Other Post-Employment Benefits Fund DISTRICTION DISTRIC

Office of the Chief Financial Officer Annual Report FY 2019



MURIEL BOWSER

Mayor

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EXECUTIVE SUMMARY

Introduction

We are pleased to present the annual report for the District's Other Post-Employment Benefits Fund. Assets increased from \$1.463 billion to \$1.510 billion as of September 30, 2019.

Performance this year was led by the fixed income markets. The Fund rose 1.70%, below our policy benchmark, which advanced 3.97%. The Fund had a return of 4.71% for the five-year period ending September 30, 2019. This was below our target rate of return of 6.50%. The fund generated net investment income of \$20.6 million.

The annual contribution to the Trust Fund was \$46.0 million for FY 2019 as compared to \$44.5 million in FY 2018. The contribution budgeted for FY 2020 is \$47.3 million.

An actuarial analysis of the Plan's assets and liabilities is performed annually to determine the funding status of the Plan. The Plan had a funding ratio of 103.03% for the year ending September 30, 2019, as stated in the enclosed financial statements. The latest actuarial report, dated March 2020 and based on September 30, 2019 data, is included in the appendix.

The financial statements for the Plan were prepared by BCA Watson Rice, LLP a local accounting firm. The operations of the Plan and its assets are examined each year by an independent accounting firm as part of the District's annual CAFR. The Plan received an unqualified (clean) opinion from SB & Company, LLC. The audited financial statements are included in this annual report as an appendix.

We hope this information helps you gain a better understanding of the operation of the District's Other Post- Employment Benefits Fund and the oversight performed on an ongoing basis by the Office of Finance and Treasury and the DC Department of Human Resources.

Annual Report

This annual report provides information on the District of Columbia's Other Post-Employment Benefits Plan. The report summarizes the Plan, its operations and describes the roles of the District departments that manage the Fund. The report presents information on the performance of the Fund, a description of the account managers, the amount invested with each manager and the Fund's asset allocation policy. Also included are the audited financial statements, the actuarial analysis, comparative analysis information, provider descriptions and contact personnel.

The District of Columbia Other Post-Employment Benefits Plan

The government of the District of Columbia established the District's Annuitants' Health and Life Insurance Employer Contribution Trust Fund October 1, 1999 under the Annuitants' Health and Life Insurance Employer Contribution Amendment Act of 1999 (DC Official Code 1-621.09) (the Act). The Plan includes a trust fund that is required for the deposit of District contributions. These contributions along with investment earnings are used to pay future benefits on behalf of qualified participants. The Plan is administered jointly by the District's Office of the Chief Financial Officer and the District's Office of Human Resources (DCHR).



Plan Description

The Plan is a single-employer defined benefit plan that provides health and life insurance benefits to retired eligible District employees. All employees hired after September 30, 1987, who retired under the Teachers Retirement System, Police and Fire Retirement Systems or who are eligible for retirement benefits under the Social Security Act, are eligible to participate in the Plan. The trust fund was established to hold and pay the District's contributions for health and life insurance premiums for participants.

Operations

The Office of Finance and Treasury (OFT) is responsible for the oversight of the investments in the Fund and has established an investment policy and procedures for the program. The duties and responsibilities of OFT include, but are not limited to, the financial administration and management of the Fund, the selection and monitoring of investment managers, the establishment of investment objectives, the determination of the investment policy, the establishment of management policies, and the overall management and control of Fund assets.

The DC Department of Human Resources counsels employees regarding their retirement benefits, enrolls them in the selected programs and informs OFT of their choices.

Actuarial Information

Cheiron performed the actuarial study of the Fund. Cheiron prepared its report in accordance with the Statements of the Government Accounting Standards Board (GASB) 45 and 74. Valuations are undertaken for each fiscal year. The purpose of the valuation is to provide an estimate of the Total OPEB Liability and the Actuarially Determined Contribution (ADC).

Investment Consultant

The Segal Marco Advisors ("Segal Marco") investment consulting firm provides guidance and advice to the Office of Finance and Treasury in managing the assets of the Other Post-Employment Benefits Fund. This includes, but is not limited to, assisting with investment manager search and evaluation, developing and recommending target asset allocations and conducting ongoing due diligence on the investment program, including quarterly performance. Segal Marco meets with the Office of Finance and Treasury regularly to review the portfolio structure and manager line-up.

Contributions

Cost sharing arrangements for annuitants vary depending on whether the employee was a General Employee, Teacher, Police Officer, or Firefighter. For General Employees and Teachers, annuitants with at least 10 years of creditable District service (but less than 30 years of creditable District service) pay a percentage of their health insurance premiums, and the District pays the remainder. The percentage paid by the annuitant is 75%, reduced by an additional 2.50% for each year of creditable service over 10 years, up to a maximum of 20 such additional years. Thus, the District's contribution shall not exceed 75% of the cost of the selected health benefit plan. For annuitants with 30 or more years of creditable District service, the District pays 75% of the cost of the selected health benefit plan and the annuitant pays 25% of the cost of the selected health benefit plan.

