Convergence, Inc.	Investment Consulting	40,000	20,000
DC Net	Information Technology Consulting	100,504	66,149
James M Loots PC	Legal Services	22,002	-
Capitol Document Solutions	Information Technology Consulting	37,658	38,491
DLT Solutions, Inc.	Information Technology Consulting	-	12,618
Advent Software, Inc.	Investment Consulting	71,838	18,503
Diligent Corp	Information Technology Consulting	-	31,575
Election-America, Inc.	Trustee Elections	30,851	33,724
Kofax, Inc.	Information Technology Consulting	-	26,943
D.C. Office of the Chief Technology	Information Technology Consulting	371,405	416,321
eVestment Alliance	Online Investment Service	23,738	22,521
vTech Solutions, Inc.	Benefits Staffing Services	14,388	-
Dell Marketing LP	IT Equipment Purchase	97,676	-
Crowe LLP	Professional Services	137,233	404,600
Groom Law Group	Legal Counsel	455,325	102,750
Cradle Systems, Inc.	IT Software Maintenance	-	85,682
WatsonRice LLP	Audit Costs	80,892	79,968
The Seaprompt Corporation	IT Software Maintenance	68,049	65,999
Globalscape, Inc.	IT Software Maintenance	-	9,335
Carahsoft Technology Corporation	IT Software Maintenance	8,756	8,460
OD Group, Inc. dba Orion Dev Grp	Staff Training	-	8,085
Changing Technologies, Inc.	IT Software Maintenance	9,929	6,715
CJEN, Inc.	IT Software Purchase	5,995	5,031
HBP, Inc.	Graphic Design for Publications	-	3,917
Office of Finance and Resource Mgmt.	Information Technology Consulting	13,793	2,893
Money-Media, Inc.	Investment Consulting	-	2,160

(Continued on next page)

Professional/Consultant	Nature of Service	FY 2022	FY 2021
D.C. Department of Human Resources	Professional Services	56,220	56,220
Prism International, LLC	IT Software Maintenance	-	19,616
Techflairs, Inc.	Benefits Staffing Services	46,047	17,993
Kastle Systems, LLC	Office Security	14,370	14,223
George Mason University	Staff Training	-	12,750
Hartford Casualty Insurance Company	Insurance Consulting	10,612	12,128
Harris, Mackessy & Brennan, Inc.	IT Software Maintenance	-	11,877
Midtown Personnel, Inc.	Benefits Staffing Services	60,758	11,608
Institutional Shareholder Services, Inc.	Investment Consulting	13,319	11,125
Pitney Bowes, Inc. (Reserve Account)	Postage	-	10,000
RSM US LLP formerly RSM McGladrey	IT Software Maintenance	91,832	25,067
Cision US, Inc.	Advertising	-	1,329
Corporate Investigations	Professional Services	-	1,257
Phoenix Graphics, Inc.	Professional Services	-	1,000
Total Administrative Consultants		$ 7,024,716	$ 5,380,018
Investment Consulting			
Meketa Investment Group	Investment Consulting	713,000	700,000
Abel Solutions	Investment Consulting	-	10,000
Total Investment Consultants		713,000	710,000
Total Payments to Consultants		$ 7,737,716	$ 6,090,018

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INVESTMENTS SECTION

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 actuarial investment return target for the Fiscal Year 2022 was 6.25%, net of investment management fees and administrative expenses. Inaddition 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, including the Interim and Long-Term Policy Benchmarks.

As of September 30, 2022, the Long-Term Policy Benchmark and actual allocation weights were as follows:

Asset Class	Performance Benchmark	Target	Actual
Cash & Fixed Income	Fixed Income Benchmark[1]	26%	29%
U.S. Equities	Russell 3000 Index	20%	20%
Developed Int'l. Markets Equities	MSCI World Index ex-U.S. (net)	16%	16%
Emerging Markets Equities	MSCI Emerging Markets Index (net)	10%	9%
Private Equity	Private Equity Benchmark[2]	9%	11%
Real Estate	FTSE EPRA NAREIT Global Index (net)	8%	8%
Infrastructure	Infrastructure Benchmark[3]	6%	4%
Private Credit	BC US High Yield	3%	1%
Natural Resources	S&P Global Natural Resources Index	2%	2%

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.

The Board's Investment Office staff compiled the investment data presented on the following pages. Investment performance is calculated using the time-weighted-rates of return, including the impact of fees and expense. Total return includes interest and dividends, as well as capital appreciation.

[1] The Fixed Income Benchmark is a composite of 28.0% BC US Aggregate, 20.0% BC US TIPS, 8.0% BC US High Yield, 8.0% CS Leveraged Loan, 8.0% BC Global Aggregate ex-US, 8.0% JPM GBI-EM Global Diversified; 8.0% JPM EMBI Global Diversified; 12.0% BC LT Govt Bonds.

[2] The Private Equity Benchmark is a composite of 67% Russell 3000; 22% MSCI World ex-US ND; 11% MSCI Emerging Markets ND.

[3] The Infrastructure Benchmark is a composite of 25% MSCI World ex-US ND, 25% FTSE EPRA NAREIT Global (net), 25% BC US Aggregate, and 25% BC US TIPS.

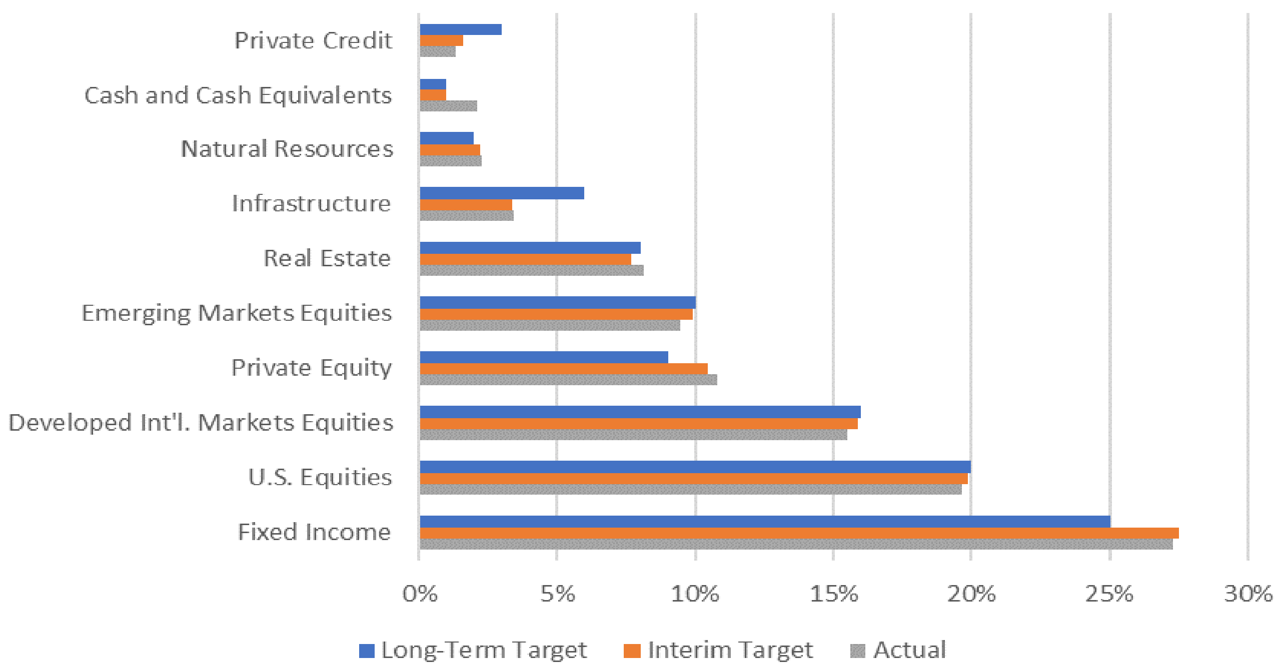
Report on Investment Activity

Asset Allocation

As of September 30, 2022, 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 and Long-Term Asset Allocation Policy Targets

As of September 30, 2022



The small overweight in private market investments is driven by a consistent pace of commitments amid a correction in public markets in Fiscal Year 2022 and is within the asset allocation policy range of 9-14%. The allocation will move back towards the target as public markets recover over time. In the meantime, the Board is focused on a deliberate, prudent pace of new commitments to maintain vintage year diversification, subject to the availability of compelling opportunities, strong fit with the existing investment program, due diligence on potential partners, and attractive market characteristics.

Report on Investment Activity

Fiscal Year 2022 Global Market Review

The Fiscal Year began with COVID-19 vaccine rollouts and the new Omicron variant as the market tried to find a sense of direction. While the S&P 500 Index gained 11% during the first quarter of the Fiscal Year, the MSCI EAFE index was more muted with a gain of 2.7%. The MSCI Emerging Market Index dropped 1.3% in the quarter as concerns on continued spread of COVID-19 amidst rolling lockdowns in some countries weighed on the market. Pandemic related supply chain issues lingered as demand picked up in the developed world. This caused a surge in inflation and worries of a policy tightening response from Central Banks around the world, especially the US Fed.

Following a strong calendar year for global equities in 2021, the first quarter of calendar year 2022 brought about a sharp market decline spurred by the Russian invasion of Ukraine. Looming sanctions on a major commodity supplier to the global economy caused inflationary pressures to build up and the US Federal reserve responded by a) raising rates by 25bps and b) signaling a switch towards stronger monetary policy tightening. The S&P 500 declined by 4.6% while the MSCI EAFE and MSCI Emerging Markets indices fell by 3.7% and 6.1%, respectively, in local currency terms. The higher rates cycle globally had a detrimental effect on asset valuations as (growth) stocks suffered from the rise in discount rates for future earnings.

Global market weakness accelerated in the second quarter of the calendar year with the S&P 500, MSCI EAFE and MSCI Emerging markets indices down by 16.1%, 14.5% and 11.5%, respectively. The US Fed increased rates by 125bps in the quarter and Government bonds offered little reprieve as 10-year Treasury yields rose above 3% for the first time since November 2018, dragging down performance of fixed income assets. Recession fears trigged by monetary policy tightening, and supply chains disrupted by the on-going war in Ukraine and China’s COVID lockdowns, negatively impacted market sentiment. EM currencies on average depreciated relative to the US dollar by 6.5%, as the dollar advanced against the currencies of its major trading partners.

In the third quarter of calendar year 2022, global equity and bond markets started off strongly in July only for the rally to peter out throughout August and September. The US Fed raised their benchmark rate by another 150bps and caused many other central banks to respond to protect their currencies and curb capital outflows. Key reasons for concern were the US Fed Chair’s bearish comments on the US economy amid rising inflation and interest rates. High inflation prints remained persistent as China continued lockdowns causing supply chain disruptions as well as the continued war in Russia-Ukraine causing disruptions, particularly in energy and agricultural markets. The US Fed’s tightening cycle led to a relatively stronger US dollar causing more pain across global markets, especially for US Dollar denominated investors. The S&P 500 finished the quarter down 4.9%, while the USD based returns for MSCI EAFE and MSCI Emerging markets were -9.4% and -11.6%, respectively.

The optimistic view for equity market investors is that global equity valuations have fallen below long-term averages, and this presents a strong buying opportunity for long-term patient capital. But, headwinds remain strong in persistently high inflation, a hawkish US Fed, and slowing global growth as companies absorb higher energy prices and pass on price increase to a weakened consumer base. This could lead to margin compression at the best and demand destruction at the worst. The looming question as always will be what catalysts will allow the market to swing from a negative year to more positive stance and a return to growth.

Report on Investment Activity

Fiscal Year 2022 Investment Results

As of September 30, 2022, total plan investments at fair value stood at $9.5 billion, a $1.4 billion decrease from the end of the prior Fiscal Year. The Fund generated the following gross returns as of September 30, 2022:[1]

- Fiscal Year: -12.5% per year, outperforming the Interim Policy Benchmark by 2.1%
- Last 5 Years: +4.0% per year, in-line with the Interim Policy Benchmark
- Last 10 Years: +5.7% per year, in-line with the Interim Policy Benchmark
- Last 20 Years: +6.3% per year, underperforming the Long-Term Policy Benchmark by 0.4%

While total portfolio returns were negative in FY 2022, they outperformed the benchmark over the last Fiscal Year driven by several factors, including an overweight to private markets and strong performance from the Private Equity and Real Assets portfolio (including Real Estate, Infrastructure and Natural Resources).