Covered family members of General Employee and Teacher annuitants with at least 10 years of creditable District service (but less than 30 years of creditable District service) pay a percentage of their health insurance premiums and the District pays the remainder. The percentage paid by the covered family member is 80%, reduced by an additional 1.00% for each year of creditable District service over 10 years, up to a maximum of 20 such additional years. Thus, the District's contribution shall not exceed 40% of the cost of the selected health benefit plan for covered family members of an annuitant with 30 or more years of creditable District service, and the family members of an annuitant with 30 or more years of creditable District service pay up to 60% of the cost of the selected health benefit plan.

For Police Officers and Firefighters, annuitants with at least 10 years of creditable District service but less than 25 years of creditable District service pay a percentage of their health insurance premiums and the District pays the remainder. The percentage paid by the annuitant is 70%, reduced by an additional 3.00% for each year of creditable service over 10 years, up to a maximum of 15 such additional years.

Thus, the District's contribution shall not exceed 75% of the cost of the selected health benefit plan. For annuitants with 25 or more years of creditable District service, or Police Officer or Firefighter annuitants who are injured in the line of duty, the District pays 75% of cost of the selected health benefit plan and the annuitant pays 25% of the cost of the selected health benefit plan. Special rules apply for Police Officers and Firefighters who were hired before November 10, 1996.

Covered family members of Police Officers and Firefighter annuitants with at least 10 years of creditable District service (but less than 25 years of creditable District service) pay a percentage of their health insurance premiums, and the District pays the remainder. The percentage paid by the covered family members is 75%, reduced by an additional 3.00% for each year of creditable District service over 10 years. However, the portion paid by the covered family member is never less than 40%, and the District's contribution shall not exceed 60% of the cost of the selected health benefit plan; the family member pays 40% of the cost of the selected health benefit plan for covered family members of Police Officers or Firefighters who were hired before November 10, 1996.



Advisory Committee

The District established an Advisory Committee to advise the Office of Finance and Treasury (OFT) on the administration and investment management of the OPEB Fund. The Committee shall consist of the following members: four appointed by the CFO; one appointed by the Mayor; one appointed by the Council; and one member who is either a member of the DCRB or a member of DCRB's professional staff. The current Advisory Committee consists of the following members:

- Ventris Gibson, Director, District of Columbia Department of Human Resources (Mayor)
- Sheila Morgan-Johnson, Executive Director, District of Columbia Retirement Board (DCRB Staff)
- Matthew Brown, Chief Financial Officer, District of Columbia Water (CFO)
- Ritta McLaughlin, Chief Education Officer, Municipal Securities Rulemaking Board (CFO)
- Thompson H. Sawyer Jr., Deputy Director, Division of Finance, Federal Deposit Insurance Corporation (CFO)
- Deborah Freis, Director, Office of Revenue and Analysis (CFO)
- Barbara Davis Blum, President BDB Investment Partnership (Council)

INVESTMENT MANAGER INFORMATION

INVESTMENT MANAGER	ASSET CLASS	BENCHMARK	INCEPTION DATE
Equity			
Brandywine Global Investment Management, LLC	U.S. Large-Cap Value	Russell 1000 Value Index	01/01/2012
Farr, Miller & Washington, LLC	U.S. Large-Cap Growth	Russell 1000 Growth Index	01/01/2012
ClearBridge Advisors	U.S. Mid-Cap Core	Russell Midcap Index ¹	01/01/2012
State Street Global Advisors	U.S. Small-Cap Core	Russell 2000 Index	11/01/2015
Baillie Gifford	Intl Large-Cap Growth	MSCI EAFE Growth NR USD	12/01/2011
Artisan Partners	Intl Large-Cap Value	MSCI EAFE Value NR USD	12/01/2011
Emerging Market Equity			
State Street Global Advisors Emerging Market	Emerging Market Equity	MSCI EM (net)	11/01/2013
Fixed Income			
State Street Global Advisors	Core	Barclays Capital Aggregate Bond Index	08/01/2010
AllianceBernstein L.P.	Core Plus	Barclays Capital Aggregate Bond Index	12/01/2011
RBC Global Asset Management (US) Inc.	Core	Barclays Capital U.S. Securitized Index	12/01/2011
AllianceBernstein L.P.	Non-U.S. Unhedged	Barclays Capital Global Aggregate	01/01/2012
Emerging Market Debt			
BlueBay Emerging Market Bond	Emerging Market Debt	50% JPM EMBI Global Diversified/50% JPM GBI-EM Global Diversified U.S. ²	11/01/2013
Commodity			
Gresham Investment	Commodities	Bloomberg Commodity Index Total Return	11/01/2013
Cash			
Northern Trust Investment, Inc.	Cash	ML U.S. Treasury Bill 3 Month	05/01/2017

¹ Benchmark as of 10/01/2012. From 01/01/2012 through 09/30/2012 the benchmark was the S&P MidCap 400 Index.

² Benchmark as of 02/01/2015. From 11/01/2013 through 01/31/2015 the benchmark was the 50% JPM EMBI Global Diversified/50% JPM GBI-EM Broad Diversified U.S. Index.



INVESTMENT MANAGER DESCRIPTIONS

Equity

Brandywine Large Cap Value

The Classic Large Cap Value Equity strategy seeks attractive total return, a dividend yield greater than the benchmark and style consistency, while maintaining a focus on bottom-up stock picking. The team's focus on free cash flow metrics is one of the primary factors differentiating the team from style peers. Although bottom-up stock-picking drives portfolio construction, the team spends significant effort to recognize the impact of macroeconomic changes when analyzing and researching companies.

Farr, Miller & Washington Large Cap Growth

This portfolio consists of 30 to 40 high-quality growth companies. The portfolio employs a buy-tohold philosophy and ignores short-term noise in favor of long-term fundamentals. The goal is to exceed the performance of the market over a full market cycle (three to five years) without taking on more risk than the overall market. Their research analysts focus on the long-term fundamentals by seeking leading companies in industries with attractive secular growth prospects that have strong management teams, great long-term track records, conservative balance sheets, high returns on capital and sustainable free cash flow. The risk/reward proposition must make sense for long-term investors and their focus on valuation provides downside protection and preservation of capital in weak markets.

Clearbridge Mid Cap Core

This fund invests in a diversified portfolio focused primarily on mid-sized companies. It seeks long-term capital appreciation through a disciplined, consistent and transparent investment process. It employs an investment strategy that is driven by stock selection, with a focus on companies that exhibit high free cash flow, strong balance sheets, undervalued growth potential and management teams that exercise capital discipline.

SSgA Russell 2000 Index Fund

The strategy seeks an investment return that approximates as closely as practicable, before expenses, the performance of its benchmark index ("Index") over the long term. The Russell 2000[®] Index is comprised of approximately 2,000 of the smallest U.S. securities in the U.S. Market and accounts for approximately 8% of the U.S. stock market capitalization.

The strategy is managed using a "passive" or "indexing" investment approach, by which SSgA attempts to match, before expenses, the performance of the Index. SSgA will typically attempt to invest in the equity securities comprising the Index, in approximately the same proportions as they are represented in the Index. Equity securities may include common stocks, preferred stocks, depository receipts, or other securities convertible into common stock. The strategy may purchase securities in their initial public offerings ("IPOs"). In some cases, it may not be possible or practicable to purchase all the securities comprising the Index, or to hold them in the same weightings as they represent in the Index. In those circumstances, SSgA may employ a sampling or optimization technique to construct the portfolio in question. From time to time securities are added to or removed from the Index. SSgA may sell securities that are represented in the Index, or purchase securities that are not yet represented in the Index, prior to or after their removal or addition to the Index.

The strategy may at times purchase or sell index futures contracts, or options on those futures, or engage in other transactions involving the use of derivatives, in lieu of investment directly in the securities making up the Index or to enhance the strategy's replication of the Index return. The strategy's return may not match the return of the Index.

Baillie Gifford International Growth Equity

The fund is designed to pursue long-term capital appreciation by investing in highquality, attractively valued, non-U.S. growth companies of all market capitalizations. Baillie Gifford's investment philosophy is built on three fundamental viewpoints:

- 1. Share prices follow company fundamentals;
- 2. Companies that grow their earnings and cash flows faster than average outperform the market; and
- 3. Company analysis is more useful than economic data.

Their investment process is based on a highly analytical research-driven process and builds portfolios from the bottom-up. The strategy invests primarily in developed markets, but also may invest up to 20% of the Fund's net assets at market value, at the time of purchase, in emerging markets. Currency hedging is used for defensive purposes and only used under certain conditions.

Artisan International Value Equity

This fund seeks to invest in undervalued companies that are generating high returns on capital, are financially strong and are managed by people who are working to build value over time. The investment team seeks to invest in companies with histories of generating strong free cash flow, improving returns on capital and strong competitive positions in their industries. This criteria helps rule out businesses that are statistically cheap, but whose values are deteriorating over time. The team believes that investing in companies with strong balance sheets helps to reduce the potential for capital risk and provides company management the ability to build value when attractive opportunities are available.