Exhibit 1 shows the net returns for the Fund and each asset class over the one, three, five, and ten-year time periods ending September 30, 2022. The returns were calculated by the Board's custodial bank, The Northern Trust Company, 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.

[1] 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.

Report on Investment Activity

Exhibit 1: Investment Performance (Net of Fees)
As of September 30, 2022

Asset Class	1-Year	3-Year	5-Year	10-Year	20-Year
Total Fund	**-12.5%**	**3.6%**	**4.0%**	**5.7%**	**6.3%**
Interim Policy Benchmark [1]	*-14.6%*	*3.3%*	*4.0%*	*5.7%*	*7.0%*
Long-Term Policy Benchmark [2]	*-17.7%*	*2.0%*	*3.3%*	*5.4%*	*6.7%*
Cash and Cash Equivalents	**0.7%**	**0.6%**	**1.2%**	**0.9%**	**1.5%**
ICE BofAML US 3-Month Treasury Bill	*0.6%*	*0.6%*	*1.2%*	*0.7%*	*1.3%*
Fixed Income	**-14.4%**	**-2.3%**	**-0.1%**	**0.9%**	**3.3%**
Fixed Income Benchmark [3]	*-15.0%*	*-2.6%*	*0.0%*	*1.0%*	*3.2%*
U.S. Equities	**-18.9%**	**7.9%**	**8.5%**	**11.3%**	**9.7%**
Russell 3000 Index	*-17.6%*	*7.7%*	*8.6%*	*11.4%*	*9.9%*
International Developed Markets Equities	**-23.0%**	**-0.7%**	**0.2%**	**4.3%**	**6.4%**
MSCI World Index ex U.S.(net)	*-23.9%*	*-1.2%*	*-0.4%*	*3.6%*	*6.4%*
Emerging Markets Equities	**-26.7%**	**-1.5%**	**-1.6%**	**1.1%**	**-**
MSCI Emerging Markets Index (net)	*-28.1%*	*-2.1%*	*-1.8%*	*1.1%*	*-*
Private Equity	**14.8%**	**23.1%**	**18.5%**	**14.6%**	**10.2%**
Cambridge Associates Global PE & VC Index (quarter lag) [4]	*2.4%*	*22.0%*	*19.7%*	*16.2%*	*13.4%*
DCRB Custom Long Term Private Equity Benchmark [5]	*-15.8%*	*8.0%*	*9.4%*	*11.6%*	*9.3%*
Real Estate	**4.7%**	**6.6%**	**6.9%**	**7.7%**	**5.1%**
DCRB Real Estate interim/Long-Term	*2.6%*	*5.0%*	*6.2%*	*8.4%*	*8.3%*
Natural Resources	**35.2%**	**14.5%**	**9.7%**	**11.3%**	**-**
Cambridge Associates Energy & Royalties (quarter lag)	*27.9%*	*7.1%*	*5.0%*	*-0.8%*	*-*
Infrastructure	**21.3%**	**17.5%**	**12.5%**	**10.9%**	**-**
Cambridge Associates Infrastructure Index (quarter lag)	*12.8%*	*10.8%*	*11.2%*	*10.4%*	*-*
Private Credit	**7.3%**	**-**	**-**	**-**	**-**
Cambridge Associates Private Credit Index (quarter lag)	*4.9%*	*-*	*-*	*-*	*-*

[1] As of 9/30/22, the Interim Policy Benchmark is a composite of 10.1% MSCI Emerging Markets ND; 2.0% BC Global Agg ex USD; 6.2% BC (LB) US TIPS; 2.9% BC US Corporate High Yield; 2.9% Credit Suisse Leveraged Loan; 10.6% DCRB CA Glob PE & VC Idx(1QLag); 5.1% DCRB CA RE Idx (1QLag); 2.5% Total Public RE; 2.0% DCRB CA Energy & Royalties(1QL); 16.1% MSCI World ex USA ND; 7.0% BC U.S. Aggregate; 4.0% 50% JPM GBI-EM Global Diversified / 50% JPMorgan EMBI Global Diversified; 20.1% Russell 3000; 3.2% DCRB CA Infra(1QLag); 3.0% BC U.S. Long Govt. Bond Index; 1.0% ICE BofA ML 90 Day T-Bills; 1.2% DCRB CA Private Debt (1QLag)

[2] As of 9/30/22, the Long-Term Policy Benchmark is a composite of 10% MSCI Emerging Markets ND; 16% DCRB Real Assets Long Term; 3% DCRB Private Debt Long Term; 1% ICE BofA 3 Month Treasury Bill; 16% MSCI World ex USA ND, 20% Russell 3000; 9% DCRB Custom Long Term Private Equity; 25% DCRB Custom Fixed Income - Long Term.

[3] As of 9/30/22, the Long-Term Policy Benchmark is a composite of 10% MSCI Emerging Markets ND; 16% DCRB Real Assets Long Term; 3% DCRB Private Debt Long Term; 1% ICE BofA 3 Month Treasury Bill; 16% MSCI World ex USA ND, 20% Russell 3000; 9% DCRB Custom Long Term Private Equity; 25% DCRB Custom Fixed Income - Long Term.

[4] Prior to 12/31/07, Cambridge Associates U.S. Private Equity & Venture Capital Index.

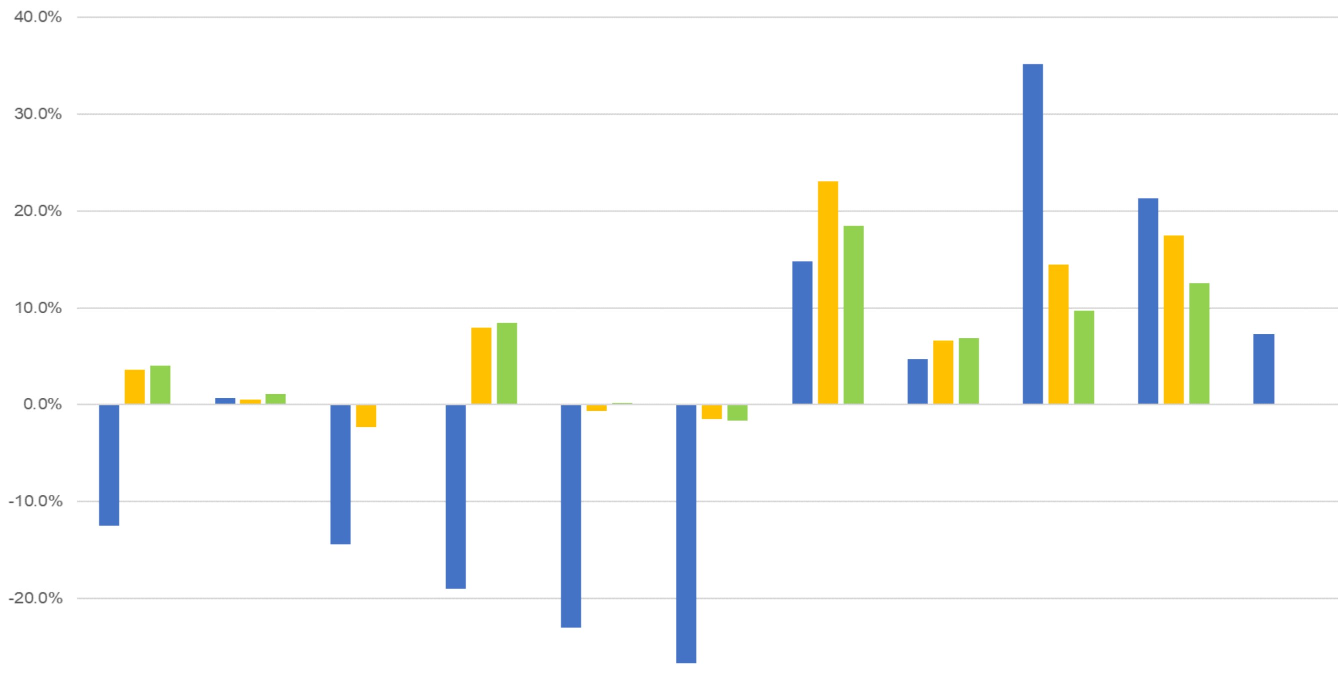
[5] As of 9/30/2022, the Private Equity Benchmark is a composite of 66.7% Russell 3000 Qtr Lag; 22.2% MSCI World ex USA ND Qtr Lag; 11.1% MSCI Emerging Markets ND Qtr Lag. Prior to 3/31/21, MSCI ACWI + 3% (quarter lag). Prior to 12/31/07, Russell 3000 + 3% (quarter lag)

[6] As of 9/30/2022, the Real Estate Benchmark is a composite of 64% FTSE EPRA/NAREIT Global Net and 36% DCRB CA RE Idx (1Q Lag)

Note: All returns are time-weighted and net of fees. Private Market fund valuations are lagged by a quarter.

Report on Investment Activity

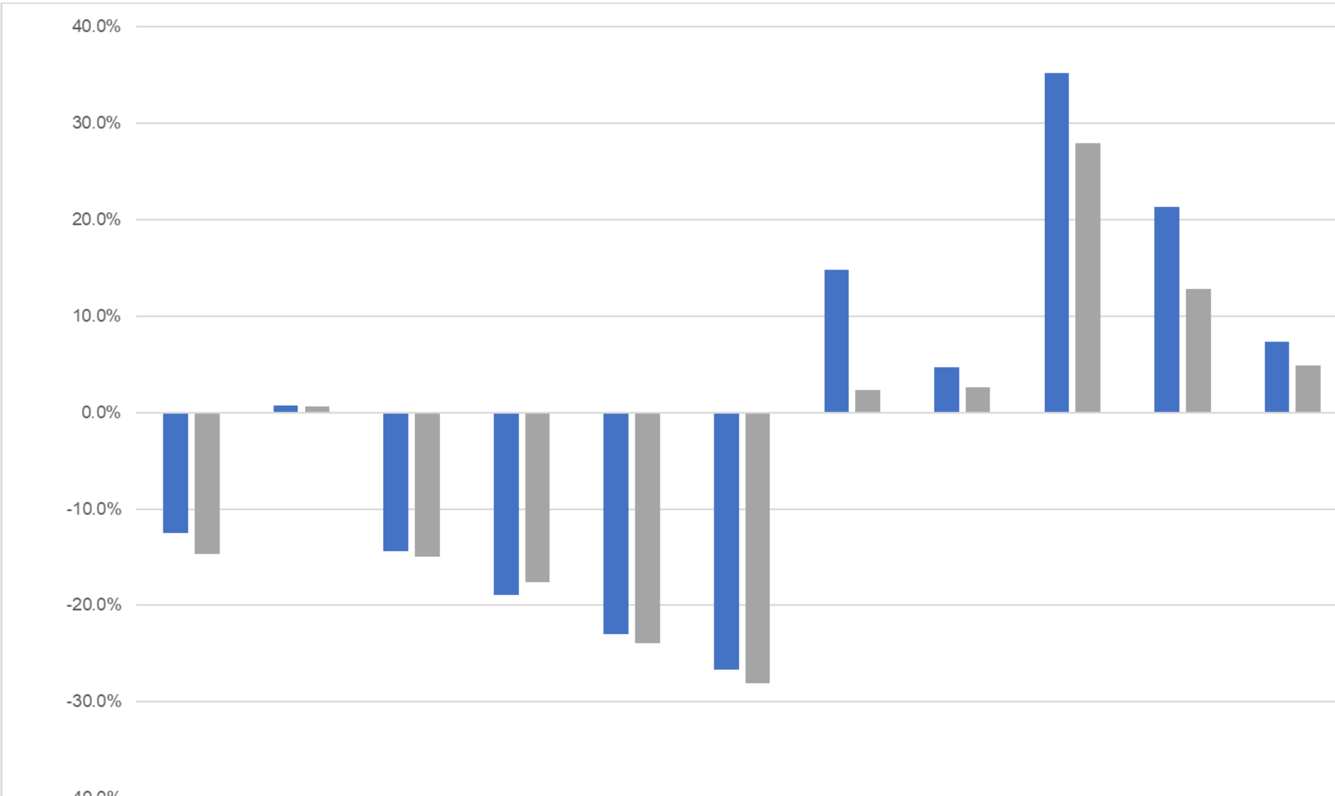
Exhibit 2: Historical Investment Performance
As of September 30, 2022