SSgA Emerging Market Index Fund

The fund is managed using a "passive" or "indexing" investment approach, by which SSgA attempts to match, before expenses, the performance of the MSCI Emerging Markets Index, which is a free float-adjusted market capitalization index that is designed to measure equity market performance of emerging markets. SSgA will typically attempt to invest in the equity securities comprising the Index, in approximately the same proportions as they are represented in the Index. Equity securities may include common stocks, preferred stocks, depository receipts, or other securities convertible into common stock. Equity securities held by the fund may be denominated in foreign currencies and may be held outside the United States. In some cases, it may not be possible or practicable to purchase all of the securities comprising the Index, or to hold them in the same weightings as they represent in the Index. In those circumstances, SSgA may employ a sampling or optimization technique to construct the portfolio in question. SSgA may also utilize other pooled investment vehicles, including those managed by SSgA and its affiliates, as substitutes for gaining direct exposure to securities or a group of securities in the Index.

Fixed Income

SSgA U.S. Aggregate Bond Index Fund

The fund seeks an investment return that approximates as closely as practicable, before expenses, the performance of the Barclays Capital U.S. Aggregate Bond Index (the "Index") over the long term. The fund is managed using a "passive" or "indexing" investment approach, by which SSgA attempts to replicate, before expenses, the performance of the Index. The fund may attempt to invest in the securities comprising the Index in the same proportions as they are represented in the Index. However, due to the large number of securities in the Index, some of the securities may be unavailable for purchase, so it may not be possible for the fund to purchase all of the securities comprising the Index.

Bernstein Strategic Core – Plus

This is a multisector fixed-income strategy with a research-driven investment approach. This fund has as its neutral composition both strategic overweights to non-Treasury sectors, such as investment-grade corporates and mortgages, and strategic allocations to high-yield, non-U.S. and emerging market debt; these allocations are neutral targets around which portfolio exposures vary in accordance with perceived opportunity. The goal is to outperform the Barclays U.S. Aggregate Index by 100 to 200 basis points annually, before fees, over full market cycles. The strategy has a minimum average credit quality of 'A.'

RBC Global – Access Capital

The fund's investment objective is to invest in geographically specific debt securities located in portions of the United States designated by fund investors. The fund engages in socially responsible investing that helps build stronger communities through its support of low- and moderate-income homebuyers, affordable rental housing units, small business administration loans and economic development projects. The fund invests at least 75% of the fund in securities rated AAA or equivalent.

Bernstein Global Plus

This is an actively managed global bond strategy with a research-driven investment approach. This fund invests in the sovereign debt of developed countries other than the U.S., investment-grade credits, agencies, mortgages, commercial mortgage-backed securities and asset-backed securities, and takes opportunistic positions in high yield and emerging-market debt, where permitted by client guidelines. The goal is to outperform the Barclays Global Aggregate Index by 100 to 200 basis points annually, before fees, over full market cycles. The strategy has a minimum average credit quality of 'A.'

Emerging Market Debt

Bluebay Emerging Market Bond

This fund invests predominantly in fixed income securities issued by emerging market countries or issuers based in such countries. The fund seeks to generate excess returns via superior country and issue selection through an indepth country and security selections process focusing on value in external credit spreads, local currencies and local interest rates. Particular emphasis is given to avoiding deteriorating credits and one-off currency devaluations. The fund has a focus on absolute returns, both their long-only and alternative strategies use short exposures (either directly or via credit derivatives) as one of a number of techniques designed to deliver absolute-style returns. There is a strong emphasis on capital preservation; the use of credit derivatives helps to maximize portfolio efficiency and potentially minimize risk.



Commodity

Gresham Strategic Commodities Fund

This fund seeks to provide diversified exposure to commodities using long-only, fully collateralized commodity futures. Gresham's Tangible Asset Program (TAP), is a long-only, diversified, tangible commodity futures investment strategy with a 26-year real-time track record. The TAP methodology balances rules-based construction with market-driven implementation and is designed to maximize return through effective trading and minimize volatility by constraining sector and individual commodity weightings as well as a systematic interim rebalancing strategy. The fund also generates return through investment of the collateral.

Cash

Northern Institutional Treasury Portfolio

The Portfolio invests in high-quality securities, primarily in U.S. Treasuries and repurchase agreements that are collateralized by Treasury Obligations and/or Government Obligations carrying the full faith and credit of the U.S. government. In addition to investing in Treasuries, the Portfolio invests in repurchase agreements, which may offer a potential yield advantage over a Portfolio invested only in Treasuries. The Portfolio, under normal circumstances, will invest at least 80% of its net assets (plus the amount of any borrowings for investment purposes) in Treasury Obligations and repurchase agreements collateralized solely by Treasury Obligations. The Portfolio operates as a "government money market fund" under Sec Rule 2a-7.