	Total Fund	Cash and Cash Equivalents	Fixed Income	U.S. Equities	International Developed Markets Equities	Emerging Markets Equities	Private Equity	Real Estate	Natural Resources	Infrastructure	Private Credit
1-Year	-12.5%	0.7%	-14.4%	-18.9%	-23.0%	-26.7%	14.8%	4.7%	35.2%	21.3%	7.3%
3-Year	3.6%	0.6%	-2.3%	7.9%	-0.7%	-1.5%	23.1%	6.6%	14.5%	17.5%	
5-Year	4.0%	1.2%	-0.1%	8.5%	0.2%	-1.6%	18.5%	6.9%	9.7%	12.5%	

Report on Investment Activity

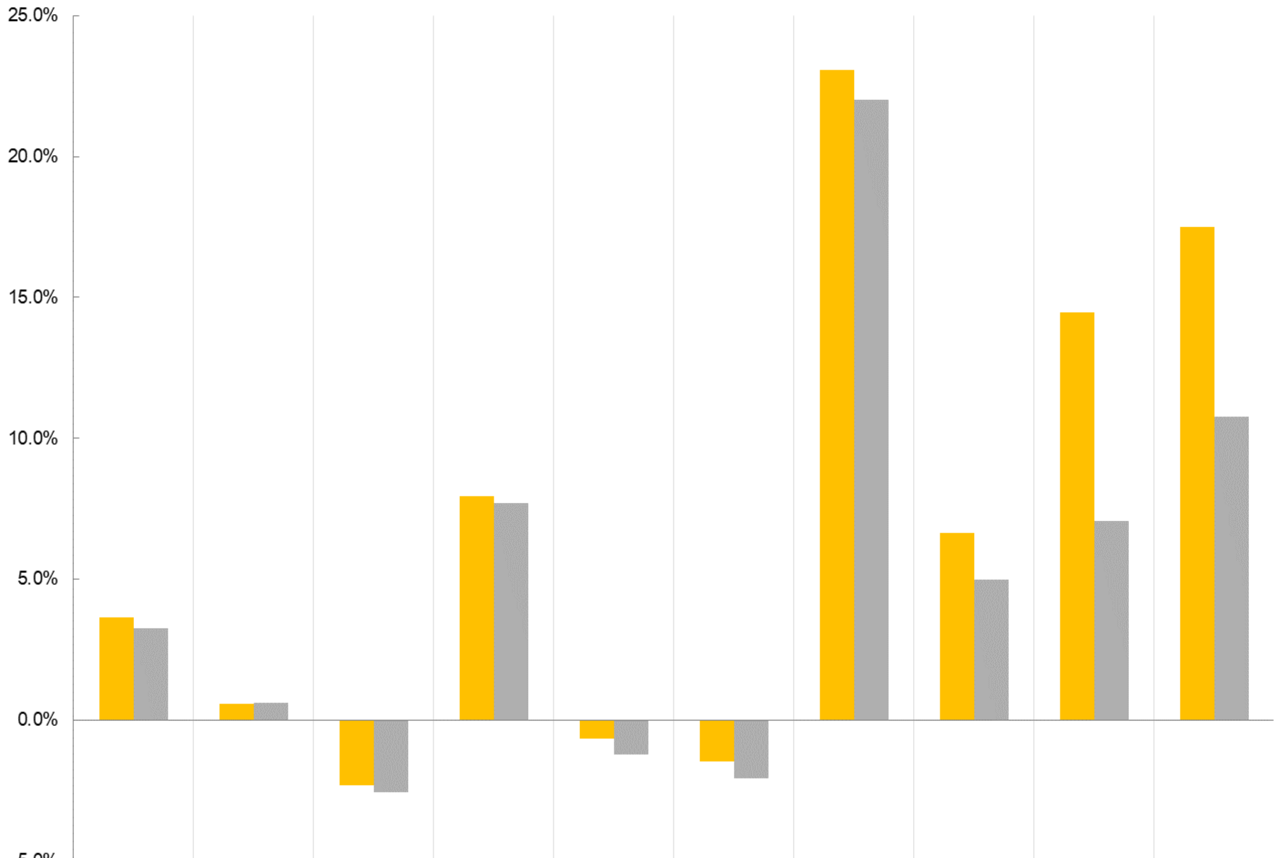
Exhibit 3: 1-Year Performance vs. Benchmark
As of September 30, 2022



	Total Fund	Cash and Cash Equivalents	Fixed Income	U.S. Equities	International Developed Markets Equities	Emerging Markets Equities	Private Equity	Real Estate	Natural Resources	Infrastructure	Private Credit
1-Year	-12.5%	0.7%	-14.4%	-18.9%	-23.0%	-26.7%	14.8%	4.7%	35.2%	21.3%	7.3%
Benchmark	-14.6%	0.6%	-15.0%	-17.6%	-23.9%	-28.1%	2.4%	2.6%	27.9%	12.8%	4.9%

Report on Investment Activity

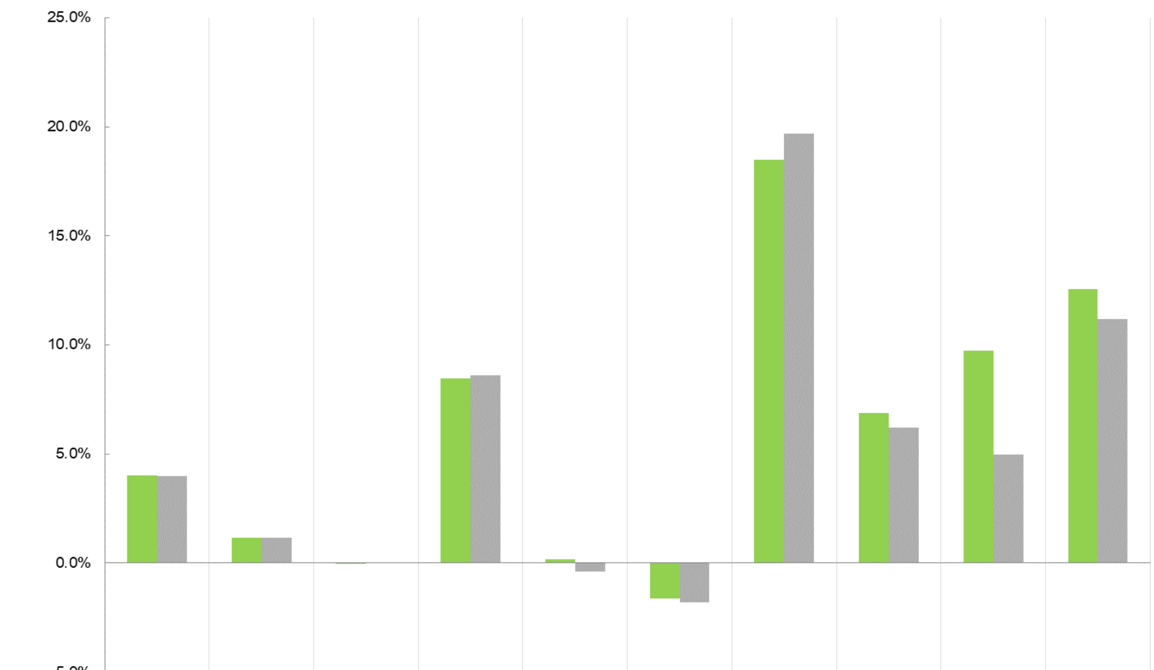
Exhibit 4: 3-Year Performance vs. Benchmark
As of September 30, 2022



	Total Fund	Cash and Cash Equivalents	Fixed Income	U.S. Equities	International Developed Markets Equities	Emerging Markets Equities	Private Equity	Real Estate	Natural Resources	Infrastructure
3-Year	3.6%	0.6%	-2.3%	7.9%	-0.7%	-1.5%	23.1%	6.6%	14.5%	17.5%
Benchmark	3.3%	0.6%	-2.6%	7.7%	-1.2%	-2.1%	22.0%	5.0%	7.1%	10.8%

Report on Investment Activity

Exhibit 5: 5-Year Performance vs. Benchmark
As of September 30, 2022



	Total Fund	Cash and Cash Equivalents	Fixed Income	U.S. Equities	International Developed Markets Equities	Emerging Markets Equities	Private Equity	Real Estate	Natural Resources	Infrastructure
5-Year	4.0%	1.2%	-0.1%	8.5%	0.2%	-1.6%	18.5%	6.9%	9.7%	12.5%
Benchmark	4.0%	1.2%	0.0%	8.6%	-0.4%	-1.8%	19.7%	6.2%	5.0%	11.2%

Report on Investment Activity

Investment Summary
As of September 30, 2022

(Dollars in thousands)

Asset Class	Fair Value	Percent of Fund
Fixed Income	$ 2,578,264	27.8 %
Domestic Equity	1,864,163	20.1
International Developed Equity	1,467,558	15.8
Private Equity	1,022,023	11.0
Emerging Market Equity	896,582	9.7
Real Estate	771,520	8.3
Infrastructure	327,497	3.5
Natural Resources	214,421	2.3
Private Credit	123,733	1.3
Total	$ 9,265,761	100.0 %

Top 10 Public Equity Holdings (Dollars in thousands)			
Rank	Security Name	Share/Par Value	Fair Value
1	Apple Inc	584,758	$ 80,814
2	Microsoft Corp	286,146	66,643
3	Alphabet Inc [1]	436,417	41,847
4	Amazon.com Inc	339,901	38,409
5	Taiwan Semiconductor Manufacturing Co Lt	2,580,923	34,305
6	Tesla Inc	97,278	25,803
7	Nestle SA	230,411	25,067
8	Tencent Holdings Ltd	660,015	22,399
9	Roche Holdings	57,506	18,898
10	Samsung Electronics Co Ltd	505,786	18,772

Top 10 Fixed Income Holdings (Dollars in thousands)					
Rank	Security Name	Interest Rate(%)	Maturity Date	Share/Par Value	Fair Value
1	TSY INFL IX N/B TII 0 1/8 04/15/27	0.1312	04/15/2027	28,479,934	$ 26,257
2	UNITED STATES TSY INFL IX TREAS BOND	0.7936	01/15/2024	26,110,268	25,491
3	UNITED STATES TREAS NTS .125% DUE 07-15-	0.1444	07/15/2030	28,708,126	25,289
4	TSY INFL IX N/B TII 0 1/8 01/15/32	0.1336	01/15/2032	27,642,158	23,936
5	UNITED STATES TREAS NTS DTD 07/15/2014	0.1560	07/15/2024	24,304,157	23,469
6	TSY INFL IX N/B 15/10/2026 10-15-2026	0.1355	10/15/2026	23,895,370	22,265
7	UNITED STATES TREAS INFL NTS 0.375% DTD	0.4685	07/15/2025	23,190,865	22,153
8	UNITED STATES OF AMER TREAS NOTES NTS	0.1545	07/15/2026	23,317,990	21,810
9	UNITED STS TREAS NTS	0.1382	07/15/2031	24,386,735	21,274
10	TSY INFL IX N/B US GVT NATIONAL 0.375%01	0.4599	01/15/2027	22,264,330	20,794

[1] Includes different classes of securities.

Report on Investment Activity

Schedule of Fees and Commissions
As of September 30, 2022

During the Fiscal Year 2022, the Board paid the following fees and commissions:

Expense Category	Amount (Dollars in thousands)		Percent of Investments	
Investment Managers	$	19,705	0.212	%
Investment Administrative Expense		1,224	0.013	
Invetsment Consultants		713	0.008	
Investment Custodian		340	0.004	
Brokerage Commissions		169	0.002	
Total	$	22,151	0.239	%

* 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 only separate account relationships.

Brokers		Brokerage Fees
LOOP CAPITAL MARKETS LLC		19,212
CABRERA CAPITAL MARKETS LLC		17,254
WILLIAMS CAPITAL GROUP L.P.,THE		14,567
JEFFERIES LLC		13,388
RAYMOND JAMES & ASSOCIATES, INC.		10,361
ROBERT W. BAIRD & CO. INCORPORATED		9,265
KEYBANC CAPITAL MARKETS INC		6,887
STIFEL, NICOLAUS & COMPANY, INCORPORATED		6,705
KEEFE BRUYETTE		6,414
PENSERRA SECURITIES LLC		6,192
Others		58,832
	$	169,078

Report on Investment Activity

Other Updates

During the Fiscal Year 2022, the Board updated the long-term asset allocation to reallocate the target allocation from Absolute return (2%) in equal parts to Real Estate (1%) and U.S. TIPS (1%).

The Investment Team ("Team") and Meketa Investment Group ("Meketa") also focused on monitoring and rebalancing the Fund's asset allocation, completing 72 rebalancing transactions. In addition, the Team continued to work closely with Meketa to expand the private markets investment program, including four commitments to emerging and/or diverse managers (see "Private Markets Commitments" section below for more details). The Team and Meketa also spent a significant amount of time monitoring the Board's ~75 existing investment managers.

In Fiscal Year 2022, the Board completed an active U.S. equity manager search, renewed the investment consulting services contract with Meketa for a further 3 years, and continued to build out its private market investment program, particularly in Infrastructure, Private Credit and Private Equity, among other activities.

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 private market investment program, the Board committed a total of approximately $1.1 billion to 12 private equity, private credit, and real assets limited partnerships during Fiscal Year 2022. In private equity, this included four funds focused on buyouts and equity. In private credit, the Board committed to three funds targeting core and opportunistic credit in the US and Western Europe. In real assets, the Board committed to two infrastructure funds, two real estate funds and one natural resources fund.

Investment Service Providers

During Fiscal Year 2022, there were no investment-related service provider changes.

Report on Investment Activity

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 at 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[1]. Diverse managers are defined by the Board as firms with substantial ownership and/or senior leadership participation from minorities, women, disabled individuals, and/or veterans.

Methods

The Board has supported diverse and emerging investment managers for nearly two decades. Past initiatives include funding a dedicated diverse manager program and direct emerging and diverse manager relationships sourced through investment consultants and industry relationships. These efforts have resulted in moderate exposure to diverse and emerging managers across the public and private markets asset classes. At the same time, given the Fund's increasing assets and growing manager roster, particularly on the private markets side, there's potential to do more, especially with our direct investment approach and standardizing the metrics of how we measure managers Diversity and Equity Inclusion (DEI) efforts.

For example, there's a significant opportunity to engage with our investment managers to discuss their diversity and inclusion efforts. The results from our investment consultant's inaugural diversity and inclusion survey (mid-2021), have been useful in better understanding our investment managers' current team diversity and related initiatives. We continued to monitor the progress of our manager roster via the 2022 survey to evaluate their ability to influence diversity and inclusion in their hiring and investment decisions as well as firm ownership.

Results

Diverse Emerging Fund Managers: Firm Ownership; Gender and Racial Diversity (Senior Leadership)

Firm Name	Diverse Firm Ownership[2]	Gender Diversity[3] (Senior Leadership)	Racial Diversity[4] (Senior Leadership)
Private Equity Firm A	75%	21%	67%
Private Equity Firm B	80%	30%	0%
Private Equity Firm C	63%	75%	25%
Natural Resources Firm D	50%	0%	50%

Diverse Emerging Fund Managers: Racial Diversity[1] Breakdown (Senior Leadership)

Firm Name	White	American Indian/Alaskan Native	Asian	Black/African American	Hawaiian/ Pacific Islander	Hispanic/Latino	Multi-Racial
Private Equity Firm A	33%	0%	0%	0%	0%	67%	0%
Private Equity Firm B	100%	0%	0%	0%	0%	0%	0%
Private Equity Firm C	70%	0%	30%	0%	0%	0%	0%
Natural Resources Firm D	50%	0%	0%	0%	0%	50%	0%

[1] See D.C. Code § 1-901.02(2B).
[2] Diverse ownership includes firm ownership by employees identifying as Female or non-White (i.e., American Indian / Alaskan Native, Asian, Black / African American, Hawaiian / Pacific Islander, Hispanic / Latino, or Multi-Racial).
[3] Gender diversity based on % of Senior Leadership Identifying as Female.
[4] Racial diversity based on % of Senior Leadership identifying as American Indian/Alaskan Native, Asian, Black/African American, Hawaiian/Pacific Islander, Hispanic/Latino, or Multi-Racial.

Report on Investment Activity

Results - Continued

Supplementary Data (Dollars in thousands)

Total Active Manager Public Market Investments	Fair Value	Diverse Firm Ownership	Gender Diversity (Total Firm)	Gender Diversity (Senior Leadership)	Racial Diversity (Total Firm)	Racial Diversity (Senior Leadership)
As of 9/30/2021	$ 2,513,707	41%	35%	16%	28%	22%
As of 9/30/2022	$ 2,170,410	44%	35%	19%	33%	25%
Change	-343,297	2%		3%	5%	3%

Exhibit 7: Sudan Divestment

During Fiscal Year 2022, the Board did not hold or acquire any direct investments with companies doing business with Sudan.

The "Prohibition of the Investment of Public Funds in Certain Companies Doing Business with the Government of Sudan Act of 2007" (the "Act"), which became District of Columbia law on February 2, 2008. Specifically, Section 1-335.04(b) of the Act requires that the District of Columbia Retirement Board (the "Board") report as part of the annual report required under section 142(b)(13) of the Police Officers, Fire Fighters, and Teachers Retirement Benefit Replacement Plan Act of 1998, effective September 18, 1998 (D.C. Law 12-152; D.C. Official Code § 1-909.02(b)(13)) 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).

[1] Racial diversity based on % of Senior Leadership identifying as American Indian/Alaskan Native, Asian, Black/African American, Hawaiian/Pacific Islander, Hispanic/Latino, or Multi-Racial.

Report on Investment Activity

Exhibit 8: Iran Divestment

During Fiscal Year 2022, the Board did not hold or acquire any direct investments with companies doing business with Iran.

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" (the "Act" DC Law 17-337 codified at DC Official Code §§1-336.01 -1-336.06), which became District of Columbia law on March 21, 2009. Specifically, Section 1-336.04(b) of the Act requires that the District of Columbia Retirement Board (the "Board") report as part of the annual report required under section 142(b)(14) of the Police Officers, Fire Fighters, and Teachers Retirement Benefit Replacement Plan Act of 1998, effective September 18, 1998 (D.C. Law 12-152; D.C. Official Code § 1-909.02(b)(14)), 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 76.

(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 Activity

List of Direct Holdings in Publicly Traded Securities
As of September 30, 2022

G06242104	#REORG/ATLASSIAN NAME CHANGE WITH CUSIP
88025U109	10X GENOMICS INC CL A CL A
LX2010713	ABG INTERMEDIATE HOLDINGS 2 LLC TERM
81141R100	ADR SEA LTD ADR
009066101	AIRBNB INC CL A COM USD0.0001 CL A
016255101	ALIGN TECHNOLOGY INC COM
02090CAB6	ALTAR BIDCO, INC. TL DUE 11-16-2029
023135106	AMAZON COM INC COM
03539PAE8	ANKURA CONSULTING GROUP, LLC FLTG RT TBL
039524AB9	ARCHES BUYER INC 6.125% DUE
6LP999ZZ9	ARCTIC CANADIAN DIAMOND COMPANY COMMON S
LX1927008	ARCTIC CANADIAN DIAMOND COMPANY LTD TERM
04316A108	ARTISAN PARTNERS ASSET MGMT INC CL A CL
04317JAF5	ARUBA INVESTMENTS, INC.(AKA ANGUS
043436104	ASBURY AUTOMOTIVE GROUP INC COM
51809EAE5	ASP LS ACQUISITION CORP TERM LOAN (SECO
04624VAA7	ASSUREDPARTNERS INC 7.0% DUE
04649VBA7	ASURION, LLC (FKA ASURION CORPORATION) T
04683P100	ATD NEW HLDGS INC COM
01741R102	ATI INC COM
05355JAD0	AVEANNA HEALTHCARE LLC TERM LOAN (SECOND
05368V106	AVIENT CORPORATION
06652V208	BANNER CORP COM NEW COM NEW
077454106	BELDEN INC COM
852234103	BLOCK INC
103304101	BOYD GAMING CORP COM
10524MAN7	BRAND ENERGY & INFRASTRUCTURE SERVICES,
109696104	BRINKS CO COM
127203107	CACTUS INC CL A CL A
12740C103	CADENCE BK COM
13782CAA8	CANO HEALTH LLC 6.25% DUE
16119P108	CHARTER COMMUNICATIONS INC NEW CL A CL A
17186HAC6	CIMPRESS N V 7.0% DUE
LX1963698	CLOUDERA INC LIEN2 TL DUE 08-10-2029 BEO
18915M107	CLOUDFLARE INC COM
12656AAE9	CNT HOLDINGS I CORP
19247G107	COHERENT CORP COM
20752TAA2	CONNECT FINCO SARL/CONNECT U S FINCO L
22002T108	CORPORATE OFFICE PPTYS TR COM
22160N109	COSTAR GROUP INC COM
LX1975460	CP IRIS HOLDCO I, INC. TERM LOAN 09-15-
12671K116	CWT TRAVEL HLDGS INC WTS 11-19-2026
12671K124	CWT TRAVEL HLDGS INC WTS 11-19-2028
5A1999L10	CWT TRAVEL HOLDINGS INC COMMON STOCK
237266101	DARLING INGREDIENTS INC COMSTK
23804L103	DATADOG INC COM USD0.00001 CL A
362393AA8	DEFAULTED GTT COMMUNICATIONS INC 7.875%
66727WAA0	DEFAULTED NORTHWEST ACQUISITIONS 0.0%
252131107	DEXCOM INC COM
254543101	DIODES INC COM

25809K105	DOORDASH INC CL A COM USD0.00001 CLASS A
28176E108	EDWARDS LIFESCIENCES CORP COM
26658NAQ2	ENGINEERED MACHINERY HOLDINGS INC INCREM
26658NAN9	ENGINEERED MACHINERY HOLDINGS, INC TL 0
194014502	ENOVIS CORPORATION COM USD0.001
429ESCAA4	ESC CB144A HIGH RIDGE D03/22/17 08.875%
30233PAK6	EYECARE PARTNERS, LLC TERM LOAN (SECOND
LX2073091	EYECARE PARTNERS, LLC TL DUE 11-15-2028
339750101	FLOOR & DECOR HLDGS INC CL A CL A
345370CA6	FORD MTR CO DEL 7.45% DUE 07-16-2031 BEO
345370CX6	FORD MTR CO DEL 9.625% DUE
34984VAC4	FORUM ENERGY TECHNOLOGIES INC SR SECD NT
389375106	GRAY TELEVISION INC COM CL B
410867105	HANOVER INS GROUP INC COM
428291108	HEXCEL CORP NEW COM
431571108	HILLENBRAND INC COM STK
440327104	HORACE MANN EDUCATORS CORP COMMON STOCK
44332PAD3	HUB INTL LTD 7.0% DUE
45174AAA0	IEA ENERGY SVCS LLC 6.625% DUE
91823JAE2	ILLUMINATE MERGER SUB CORP. TERM LOAN
453836108	INDEPENDENT BK CORP MASS COM COM STK US
45674KAF2	INFINITE ELECTRONICS 2/21 2ND LIEN COV-L
45826H109	INTEGER HLDGS CORP COM
45827MAA5	INTELLIGENT PACKAGING LTD FINCO INC /
461202103	INTUIT COM
LX1718506	IVORY MERGER SUB,INC TL DUE 03-06-2026 B
48254EAE1	KKR APPLE BIDCO LLC 2ND LIEN TL SR SEC T
48244EAJ3	KUEHG CORP (FKA KC MERGERSUB, INC.) TLB
50118YAB5	KUEHG CORP. TERM LOAN (SECOND LIEN) SE
512807108	LAM RESH CORP COM
52201CAF8	LEARNING CARE GROUP (US) NO 2 INC INCREM
52201CAC5	LEARNING CARE GROUP, INC.- TERM LOAN B
52201CAE1	LEARNING CARE GROUP, INC. TERM LOAN
55826T102	MADISON SQUARE GARDEN ENTMT CORP CL A CL
57164Y107	MARRIOTT VACATIONS WORLDWIDE CORP COM
57475YAB7	MASERGY COMMUNICATIONS, INC. TERM LOAN
57667L107	MATCH GROUP INC NEW COM
57776J100	MAXLINEAR INC COMMON STOCK
LX1986830	MEDICAL SOLUTIONS
58506Q109	MEDPACE HLDGS INC COM
589889104	MERIT MED SYS INC COM
30303M102	META PLATFORMS INC
55303BAD5	MH SUB I, LLC FLTG RT TBL 0
60662WAU6	MITCHELL INTERNATIONAL INC INITIAL TERM
553498106	MSA SAFETY INC COM
64110L106	NETFLIX INC COM STK
670704105	NUVASIVE INC COM
67066G104	NVIDIA CORP COM
P73684113	ONESPAWORLD HLDGS LTD
69478X105	PACIFIC PREMIER BANCORP COM