ASSET ALLOCATION AND INVESTMENT PERFORMANCE

ASSET ALLOCATION BY CLASS¹

CLASS	MARKET VALUE (\$)	ALLOCATION (%)
Domestic Equity	682,660,580	45.20
Domestic Fixed Income	297,547,594	19.70
International Equity	156,662,561	10.37
International Fixed Income	156,679,879	10.38
Emerging Equity	93,938,640	6.22
Commodities	40,423,059	2.68
Emerging Fixed Income	34,912,309	2.31
Cash	47,328,861	3.14
Total	1,510,153,483 ²	100.00 ³

ASSET ALLOCATION BY MANAGER⁴

MANAGER	MARKET VALUE (\$)	ALLOCATION (%)
Brandywine Large Cap Value	215,040,202	14.24
Farr, Miller & Washington Large Cap Growth	225,961,104	14.96
Bernstein International Fixed	156,679,879	10.38
Bernstein Strategic Core	176,052,665	11.66
ClearBridge Mid Cap Core	156,662,158	10.37
SSgA Emerging Market Index Fund	93,938,640	6.22
Baillie Gifford International Growth Equity	86,386,848	5.72
SSgA U.S. Aggregate Bond Index Fund	88,483,088	5.86
SSgA Russell 2000 Index Fund	84,997,115	5.63
Artisan International Value Equity	70,275,713	4.65
Gresham Investment	40,423,059	2.68
RBC Global – Access Capital	33,011,841	2.19
BlueBay Emerging Market Bond	34,912,309	2.31
Cash Account	47,328,861	3.14
Total	1,510,153,4835	100.00 ⁶

^{1,4} Source: The Northern Trust Company.

^{2.6} Asset total will differ from the financial statements due to accrual reporting of certain expenses in the financial statements.

^{3, 6} Numbers may not add up to 100% due to rounding.

PERFORMANCE FOR TOTAL FUND AND ASSET CLASS AS OF SEPTEMBER 30, 2019

PERFORMANCE (%)							
	1 Year¹	3 Years²	5 Years³	7 Years⁴	10 Years³	Since Inception ⁶	Inception Date ⁷
Total Fund Composite	1.70	6.47	4.71	6.55	6.90	6.96	01/01/03
Policy Index	3.97	7.18	5.74	6.94	7.74	7.70	
Domestic Equity	-0.32	10.20	7.34	11.14	10.85	10.68	01/01/03
Equity Policy Index	1.76	11.98	10.00	12.71	12.85	9.75	
U.S. All Cap Equity (SA+CF) Median	2.79	11.72	9.23	12.44	12.54		
International Equity	-2.57	7.85	5.12	7.95	6.20	6.22	01/01/03
MSCI EAFE Index	-0.82	7.01	3.77	6.62	5.39	7.55	
IM International Large Cap Core Equity	-1.65	6.24	3.85	6.81	6.32		
Emerging Market Equity	-2.01	5.90	2.23	N/A	N/A	1.79	11/01/13
MSCI EM (net)	-2.02	5.97	2.33	2.41	3.37	1.87	
IM Emerging Markets Equity	0.07	5.97	3.09	4.00	4.83		
Domestic Fixed Income	10.14	3.12	3.54	2.93	4.49	3.71	01/01/03
Fixed Income Policy Index	10.30	2.92	3.38	2.72	3.80	4.24	
U.S. Fixed Income (SA+CF) Median	7.89	3.43	3.68	3.27	4.41		
International Fixed Income	5.01	0.74	1.44	0.34	N/A	1.16	11/01/11
Barclays Global Aggregate Ex USD	5.34	0.43	0.87	0.01	1.28	0.71	
IM International Fixed Income	9.60	3.94	3.20	2.68	4.58		
Emerging Market Debt	8.26	1.85	0.72	N/A	N/A	0.54	11/01/13
Emerging Market Debt Policy Index	10.91	3.89	3.43	N/A	N/A	3.33	
IM Emerging Markets Debt	10.34	4.24	4.03	3.22	3.48		
Commodity	-11.10	-1.01	-7.81	N/A	N/A	-7.48	11/01/13
Bloomberg Commodity Index	-6.57	-1.50	-7.18	-8.15	-4.32	-6.94	
Cash Account	N/A	N/A	N/A	N/A	N/A	N/A	05/01/17

 ${}^{\scriptscriptstyle 1,2,3,6}$ Performance provided by The Northern Trust Company.

^{4,5} Performance provided by Segal Marco Advisors.

⁷ Historical performance measurement data begins on 01/01/2003.