Report on Investment Activity

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

69327R101	PDC ENERGY INC COM
71943U104	PHYSICIANS RLTY TR COM
25830JAA9	PVPTL DORNOCH DEBT MERGER SUB INC 6.625%
056623AA9	PVTPL BAFFINLAND IRON MINES CORP/BAFFINL
08949LAB6	PVTPL BIG RIV STL LLC/BRS FIN CORP
103304BV2	PVTPL BOYD GAMING CORP 4.75% DUE
12510CAA9	PVTPL CD&R SMOKEY BUYER INC SR SECD NT
156431AN8	PVTPL CENTURY ALUMINUM COMPANY 7.5%
18453HAD8	PVTPL CLEAR CHANNEL OUTDOOR HOLDINGS INC
18453HAC0	PVTPL CLEAR CHANNEL WORLDWIDE
12670RAA2	PVTPL CWT TRAVEL GROUP INC 8.5% DUE 11-1
40060QAA3	PVTPL GTCR AP FIN INC 8% DUE 05-15-2027
48128TAA0	PVTPL JPW INDS HLDG CORP SR SECD NT
53627NAE1	PVTPL LIONS GATE CAP HLDGS LLC SR NT 5.
60337JAA4	PVTPL MINERVA MERGER SUB INC 6.50% DUE
64199ALJ1	PVTPL NEW STAR METALS INC SR SECURED
62999AVK3	PVTPL NEW STAR METALS INC. SENIOR
65342RAD2	PVTPL NFP CORP 6.875% DUE 08-15-2028
65342RAE0	PVTPL NFP CORP SR SECD NT 4.875%
687785AB1	PVTPL OSCAR ACQUISITIONCO LLC & OSCAR
72815LAA5	PVTPL PLAYTIKA HLDG CORP 4.25% DUE
73099AEG7	PVTPL POLISHED METALS LIMITED SR SECURED
75026JAE0	PVTPL RADIATE HOLDCO FINANCE 6.5% DUE
75602BAA7	PVTPL REAL HERO MERGER SUB 2 INC 6.25%
81105DAB1	PVTPL SCRIPPS ESCROW II INC 5.375% DUE
82873MAA1	PVTPL SIMMONS FOOD INC 4.625% DUE 03-01-
84611WAB0	PVTPL SP FINCO LLC SR 6.75%
84749AAA5	PVTPL SPECIALTY BLDG PRODS HLDGS LLC/SBP
784999617	PVTPL SPECIALTY STEEL HOLDCO INC COMSTK
84752HAC0	PVTPL SPECIALTY STL HOLDCO INC FLTG DUE
85999ABY6	PVTPL STERLING ENTERTAINMENT
88033GDA5	PVTPL TENET HEALTHCARE CORP 5.125%
88033GDJ6	PVTPL TENET HEALTHCARE CORP 6.125% DUE
88827AAA1	PVTPL TITAN CO-BORROWE SR NT 7.75%
89616RAB5	PVTPL TRIDENT TPI HLDGS INC SR NT 144A
LX1740260	RA ACQUISITION PURCHASER LLC PIK TOGGLE
749999249	REAALL CMN STOCK
758750103	REGAL REXNORD CORPORATION COM STK
LX1959910	RLG HOLDINGS, INC. TERM LOAN (SECOND
803607100	SAREPTA THERAPEUTICS INC COM
816300107	SELECTIVE INS GROUP INC COM
81762P102	SERVICENOW INC COM USD0.001
82509L107	SHOPIFY INC CL A SHOPIFY INC
83066P200	SKILLSOFT CORP CL A
LX1945828	SKOPIMA MERGER SUB INC 2ND LIEN SR TL
LX1937080	SM WELLNESS HOLDINGS, INC. TERM LOAN
833445109	SNOWFLAKE INC CL A CL A
840441109	SOUTHSTATE CORP COM
84790A105	SPECTRUM BRANDS HLDGS INC COM USD0.01
78473E103	SPX TECHNOLOGIES INC COM
78471RAD8	SRS DISTR INC SR NT 144A 6.0% 12-01-2029
860630102	STIFEL FINL CORP COM
86881WAD4	SURGERY CTR HLDGS INC 10.0% DUE
87161C501	SYNOVUS FINL CORP COM NEW COM NEW
LX1686844	TEN-X, LLC TERM LOAN SENIOR SECURED
131193104	TOPGOLF CALLAWAY BRANDS CORP
893647BQ9	TRANSDIGM INC 4.875% DUE 05-01-2029 REG
893647BB2	TRANSDIGM INC 6.375% DUE
89616RAA7	TRIDENT TPI HLDGS INC 6.625% DUE
90353T100	UBER TECHNOLOGIES INC COM USD0.00001
90353TAK6	UBER TECHNOLOGIES INC SR NT 144A 4.5%
LX1913511	UTEX INDUSTRIES INC COMMON EQUITY
9J1999U74	UTEX INDUSTRIES INC WARRANT 12-31-2049
92552VAN0	VIASAT INC 6.5% DUE
92826C839	VISA INC COM CL A STK
934550203	WARNER MUSIC GROUP CORP CL A CL A
96289WAA7	WHEEL PROS ESCROW ISSUER CORP 6.5% DUE
96350RAA2	WHITE CAP BUYER LLC 6.875% DUE
LX1983860	XPLORNET COMMUNICATIONS INC. 2ND LIEN
98983L108	ZURN ELKAY WATER SOLUTIONS CORPORATION

ACTUARIAL SECTION

December 19, 2022

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

RE: Actuarial Certification of October 1, 2022 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, 2022. The date of the most recent valuation prior to this was October 1, 2021. Valuations are conducted annually for DCRB. In this study, membership data as of July 1, 2022, and market value of assets as of October 1, 2022 were provided by or at the direction of the District of Columbia Retirement Board. While we have reviewed this data for consistency and completeness, we have not audited this data.

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 and 2021 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 2021 the funding policy was revised to state:

- In years where there is a surplus, eliminate existing amortization layers and amortize that surplus over an open 30-year period

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 Valuation report. 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,

Thomas Vicente

Tom Vicente, FSA, EA, FCA, MAAA
Senior Consulting Actuary

Ann M Sturner

Ann M. Sturner, FSA, EA, FCA, MAAA
Senior Consulting Actuary

Required Actuarial Certification

Under District of Columbia Code §1-907 for Fiscal Year 2024

Certification	Code Section	Teachers	Police	Fire	Police/Fire Combined	Total District
FY2024 Employer Normal Cost Rate	N/A	7.19%	32.52%	32.05%	32.35%	18.27%
FY2024 Unfunded Accrued Liability Cost Rate	N/A	0.47%	(12.36)%	(16.12)%	(13.67)%	(5.76)%
Estimated FY2024 Covered Payroll	N/A	$636,961,000	$325,927,000	$175,448,000	$501,375,000	$1,138,336,000
FY2024 Employer Normal Cost	1-907.03(a)(3)(A)	$45,798,000	$105,991,000	$56,231,000	$162,222,000	$208,020,000
FY2024 Unfunded Accrued Liability Payment	1-907.03(a)(3)(C)	$2,965,000	$(40,278,000)	$(28,275,000)	$(68,553,000)	$(65,588,000)
FY2024 District Payment before 1-907.02 (c)	N/A	$48,763,000	$65,713,000	$27,957,000	$93,670,000	$142,433,000
FY2022 Shortfall/Overpayment	1-907.02(c)	$1,461,000	$(9,523,000)	$(4,264,000)	$(13,787,000)	$(12,326,000)
FY2024 District Payment	N/A	$50,224,000	$56,190,000	$23,693,000	$79,883,000	$130,107,000
Present Value of Future Benefits	1-907.03(a)(3)(B)	$3,610,532,000	$5,934,589,000	$2,762,756,000	$8,697,345,000	$12,307,877,000
Current Value of Assets	1-907.03(a)(3)(D)	$2,573,334,000	$4,733,562,000	$2,167,983,000	$6,901,545,000	$9,474,879,000
Actuarial Value of Assets	1-907.03(a)(3)(E)	$2,838,193,000	$5,220,802,000	$2,391,466,000	$7,612,268,000	$10,450,461,000

Actuarial Assumptions

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

Thomas Vicente

Tom Vicente, FSA, EA, MAAA
December 19, 2022

Outline of Actuarial Assumptions and Methods

The economic and demographic assumptions were adopted by the Board on October 12, 2021. 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, 2022. Demographic information was collected as of June 30, 2022. For valuation purposes (e.g., age, service), all members are treated as if remaining in the System as of October 1, 2022.

Investment rate of return: 6.25% per annum, compounded annually (net of investment expenses).

Inflation assumption: 3.00% per annum.

Payroll growth assumption: 4.00% per annum.

Percent married: 65% of Teachers, 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 2021:

- Amortize the legacy UAAL as of October 1, 2021 over a closed 15-year period.
- Amortize the assumption and method changes and experience gains for October 1, 2021 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.
- If a surplus exists, amortize over open 30 years and eliminated all prior amortization bases.

Assets: The method of valuing assets is intended to recognize a “smoothed” fair value of assets. Under this method, the difference between actual return on fair value from investment experience and the expected return on fair value is recognized over a five-year period. The actuarial value of assets is constrained to an 80% to 120% corridor around fair 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: 20% of the vested members who terminate elect to withdraw their contributions for Teachers, Police Officers, and Firefighters, while the remaining 80% are assumed to leave their contributions in the Plan in order to be eligible for a benefit at their deferred retirement date.

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 50% Joint and Survivor annuity for all participants. One-fifth of all Police Officers and Firefighter active deaths areassumed 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 2.75% per year for all members.

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.

Outline of Actuarial Assumptions and Methods (Continued)

Military service: Teachers are assumed to have 0.25 years of combined unused sick leave and military service credit at retirement. All Police and Fire members are assumed to have 1 year of combined unused sick leave and military service at retirement.

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:

Healthy Retiree and Actives

- Teachers: Pub-2010 General Employee and Healthy Retiree Mortality Table
- Police and Firefighters: Pub-2010 Safety Employees and Healthy Retiree Mortality Table with male ages set forward 1 year

Disabled Retirees

- Teachers: Pub-2010 General Disabled Retiree Mortality Table
- Police and Firefighters: Pub-2010 Safety Disabled Retiree Mortality Table

Contingent Beneficiaries

- Teachers: Pub-2010 General Contingent Survivor Mortality Table
- Police and Firefighters: Pub-2010 Safety Contingent Survivor Mortality Table

Mortality Improvement Scale

- Improvement scale MP-2021 is applied on a generational basis. The improvement scale will be updated annually with any subsequent updates available on the valuation date.

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:

Years of Service	Total Increase (Next Year)
5	7.10 %
10	4.65
15	4.00
20 and over	4.00

Termination: The assumed annual rates are in the following table:

	Rate of Termination	
Years of Service	Male	Female
0	25.0 %	23.0 %
1	26.0	22.0
2	22.0	22.0
3	20.0	19.0
4	14.7	13.4
5	14.7	13.4
6	13.0	11.2
7	13.0	11.2
8	13.0	11.2
9	13.0	11.2
10 and over	9.4	5.8

Retirement: The assumed annual rates are in the following table:

	Years of Service						
Age	5	6-9	20	21-24	25-29	30	31 and over
50 and below	0 %	0 %	0 %	0 %	5 %	20 %	15 %
50-59	0	0	5	5	5	20	15
60-61	0	0	20	15	15	20	15
62	20	20	20	15	15	20	15
63-74	20	15	15	15	15	20	15
75 and over	100	100	100	100	100	100	100

Disability: Representative values of assumed disability rates are in the following table:

	Rate of Disability
Age	Proposed Rates
30	0.010 %
40	0.035
50	0.010
60	0.015

Outline of Actuarial Assumptions and Methods

Police Officers

Salary Increases: Police Officers are assumed to receive longevity increases applied to individual base pay at certain years of service. Representative values of the assumed annual rates of future salary increase are as follows:

Years of Service	Total Increase (Next Year)
5	6.25 %
10	5.20
15	6.15
19	8.15
20	6.00
24	7.80
25	5.15
29	7.65
30 and over	7.25

Termination: The assumed annual rates are in the following table:

	Rate of Termination	
Years of Service	Male	Female
0	9.0 %	10.0 %
1	9.0	7.0
2	8.0	7.0
3	8.0	5.0
4	8.0	3.8
5	6.2	3.8
6	4.1	2.7
7	4.1	2.7
8	2.7	2.7
9	2.7	2.7
10 and over	2.0	2.0

Retirement: The assumed annual rates are in the following table:

	Years of Service						
Age	24 and below	25	26	27	28	29	30 and over
Below 62	0 %	50 %	25 %	25 %	30 %	35 %	30 %
62 and over	100	100	100	100	100	100	100

Disability: Representative values of assumed disability rates are in the following table:

	Rate of Disability
Age	Proposed Rates
30	0.083 %
40	0.173
50	0.315
60	0.383

Outline of Actuarial Assumptions and Methods
Firefighters

Salary Increases: Firefighters are assumed to receive longevity increases applied to individual base pay certain years of service. Representative values of the assumed annual rates of future salary increases are as follows:

Years of Service	Total Increase (Next Year)
5	6.05 %
10	6.05
14	7.30
15	4.85
19	6.30
20	4.25
24	5.20
25	4.80
29	6.00
30 and over	4.50

Termination: The assumed annual rates are in the following tables:

	Rate of Termination	
Years of Service	Male	Female
0	9.0 %	16.0 %
1	7.0	12.0
2	4.2	2.1
3	4.2	2.1
4	3.4	2.1
5	3.4	1.8
6	3.4	2.3
7	1.7	2.3
8	1.7	2.3
9	1.7	2.3
10 and over	1.0	0.5

Retirement: The assumed annual rates are in the following tables:

	Years of Service						
Age	24 and below	25	26	27	28	29	30 and over
Below 62	0 %	15 %	15 %	15 %	25 %	25 %	40 %
62 and over	100	100	100	100	100	100	100

Disability: Representative values of assumed disability rates are in the following tables:

	Rate of Disability
Age	Proposed Rates
30	0.135 %
40	0.225
50	0.300
60	0.375

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. No interest is accrued on contributions.

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 Dates 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, child, or parent.

Benefit

Refund of member contributions.

Spouse or Domestic Partner Only

Eligibility

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

Eligibility

Death before retirement and married/registered domestic partnership for at least two years or have a child by the marriage or registered domestic partnership. Children must be unmarried and not in a domestic partnership and under age 18, 22 if full-time 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.

Spouse/Domestic Partner 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.

Provisions as Interpreted for Valuation Purposes
Teachers' Retirement Plan (Continued)

Survivor Benefits (Continued)

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) $8,076* (if hired before 1/1/1980), $7,776* (if hired between 1/1/1980 and 10/31/1996), or $7,260* (if hired on or after 11/1/1996) per child
c) $24,228* (if hired before 1/1/1980), $23,328* (if hired between 1/1/1980 and 10/31/1996), or $21,780* (if hired on or after 11/1/1996) divided by the number of children.

Dependent Children Only

Eligibility
Children must be unmarried and not in a domestic partnership under age 18, or 22 if a full-time 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
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) $9,876* (if hired before 1/1/1980), $9,492* (if hired between 1/1/1980 and 10/31/1996), or $8,784* (if hired on or after 11/1/1996) per child
c) $29,628* (if hired before 1/1/1980), $28,476* (if hired between 1/1/1980 and 10/31/1996), or $26,352* (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.

*Survivor benefit amounts are as of March 1, 2022 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 survivor 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 Domestic Partner)** Reduced benefit paid to the member so that upon the member's death, the spouse or domestic partner willreceive 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 Domestic Partner)** Reduced benefit paid to member so that upon the member's death, the spouse or domestic partner willreceive a partial annuity that can range from $1 up to less than 55% of the unreduced (normal life) annuityamount. The member's benefit is reduced by the same amount as option b, multiplied by the ratio of thechosen 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 the 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 Consumer Price Index (CPI-W Washington/Baltimore are) for the prior calendar year. COLAs are included in benefit payments on and after April 1st. If a member's retirement is effective March 1 of the preceding year, the COLAamount is prorated.

For members hired on or after November 1, 1996, the cost-of-living increase is limited to no more than 3% per year.

Provisions as Interpreted for Valuation Purposes
Police Officers and Firefighters' 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
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. EMTs must be cross-trained in fire suppression, go through the fire academy, and considered sworn Firefighters.

Service Credit
One year of service is given for each year of employment with MPD or FEMS. Service Credit may also include approved purchased lateral transferred service, prior civilian government service and prior military 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 pay. Longevity pay is included in Firefighters' base pay and in Police Officers' base pay once the member has completed 25 years of service.

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 for retirement.

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 contributions may be left in the Plan or refunded upon request. Nonvested members must take a refund. No interest is accrued on contributions.

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 covered (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/domestic partner 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/domestic partnership.

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 (Continued)

Spouse/Domestic Partner and 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, or any dependent child incapable of self-support due to having 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) $4,716* (if hired before 11/10/1996) or $4,440* (if hired on or after 11/10/1996) per child
c) $14,148* (if hired before 11/10/1996) or $13,320* (if hired on or after 11/10/1996) divided by the number of children.

*Survivor benefit amounts are as of March 1, 2022 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/Domestic Partner 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 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 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 increase is equal to the annual Consumer Price Index (CPI-W Washington/Baltimore area). COLAs 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 is 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 survivors.

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, 2022	6,088	$ 612,463	$ 100.7	1.36 %
September 30, 2021	6,050	600,481	99.3	(0.52)
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)

Police Officers' Plan				
Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
September 30, 2022	3,282	$ 313,391	$ 95.5	0.29 %
September 30, 2021	3,366	320,487	95.2	0.28
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)

Firefighters' Plan				
Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
September 30, 2022	1,851	$ 168,700	$ 91.1	(0.77) %
September 30, 2021	1,876	172,299	91.8	(1.47)
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

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

		District Benefit (Dollars in thousands)								
		Added		Removed			Payrolls at End of Year			
Fiscal Year Ended	Plan	Number	Annual Allowance	Number	Annual Allowance	Increase due to Plan Amendment	Number a	Annual Allowance b	Percentage Increase in Annual Allowances	Average Annual Allowances b/a
9/30/2022	Teachers	111	$ 3,945	118	$ 2,060	$ 6,191	4,065	$ 96,686	9.10 %	$ 24
	Police/Fire	312	18,869	54	1,281	10,385	4,373	190,155	17.25	43
9/30/2021	Teachers	96	3,642	95	1,524	1,124	4,072	88,610	3.80	22
	Police/Fire	264	15,650	78	1,692	1,632	4,115	162,182	10.63	39
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	18,025	47	1,022	(1,659)	3,003	85,739	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

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) 2022	2021
Age & Service Retirements		
If members retire at older ages, there is a gain; if younger ages, a loss.	$ (1.0)	$ (0.5)
Disability Retirements		
If disability claims are less than assumed, there is a gain; if more claims, a loss.	0.4	1.0
Death-in-Service Benefits		
If survivor claims are less than assumed, there is a gain; if more claims, there is a loss.	0.4	2.9
Withdrawl from Employment		
If more liabilities are released by withdrawls than assumed, there is a gain; if smaller releases, a loss	4.3	(59.0)
Pay Increases		
If there are smaller pay increases than assumed, there is a gain; if greater increases, a loss.	34.8	67.0
New Members		
Additional refunded actuarial accrued liability will produce a loss	(26.3)	(34.5)
Investment Income		
If there is greater investment income than assumed, there is a gain; if less income, a loss.	(31.4)	75.4
Death after Retirement		
If retirees live longer than assumed, there is a loss; if not as long, a gain.	1.6	(3.7)
COLA/CPI		
If inflation is different than expected, gains or losses can occur.	(44.1)	22.4
Other		
Miscellaneous gains and losses resulting from data adjustments, timing of financial transactions, etc.	3.1	21.1
Gain/(Loss) During Year from Experience	(58.2)	92.1
Non-Recurring Items		
Adjustments for plan amendments, assumption changes, method changes, or audit changes.	10.4	89.4
Composite Gain.(Loss) During Year	47.9	181.5

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) 2022	2021
Age & Service Retirements		
If members retire at older ages, there is a gain; if younger ages, a loss.	$ (19.3)	$ (19.9)
Disability Retirements		
If disability claims are less than assumed, there is a gain; if more claims, a loss.	3.2	4.7
Death-in-Service Benefits		
If survivor claims are less than assumed, there is a gain; if more claims, there is a loss.	7.3	6.2
Withdrawl from Employment		
If more liabilities are released by withdrawls than assumed, there is a gain; if smaller releases, a loss	1.6	(5.8)
Pay Increases		
If there are smaller pay increases than assumed, there is a gain; if greater increases, a loss.	91.9	134.8
New Members		
Additional refunded actuarial accrued liability will produce a loss	(10.4)	(12.6)
Investment Income		
If there is greater investment income than assumed, there is a gain; if less income, a loss.	(84.0)	203.7
Death after Retirement		
If retirees live longer than assumed, there is a loss; if not as long, a gain.	(14.8)	(8.3)
COLA/CPI		
If inflation is different than expected, gains or losses can occur.	(101.9)	62.8
Other		
Miscellaneous gains and losses resulting from data adjustments, timing of financial transactions, etc.	3.6	27.9
Gain/(Loss) During Year from Experience	(122.9)	393.5
Non-Recurring Items		
Adjustments for plan amendments, assumption changes, method changes, or audit changes.	(16.2)	97.5
Composite Gain.(Loss) During Year	(139.1)	491.0

Valuation Balance Sheet

Teachers' Retirement Plan
(Dollars in thousands)

As of October 1, 2022

Present and Prospective Assets		
Actuarial Value of Present Assets	$	2,838,193
Present Value of Future Members' Contributions		422,278
Present Value of Future Employer Contributions		
Normal contributions		316,684
Unfunded accrued liability contributions		33,376
Total Present and Prospective Assets	$	3,610,532

Actuarial Liabilities		
Present Value of benefits payable on account of retired members and survivors of deceased members now drawing retirement benefits	$	1,235,162
Present Value of prospective benefits payable on account of inactive members		239,440
Present Value of prospective benefits payable on account of present active member		
Service retirement benefits		1,709,012
Disability retirement benefits		30,350
Survivor benefits		17,079
Separation benefits		379,488
Total Actuarial Liabilities	$	3,610,532

Valuation Balance Sheet

Police Officers and Firefighters' Retirement Plan
(Dollars in thousands)

As of October 1, 2022

Present and Prospective Assets		
Actuarial Value of Present Assets	$	7,612,268
Present Value of Future Members' Contributions		420,481
Present Value of Future Employer Contributions		
Normal contributions		1,637,741
Unfunded accrued liability contributions		(973,145)
Total Present and Prospective Assets	$	8,697,346

Actuarial Liabilities		
Present Value of benefits payable on account of retired members and survivors of deceased members now drawing retirement benefits	$	3,608,693
Present Value of prospective benefits payable on account of inactive members		97,440
Present Value of prospective benefits payable on account of present active member		
Service retirement benefits		4,474,377
Disability retirement benefits		195,573
Survivor benefits		47,016
Separation benefits		274,246
Total Actuarial Liabilities	$	8,697,346

Valuation Solvency Test
(Dollars in thousands)

	Aggregate Accrued Liabilities				Portion of Accrued Liabilities Covered by Reported Asset		
Valuation Date	(1) Active Member Contributions	(2) Retirees, Survivors and Inactive Members	(3) Members (Employer Finaned Portion)	Reported Assets	(1)	(2)	(3)
Teachers' Retirement Plan							
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
10/1/2021	333,512	1,336,297	1,028,810	2,934,307	100	100	100.0
10/1/2022	297,570	1,474,603	1,099,397	2,573,334	100	100	72.9