PERFORMANCE BY INVESTMENT MANAGER

PERFORMANCE (%)							
	1 Year¹	3 Years²	5 Years³	7 Years⁴	10 Years³	Since Inception ⁶	Inception Date ⁷
Domestic Equity							
Brandywine Large Cap Value	-3.28	9.00	4.88	10.56	N/A	11.81	01/01/12
Russell 1000 Value Index	4.00	9.43	7.79	11.30	11.46	12.25	
IM U.S. Large Cap Value Equity (SA+CF) Median	2.21	10.45	8.11	11.88	11.91		
Farr, Miller Washington Large Cap Growth	3.59	12.29	9.72	12.21	N/A	12.75	01/01/12
Russell 1000 Growth Index	3.71	16.89	13.39	15.02	14.94	15.77	
IM U.S. Large Cap Growth Equity (SA+CF) Median	4.30	16.16	12.82	14.66	14.55		
Clearbridge Mid Cap Core	3.67	10.11	8.71	12.85	N/A	12.85	01/01/12
Russell Midcap Index ⁸	3.19	10.69	9.10	12.57	N/A	13.15	
IM U.S. Mid Cap Equity (SA+CF) Median	1.87	11.62	9.56	12.76	13.25		
SSgA Russell 2000 Index Fund	-8.85	8.28	N/A	N/A	N/A	8.41	12/01/15
Russell 2000 Index	-8.89	8.23	8.19	10.43	11.19	8.10	
U.S. Equity Small Cap Core Funds (MF) Median	-9.88	7.03	7.40	9.65	10.79		
International Equity							
Baillie Gifford International Growth Equity	-4.44	9.89	6.27	8.10	N/A	6.95	12/01/11
MSCI EAFE Growth Index	2.64	8.19	5.90	7.88	6.91	7.18	
IM International Growth Equity (SA+CF) Median	-0.85	7.76	5.38	7.65	7.51		
Artisan International Value Equity	-0.17	5.54	3.89	7.69	N/A	7.61	12/01/11
MSCI EAFE Value	-4.31	5.73	1.57	4.70	3.23	4.97	
IM International Value Equity (SA+CF) Median	-4.19	5.83	3.23	6.54	6.28		
Emerging Market Equity							
SSgA Emerging Market Index Fund	-2.01	5.90	2.23	N/A	N/A	1.79	11/01/13
MSCI EM (net)	-2.02	5.97	2.33	2.41	3.37	1.87	
IM Emerging Markets Equity (SA+CF) Median	0.07	5.97	3.09	4.00	4.83		

^{1, 2, 3, 6} Performance provided by The Northern Trust Company.

^{4,5} Performance provided by Segal Marco Advisors.
 ⁷ Historical performance measurement data begins on 01/01/2003.
 ⁸ Benchmark as of 10/01/2012. From 01/01/2012 through 09/30/2012 the benchmark was the S&P MidCap 400 Index.
 Office of Finance and Treasury

PERFORMANCE BY INVESTMENT MANAGER (CONTINUED)

PERFORMANCE (%)							
	1 Year¹	3 Years²	5 Years³	7 Years⁴	10 Years³	Since Inception ⁶	Inception Date ⁷
Domestic Fixed Income							
SSgA U.S. Aggregate Bond Index Fund	10.35	2.95	3.41	2.75	N/A	3.39	08/01/10
Barclays U.S. Aggregate	10.30	2.92	3.38	2.72	3.75	3.37	
U.S. Broad Market Core Fixed Income (SA+CF) Median	10.47	3.35	3.72	3.13	4.34		
Bernstein Strategic Core	10.58	3.47	3.88	3.21	N/A	3.68	12/01/11
Barclays U.S. Aggregate	10.30	2.92	3.38	2.72	3.75	3.09	
IM U.S. Fixed Income (SA+CF) Median	7.89	3.43	3.68	3.27	4.41		
RBC Global – Access Capital	7.27	1.82	2.31	1.94	N/A	2.23	12/01/11
Barclays U.S. Securitized Index	7.93	2.38	2.84	2.42	N/A	2.64	
IM U.S. Broad Market Core Fixed Income (MF) Median	9.81	2.86	3.11	2.61	3.90		
International Fixed Income							
Bernstein Global Plus	5.01	0.77	1.44	0.52	N/A	1.16	01/01/12
Barclays Global Aggregate Ex USD	5.34	0.43	0.87	0.01	1.28	0.71	
IM International Fixed Income (SA+CF) Median	9.60	3.94	3.20	2.68	4.58		
Emerging Market Debt							
BlueBay Emerging Market Bond	8.26	1.85	0.72	N/A	N/A	0.52	11/01/13
Emerging Market Debt Policy Index (50% JPM EMBI Global Diversified/50% JPM GBI-EM Broad Diversified U.S.) ⁸	10.91	3.89	3.43	N/A	N/A	3.33	
IM Emerging Markets Debt (SA+CF) Median	10.34	4.24	4.03	3.22	6.48		
Commodity							
Gresham Investment	-11.10	-1.01	-7.81	N/A	N/A	-7.48	11/01/13
Bloomberg Commodity Index Total Return	-6.57	-1.50	-7.18	-8.15	-4.32	-6.94	

^{1, 2, 3, 6} Performance provided by The Northern Trust Company.