Police Officers and Firefighters' Retirement Plan							
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	6,296,213	100	100	100
10/1/2020	352,281	2,903,961	2,817,790	6,620,190	100	100	100
10/1/2021	357,729	3,106,359	2,741,743	7,963,277	100	100	100
10/1/2022	348,012	3,706,133	2,635,421	6,901,545	100	100	100

Schedule of Funding Progress
(Dollars in thousands)

Valuation Date	(1) Acturarial Value of Assets	(2) Acturarial Accrued Liability (AAL)	(3) Percentage Funded (1) / (2)	(4) Unfunded AAL (UAAL) (2) - (1)	(5) Annual Covered Payroll	(6) UAAL as a Percentage of Covered Payroll (4) / (5)
Teachers' Retirement Plan						
10/1/2013	$ 1,585,775	$ 1,759,043	$ 90.1 %	$ 173,268	$ 369,071	46.9 %
10/1/2014	1,638,583	1,849,230	88.6	210,647	378,926	55.6
10/1/2015	1,732,017	1,953,305	88.7	221,288	417,090	53.1
10/1/2016	1,845,476	2,029,640	90.9	184,164	438,079	42.0
10/1/2017	1,982,019	2,142,491	92.5	160,472	447,762	35.8
10/1/2018	2,139,911	2,301,314	93.0	161,403	470,749	34.3
10/1/2019	2,271,160	2,494,291	91.1	223,131	516,609	43.2
10/1/2020	2,431,075	2,640,803	92.1	209,728	551,835	38.0
10/1/2021	2,684,368	2,698,618	99.5	14,250	600,481	2.4
10/1/2022	2,838,193	2,871,570	98.8	33,376	612,463	5.4
Police Officers and Firefighters' Retirement Plan						
10/1/2013	$ 4,013,534	$ 3,644,085	$ 110.1 %	$ (369,449)	$ 413,380	(89.4) %
10/1/2014	4,288,727	3,998,537	107.3	(290,190)	438,415	(66.2)
10/1/2015	4,607,300	4,283,093	107.6	(324,207)	446,201	(72.7)
10/1/2016	4,985,051	4,498,513	110.8	(486,538)	438,114	(111.1)
10/1/2017	5,406,366	4,878,260	110.8	(528,106)	441,905	(119.5)
10/1/2018	5,848,576	5,223,760	112.0	(624,816)	454,209	(137.6)
10/1/2019	6,269,628	5,604,573	111.9	(665,055)	495,809	(134.1)
10/1/2020	6,676,013	6,023,843	110.8	(652,170)	507,348	(128.5)
10/1/2021	7,290,173	6,181,614	117.9	(1,108,559)	492,787	(225.0)
10/1/2022	7,612,268	6,639,124	114.7	(973,145)	482,092	(201.9)
Total						
10/1/2013	$ 5,599,309	$ 5,403,128	$ 103.6 %	$ (196,181)	$ 782,451	(25.1) %
10/1/2014	5,927,310	5,847,767	101.4	(79,543)	817,341	(9.7)
10/1/2015	6,339,317	6,236,398	101.7	(102,919)	863,291	(11.9)
10/1/2016	6,830,527	6,528,153	104.6	(302,374)	876,193	(34.5)
10/1/2017	7,388,385	7,020,751	105.2	(367,634)	889,667	(41.3)
10/1/2018	7,988,487	7,525,074	106.2	(463,413)	924,958	(50.1)
10/1/2019	8,540,788	8,098,864	105.5	(441,924)	1,012,418	(43.7)
10/1/2020	9,107,088	8,664,646	105.1	(442,442)	1,059,183	(41.8)
10/1/2021	9,974,541	8,880,232	112.3	(1,094,309)	1,093,268	(100.1)
10/1/2022	10,450,461	9,510,694	109.9	(939,769)	1,094,555	(85.9)

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STATISTICAL SECTION

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 ACFRs 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	2022	2021	2020	2019	2018
Assets					
Cash and Short-Term Investments	$62,042	$23,513	$8,814	$20,298	$15,735
Receivables	6,377	4,004	15,780	3,918	4,038
Prepaid Expenses	-	79	42	41	-
Investments at Fair Value	2,515,186	2,927,401	2,397,395	2,244,990	2,159,823
Collateral from Securities Lending Transactions at Fair Value	-	-	-	-	-
Net Capital Assets	88	20	20	-	-
Right-to-Use Asset, net	2,731	-	-	-	-
Total Assets	2,586,424	2,955,017	2,422,051	2,269,247	2,179,596
Liabilities					
Retirement Benefits Payable to U.S. Treasury	-	-	-	-	-
Accounts Payable and Other	2,259	2,654	1,859	1,704	2,170
Due to Federal Government	179	168	320	144	159
Due to District of Columbia Government	-	-	46	-	-
Investment Payables	7,993	7,311	8,436	2,917	1,161
Obligations Under Securities Lending	-	-	-	-	-
Right-to-Use Lease Obligation	3,068	-	-	-	-
Total Liabilities	13,499	10,133	10,661	4,765	3,490
Net Position Restricted for Pensions	**$2,572,925**	**$2,944,884**	**$2,411,390**	**$2,264,482**	**$2,176,106**

Teachers' Retirement Fund	2017	2016	2015	2014	2013
Assets					
Cash and Short-Term Investments	$23,675	$13,993	$18,352	$7,236	$26,826
Receivables	19,504	5,002	4,872	43,404	28,853
Prepaid Expenses	-	3	13	54	-
Investments at Fair Value	2,046,711	1,807,998	1,650,974	1,729,571	1,630,294
Collateral from Securities Lending Transactions at Fair Value	-	-	-	6,885	23,566
Net Capital Assets	-	-	-	-	-
Right-to-Use Asset, net	-	-	-	-	-
Total Assets	2,089,890	1,826,996	1,674,211	1,787,150	1,709,539
Liabilities					
Retirement Benefits Payable to U.S. Treasury	459	459	-	-	21,503
Accounts Payable and Other	866	1,377	735	1163	556
Due to Federal Government	301	56	20	204	78
Due to District of Columbia Government	80	501	401	414	112
Investment Payables	17,585	2,654	2,417	32,426	41,162
Obligations Under Securities Lending	-	-	-	6,982	23,753
Right-to-Use Lease Obligation	-	-	-	-	-
Total Liabilities	19,291	5,047	3,573	41,189	87,164
Net Position Restricted for Pensions	**$2,070,599**	**$1,821,949**	**$1,670,638**	**$1,745,961**	**$1,622,375**

Schedules of Fiduciary Net Position
(Dollars in thousands)

Police Officers and Fire Fighters' Retirement Fund	2022	2021	2020	2019	2018
Assets					
Cash and Short-Term Investments	166,484	63,818	24,227	56,136	43,599
Receivables	12,152	6,083	35,715	4,702	4,619
Prepaid Expenses	-	215	115	110	-
Investments at Fair Value	6,750,575	7,949,393	6,589,423	6,208,612	5,984,412
Collateral from Securities Lending Transactions at Fair Value	-	-	-	-	-
Net Capital Assets	237	55	55	-	-
Right-to-Use Asset, net	7,328	-	-	-	-
Total Assets	6,936,776	8,019,564	6,649,535	6,269,560	6,032,630
Liabilities					
Retirement Benefits Payable to U.S. Treasury	-	-	-	-	-
Accounts Payable and Other	6,165	7,262	5,152	4,733	5,348
Due to Federal Government	479	456	878	396	296
Due to District of Columbia Government	-	-	128	-	-
Investment Payables	21,453	19,852	23,187	8,068	3,216
Obligations Under Securities Lending	-	-	-	-	-
Right-to-Use Lease Obligation	8,234	-	-	-	-
Total Liabilities	36,331	27,570	29,345	13,197	8,860
Net Position Restricted for Pensions	**6,900,445**	**$7,991,994**	**$6,620,190**	**$6,256,363**	**$6,023,770**

Police Officers and Fire Fighters' Retirement Fund	2017	2016	2015	2014	2013
Assets					
Cash and Short-Term Investments	$64,541	$37,487	$57,140	$20,164	$69,232
Receivables	44,180	9,233	9,205	111,745	70,820
Prepaid Expenses	0	7	34	140.00	-
Investments at Fair Value	5,628,706	4,920,614	4,405,127	4,546,197	4,144,784
Collateral from Securities Lending Transactions at Fair Value	-	-	-	18,097	59,912
Net Capital Assets	-	-	-	-	-
Right-to-Use Asset, net	-	-	-	-	-
Total Assets	5,737,427	4,967,341	4,471,506	4,696,343	4,344,748
Liabilities					
Retirement Benefits Payable to U.S. Treasury	217	217	-	-	9,391
Accounts Payable and Other	3379	3,751	1,950	3,038	1,397
Due to Federal Government	819	154	53	523	190
Due to District of Columbia Government	216	1364	1055	1062	275
Investment Payables	48,354	7,224	6,450	85,237	104,649
Obligations Under Securities Lending	-	-	-	18,354	60,389
Right-to-Use Lease Obligation	-	-	-	-	-
Total Liabilities	52,985	12,710	9,508	108,214	176,291
Net Position Restricted for Pensions	**$5,684,442**	**$4,954,631**	**$4,461,998**	**$4,588,129**	**$4,168,457**

Schedules of Changes in Fiduciary Net Position
(Dollars in thousands)

Teachers' Retirement Fund	2022	2021	2020	2019	2018
Additions					
Contributions:					
District Government	$ 75,060	$ 70,478	$ 58,888	$ 53,343	$ 59,046
Plan Members	46,914	45,689	42,356	40,432	40,324
Total Contributions	121,974	116,167	101,244	93,775	99,370
Net Investment Income	(389,391)	513,322	138,936	85,047	94,129
Other income	871	953	803	883	1,038
Total Additions	(266,546)	630,442	240,983	179,705	194,537
Deductions					
Benefit Payments	95,352	89,404	85,679	81,471	78,430
Retirement Benefits Payable to U.S. Treasury	-	-	-	-	-
Refunds	5,236	3,417	4,873	6,418	6,126
Administrative Expenses	4,508	4,127	3,511	3,440	4,474
Total Deductions	105,096	96,948	94,063	91,329	89,030
Changes in Fiduciary Net Position	**$ (371,642)**	**$ 533,494**	**$ 146,920**	**$ 88,376**	**$ 105,507**

Teachers' Retirement Fund	2017	2016	2015	2014	2013
Additions					
Contributions:					
District Government	$ 56,781	$ 44,469	$ 39,513	$ 31,636	$ 6,407
Plan Members	34,364	33,591	31,621	28,751	28,129
Total Contributions	91,145	78,060	71,134	60,387	34,536
Net Investment Income	239,554	152,262	(72,647)	132,086	168,117
Other income	907	1,033	385	522	796
Total Additions	331,606	231,355	(1,128)	192,995	203,449
Deductions					
Benefit Payments	72,069	68,634	64,076	59,832	54,180
Retirement Benefits Payable to U.S. Treasury	-	459	-	-	21,503
Refunds	6,166	6,205	5,576	5,790	5,250
Administrative Expenses	4,721	4,746	4,543	3,787	3,627
Total Deductions	82,956	80,044	74,195	69,409	84,560
Changes in Fiduciary Net Position	**$ 248,650**	**$ 151,311**	**$ (75,323)**	**$ 123,586**	**$ 118,889**

Schedules of Changes in Fiduciary Net Position
(Dollars in thousands)

Police Officers and Fire Fighters' Retirement Fund	2022	2021	2020	2019	2018
Additions					
Contributions:					
District Government	$ 108,965	$ 109,933	$ 93,061	$ 91,284	$ 105,596
Plan Members	36,997	37,433	37,880	38,243	34,478
Total Contributions	145,962	147,366	130,941	129,527	140,074
Net Investment Income	(1,044,735)	1,391,936	381,595	232,987	316,842
Other income	2,338	2,585	2,207	2,435	2,356
Total Additions	(896,435)	1,541,887	514,743	364,949	459,272
Deductions					
Benefit Payments	179,984	156,455	140,044	121,342	106,794
Retirement Benefits Payable to U.S. Treasury	-	-	-	-	-
Refunds	2,177	2,420	1,236	1,533	1,580
Administrative Expenses	12,094	11,208	9,648	9,481	11,570
Total Deductions	194,255	170,083	150,928	132,356	119,944
Changes in Fiduciary Net Position	**$ (1,090,690)**	**$ 1,371,804**	**$ 363,815**	**$ 232,593**	**$ 339,328**