^{4,5} Performance provided by Segal Marco Advisors.

⁷ Historical performance measurement data begins on 01/01/2003.

⁸ Benchmark as of 02/01/2015. From 11/01/2013 through 01/31/2015 the benchmark was the 50% JPM EMBI Global Diversified/50% JPM GBI-EM Broad Diversified U.S. Index.

ASSET ALLOCATION POLICY

ASSET CLASS	MINIMUM	MAXIMUM	TARGET	ACTUAL
Domestic Equity	35%	55%	45%	45.20%
International Equity	4%	14%	9%	10.37%
Emerging Market Equity	0%	9%	4%	6.22%
Domestic Fixed Income	19%	29%	24%	19.70%
International Fixed Income	5%	15%	10%	10.38%
Emerging Market Debt	0%	8%	3%	2.31%
Commodity	0%	10%	5%	2.68%
Cash Account	0%	10%	0%	3.14%

COMPARATIVE PERFORMANCE AS OF SEPTEMBER 30, 2019



COMPARATIVE ANALYSIS TABLES WITH DCRB

ASSET ALLOCATION COMPARATIVE

	C	OCRB	OPE	B Fund
	Current Allocation	Target Allocation (%)	Current Allocation	Target Allocation (%)
Public Equities	50.20	46.00	61.79	58.00
Domestic Equity Assets	21.60	20.00	45.20	45.00
International Developed Market Equity Assets	17.60	16.00	10.37	9.00
International Emerging Market Equity Assets	11.00	10.00	6.22	4.00
Fixed Income	31.80	30.00	32.39	37.00
Investment Grade Bond	10.90	11.00	19.70	24.00
TIPS Assets	7.30	6.00	0.00	0.00
High Yield Assets	3.70	4.00	0.00	0.00
Emerging Market Debt Assets	4.30	4.00	2.31	3.00
Foreign Developed Bond Assets	1.80	2.00	10.38	10.00
Bank Loan Assets	3.80	3.00	0.00	0.00
Alternatives	17.40	24.00	2.68	5.00
Absolute Return Assets	3.90	4.00	0.00	0.00
Private Equity Assets	5.20	9.00	0.00	0.00
Real Estate Assets	5.40	6.00	0.00	0.00
Infrastructure/Opportunistic Assets	1.40	3.00	0.00	0.00
Private Energy Assets	1.50	2.00	0.00	0.00
Commodities			2.68	5.00
Cash	0.60	0.00	3.14	0.00

As of 09/30/19

ACTUARIAL ASSUMPTIONS COMPARATIVE

	DCRB	OPEB FUND
Valuation Date:	10/01/2018	09/30/2019
Actuarial Cost Method:	Entry Age Normal	Entry Age Normal, Level Percentage of Pay
Amortization Method:	Level Dollar Closed	Level Percentage of Pay, Closed
Remaining Amortization Period:	14 Years	17 Years Beginning with 09/30/2018
Asset Valuation Method:	5 Year Smoothed, Market	5 Year Smoothed, Market
Actuarial Assumptions		
Investment Rate of Return ¹	6.50%	6.50%
Rate of Salary Increase ²	4.25 - 8.63%	3.50% (plus merit scale)
Cost of Living Adjustments/	3.50%	5.50% grading down to 3.90%
Medical Trend:	(COLA limited to 3.00% for those hired after 11/10/ 1996)	The Society of Actuaries Getzen Medical Trend Model, reaching the ultimate medical inflation rate in 2040

¹ Includes inflation of 3.50% for DCRB, 2.75% for OPEB.

² Includes wage inflation of 4.25% for DCRB, 3.50% for OPEB.

GOVERNMENT OF THE DISTRICT OF COLUMBIA OFFICE OF THE CHIEF FINANCIAL OFFICER OFFICE OF FINANCE AND TREASURY

OTHER POST-EMPLOYMENT BENEFITS FUND

Financial Statements Together with Reports of Independent Public Accountants

For The Years Ended September 30, 2019 and 2018

GOVERNMENT OF THE DISTRICT OF COLUMBIA OTHER POST-EMPLOYMENT BENEFITS FUND	
SEPTEMBER 30, 2019 AND 2018	
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REPORT OF INDEPENDENT PUBLIC ACCOUNTANTS

The Mayor and the Council of the Government of the District of Columbia Inspector General of the Government of the District of Columbia

Report on the Financial Statements

We have audited the accompanying financial statements of the Government of the District of Columbia Other Post-Employment Benefits Fund (the Fund), a fiduciary fund of the Government of the District of Columbia, as of and for the years ended September 30, 2019 and 2018, and the related notes to the financial statements, which collectively comprise the Fund's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

The Fund's 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 controls relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

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

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

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

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Fund as of September 30, 2019 and 2018, and the respective changes in its financial position for the years then ended in accordance with accounting principles generally accepted in the United States of America.