Police Officers and Fire Fighters' Retirement Fund	2017	2016	2015	2014	2013
Additions					
Contributions:					
District Government	$ 145,631	$ 136,115	$ 103,430	$ 110,766	$ 96,314
Plan Members	33,424	32,785	33,679	32,821	30,581
Total Contributions	179,055	168,900	137,109	143,587	126,895
Net Investment Income	655,310	415,157	(187,283)	338,894	423,581
Other income	2,468	2,810	1,012	1,342	2,047
Total Additions	836,833	586,867	(49,162)	483,823	552,523
Deductions					
Benefit Payments	92,537	78,920	63,634	52,784	45,656
Retirement Benefits Payable to U.S. Treasury	-	217	-	-	9,391
Refunds	1,647	2,179	1,396	1,637	1,960
Administrative Expenses	12,838	12,918	11,939	9,730	8,913
Total Deductions	107,022	94,234	76,969	64,151	65,920
Changes in Fiduciary Net Position	**$ 729,811**	**$ 492,633**	**$ (126,131)**	**$ 419,672**	**$ 486,603**

Schedules of Administrative Expenses
(Dollars in thousands)

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Personal services										
Salaries	$ 7,584	$ 7,199	$ 6,131	$ 6,058	$ 6,420	$ 6,513	$ 6,181	$ 4,760	$ 4,401	$ 3,955
Fringe benefits	1,738	1,321	1,602	1,481	1,832	1,613	1,318	1,301	1,244	1,135
Total personal services	9,322	8,520	7,733	7,539	8,252	8,126	7,499	6,061	5,645	5,090
Non-personal services										
Office supplies	66	44	44	70	94	107	99	126	115	187
Telephone	21	20	89	46	96	107	91	71	56	50
Rent	-	1,908	1,695	1,968	1,824	1,800	1,754	1,634	1,554	1,513
Office support	-	-	-	-	-	-	-	-	-	-
Travel	92	48	110	183	194	218	209	206	181	177
Professional fees	3,212	1,905	892	1,149	3,666	5,263	6,379	6,225	4,292	3,790
Postage	8	20	13	14	66	60	27	29	25	138
Insurance	610	4	13	9	78	15	53	14	15	91
Printing	7	179	130	117	149	149	151	150	121	114
memberships	40	39	42	41	40	42	41	32	34	28
Audit costs	101	(8)	(10)	291	191	72	63	85	49	76
Actuarial fees	68	146	178	138	170	138	180	153	66	146
Legal fees	1,173	882	366	323	532	590	337	524	365	529
Investment fees	20,758	26,991	17,909	16,807	13,076	15,037	12,862	11,377	12,788	6,587
Contractual services (STAR)	2,614	2,439	2,387	1,968	1,808	1,866	1,697	1,077	872	941
Equipment and rental	159	52	89	59	199	261	376	966	995	619
Depreciation	266	22	12	-	-	-	-	-	-	3
Total non-personal Services	29,195	34,691	23,959	23,182	22,182	25,726	24,320	22,676	21,528	14,989
Total Administrative Expenses	**$38,517**	**$ 43,211**	**$31,692**	**$30,721**	**$30,435**	**$ 33,852**	**$31,819**	**$28,738**	**$27,173**	**$20,079**

Schedules of Investment Expenses
(Dollars in thousands)

Fiscal Year	Investment Managers*	Investment Administrative	Investment Consultants	Investment Custodian	Total Investment
2022	$ 19,705	$ 1,224	$ 713	$ 340	$ 21,982
2021	25,863	885	710	418	27,876
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

* 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, 2022

	Teachers' Retirement Fund	Police Officers and Fire Fighters' Retirement Fund	Total
Benefits			
Regular Retiree	$ 91,390	$ 161,493	$ 252,883
Disability	2,468	13,700	16,168
Survivor	1,495	4,790	6,285
Total Benefits	$ 95,352	$ 179,984	$ 275,336
Refunds of Member Contributions	$ 5,236	$ 2,177	$ 7,413
Total Benefits and Refunds	$ 100,588	$ 182,161	$ 282,749

Schedule of Annual Salaries and Benefits
(Dollars in millions)

	Annual Salaries of Active Members			Annual Retirement Benefits for Retireees & Beneficiaries		
Fiscal Year	Teachers	Police Officers and Firefighters	Total	Teachers	Police Officers and Firefighters	Total
2022	$575	$529	$1,104	$190	$97	$287
2021	538	517	1055	89	162	251
2020	491	474	965	85	147	232
2019	467	461	928	82	129	211
2018	471	454	925	77	112	189
2017	448	442	890	71	98	169
2016	438	438	876	69	86	155
2015	417	446	863	63	70	133
2014	379	438	817	59	58	117
2013	369	413	782	53	50	103

Schedule of Participant Data
(Dollars in thousands)

	Active			Retired Members, Beneficiaries, Disabled			
Fiscal Year	Teachers	Police Officers and Firefighters	Subtotal	Teachers	Police Officers and Firefighters	Subtotal	Total
2022	6,088	5,133	11,221	4,065	4,373	8,438	19,659
2021	6,050	5,242	11,292	4,072	4,115	8,187	19,479
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

Schedule of Average Benefit by Type

Teachers' Retirement Plan							
		Years of Credited Service					
Retirement Effective Dates		5-9	10-14	15-19	20-24	25-29	30+
	Average Monthly Benefit	$1,455	$2,441	$3,260	$4,197	$5,154	$6,250
2022	Average Final Average Salary	$120,325	$107,856	$110,284	$112,374	$113,332	$115,088
	Number of Active Recipients	11	10	7	15	13	23
	Average Monthly Benefit	$1,083	$1,957	$3,189	$3,798	$5,178	$6,072
2021	Average Final Average Salary	$96,281	$91,510	$109,703	$109,516	$116,081	$114,747
	Number of Active Recipients	9	5	8	11	7	23
	Average Monthly Benefit	$1,009	$2,258	$2,933	$3,836	$4,810	$5,810
2020	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
2019	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
2018	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
2017	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	$4,431	$5,595
2016	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
2015	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
2014	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
2013	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

Schedule of Average Benefit by Type

Police Officers and Firefighter's Retirement Plan							
		Years of Credited Service					
Retirement Effective Dates		5-9	10-14	15-19	20-24	25-29	30+
	Average Monthly Benefit	$4,036	$3,001	$3,493	$4,456	$6,360	$8,423
2022	Average Final Average Salary	$84,514	$78,895	$93,671	$94,275	$111,221	$124,466
	Number of Active Recipients	6	5	9	11	141	83
	Average Monthly Benefit	$0	$4,297	$3,674	$4,303	$6,599	$7,772
2021	Average Final Average Salary	$0	$80,403	$81,375	$96,102	$110,669	$119,628
	Number of Active Recipients	0	4	6	12	98	99
	Average Monthly Benefit	$2,589	$2,715	$3,437	$3,928	$6,500	$7,689
2020	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
2019	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
2018	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
2017	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
2016	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
2015	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
2014	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
2013	Average Final Average Salary	$40,134	$64,784	-	$77,175	$94,464	$103,254
	Number of Active Recipients	4	4	-	4	97	48

Schedule of Retired Members by Type of Benefit and Option Selected

Teachers' Retirement Plan												
	Number of Members by Retirement Type							Number of Members by Option Selected				
Monthly Benefit Payment	A	B	D	E	F	G	Grand Total	1	2	3	4	Grand Total
$1-250	4			20	1	1	26	9	17			26
$251-500	29			21	2	2	54	32	21	1		54
$501-750	51	2	1	14	9		77	56	20		1	77
$751-1,000	82	3	1	15	2	2	105	82	19	3	1	105
$1,001-1,250	63	6	2	13	10	1	95	66	25	2	2	95
$1,251-1,500	57	3	2	18	7	2	89	55	29	1	4	89
$1,501-1,750	61	6	6	20	21	3	117	68	33	3	13	117
$1,751-2,000	62	9	10	27	9	1	118	64	47	2	5	118
$2,001-3,000	303	26	87	117	17	2	552	372	171	3	6	552
$3,001-4,000	613	69	79	49	5		815	602	205	7	1	815
$4,001-5,000	1296	108	23	3			1430	1067	357	4	2	1430
$5,001-6,000	1078	63	3	1			1145	919	223	3		1145
$6,001-7,000	492	28	1	0			521	403	117	1		521
$7,001-8,000	160	8		0			168	130	37	1		168
$8,001-9,000	67	3		0			70	59	10	1		70
$9,001-10,000	36	2		0			38	32	6			38
over $10,000	14	1		0			15	12	3			15
Grand Total	**4468**	**337**	**215**	**318**	**83**	**14**	**5435**	**4028**	**1340**	**32**	**35**	**5435**

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							
	Number of Members by Retirement Type						
Monthly Benefit Payment	A	C	D	E	F	G	Grand Total
$1-250	0			0		3	3
$251-500	0			22	24	5	51
$501-750	10			4		21	35
$751-1,000	5			2		28	35
$1,001-1,250	5		1	4	2	24	36
$1,251-1,500	1			9		35	45
$1,501-1,750	3			5		29	37
$1,751-2,000	8	5	13	3	1	30	60
$2,001-3,000	54	127	117	826	20	86	1230
$3,001-4,000	409	143	44	729	18	21	1364
$4,001-5,000	867	354	41	103	3	11	1379
$5,001-6,000	1115	136	19	31	1	5	1307
$6,001-7,000	1173	39	4	13	1		1230
$7,001-8,000	785	15	2	6	5		813
$8,001-9,000	441	13	1	1			456
$9,001-10,000	226	1		1			228
over $10,000	311	4		0	1		316
Grand Total	**5413**	**837**	**242**	**1759**	**76**	**298**	**8625**

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

ADDITIONAL DISCLOSURES

Schedules of Transactions - Board of Trustees

Trustee Name	Expenditures	
	FY 2022	FY 2021
Lyle Blanchard	$ 11,267	$ 14,984
Joseph Bress	10,849	12,689
Joseph Clark	14,845	14,984
Mary Collins	14,998	13,995
Christopher Finelli	7,651	-
Geoffrey Grambo	8,641	8,285
Danny Gregg	14,427	9,498
Gary Hankins	-	3,732
Tracy Harris	14,921	13,808
Greggory Pemberton	14,921	12,166
Nathan Saunders	14,998	14,984
Adam Weers	14,921	-
	$ 142,439	$ 119,125

Names and Addresses of the Board of Trustees

Schedule of Trustee Sponsored Activities

No members of the DCRB Board of Trustees attended events sponsored by outside entities in either FY 2022 or FY 2021.

Acknowledgments and Credits

On the Cover:
Fire Engine: Courtesy, Fire and EMS Department
Police Vehicle: Courtesy, Metropolitan Police Department
DC Public School Classroom: Courtesy, DC Public Schools

Page 1, Introductory Section:
Fire Engine: Courtesy, Fire and EMS Department
Police Vehicle: Courtesy, Metropolitan Police Department
DC Public School Classroom: Courtesy, DC Public Schools

Page 15, Financial Section:
DC Public School Classroom: Courtesy, DC Public Schools
Police Vehicle: Courtesy, Metropolitan Police Department
Fire Engine: Courtesy, Fire and EMS Department

Page 60, Investment Section:
DC Public School Building: Courtesy, DC Public Schools
Police Officers: Courtesy, Metropolitan Police Department
DC Firefighter in response: Courtesy, Fire and EMS Department

Page 78, Actuarial Section:
DC Public School Students: Courtesy, DC Public Schools
Police Vehicle: Courtesy, Metropolitan Police Department
Fire Engine: Courtesy, Fire and EMS Department

Page 106, Statistical Section:
Police Officers: Courtesy, Metropolitan Police Department
Fire Engine: Courtesy, Fire and EMS Department
DC Public School Building: Courtesy, DC Public Schools

District of Columbia Retirement Board
900 7th Street NW
2nd Floor
Washington, D.C. 20001