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Emphasis of Matter

As discussed in Note 2, the financial statements of the Fund are intended to present only the financial position of the Fund and do not purport to, and do not, present fairly the financial position of the Government of the District of Columbia as of September 30, 2019 and 2018, and the changes in its financial position for the years then ended, in conformity with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, schedule changes in net OPEB asset (liability), schedule of contributions and related ratios, schedule of investment returns, and notes to the required supplementary information be presented to supplement the basic financial statements. Such information, although not a part of the 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 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's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated January 6, 2020 on our consideration of the Fund's internal controls 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 controls 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 Fund's internal controls over financial reporting and compliance.

Washington, DC January 6, 2020

SB + Company, SfC

Management's Discussion and Analysis September 30, 2019 and 2018

The following presents our discussion and analysis of the financial performance of the Government of the District of Columbia's (the District) Other Post-Employment Benefits Fund (OPEB or the Fund), a fiduciary fund of the Government of the District of Columbia, for the fiscal years ended September 30, 2019 and 2018. This discussion and analysis should be read in conjunction with the financial statements and note disclosures.

All employees hired after September 30, 1987, who retired under the Teacher Retirement System or Police and Fire Retirement System, or who are eligible for retirement benefits under the Social Security Act, are eligible to participate in the Fund.

Overview of the Financial Statements

The Fund is required to follow U.S. Generally Accepted Accounting Principles and, as such, the Fund's financial statements consist of two basic financial statements: (a) Statement of Fiduciary Net Position and (b) Statement of Changes in Fiduciary Net Position.

- The Statement of Fiduciary Net Position presents the Fund's assets, liabilities, and net position available for postretirement benefits.
- The Statement of Changes in Fiduciary Net Position presents the additions to, and deductions from, the Fund's net position.
- The Notes to Financial Statements provide additional information that is essential for a full understanding of the financial statements. The notes are an integral part of the financial statements and include detailed information not readily evident in the basic financial statements, such as accounting policies, plan membership and benefits, and summary disclosures of selected financial data.
- The Required Supplementary Schedules immediately following the Notes to Financial Statements provide information illustrating the Schedule of Changes in Net OPEB Liability (Asset), Schedule of Contributions and Related Ratios and Schedule of Investment Returns.

During the fiscal year ended September 30, 2017, the Fund adopted Government Accounting Standards Board (GASB) Statement No. 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*, which addresses accounting and financial reporting issues related to measurement of the total and net OPEB liability, as well as financial reporting by plans that administer OPEB benefits on behalf of governments.

Financial Highlights

	Fiscal Year Ending September 30,			
	2019	2018	2017	
The Fund's Investments	\$1,404,403,946	\$1,400,747,331	\$1,299,091,485	
District's Contributions	46,000,000	44,500,000	31,000,000	

Management's Discussion and Analysis (continued) September 30, 2019 and 2018

Table 1 - Condensed Statements of Fiduciary Net Position as of September 30, 2019, 2018, and 2017

			FY2019 - FY2018				FY2018 - FY2017			
	2019	2018		Variance	Variance %		2017		Variance	Variance %
Assets										
Cash and cash equivalents	\$ 111,234,143	\$ 64,918,000	\$	46,316,143	71.3%	\$	82,057,838	\$	(17,139,838)	-20.9%
Receivables	5,089,173	4,516,294		572,879	12.7%		3,606,182		910,112	25.2%
Investments, at fair value	1,404,403,946	1,400,747,331		3,656,615	0.3%		1,299,091,485		101,655,846	7.8%
Total assets	1,520,727,262	1,470,181,625		50,545,637	3.4%		1,384,755,505		85,426,120	6.2%
Liabilities										
Investments and other payable	11,624,991	8,151,766		3,473,225	42.6%		18,473,444		(10,321,678)	-55.9%
Net Position Restricted for Other					_					
Post-Employment Benefits	\$ 1,509,102,271	\$ 1,462,029,859	\$	47,072,412	3.2%	\$	1,366,282,061	\$	95,747,798	7.0%

Table 2 - Condensed Statements of Changes in Fiduciary Net Position for Fiscal Years Ended September 30, 2019, 2018 and 2017

			FY2019 - FY2018			FY2018 - FY2017				
	2019	2018		Variance	Variance %		2017		Variance	Variance %
Additions										
Contributions	\$ 46,834,228	\$ 45,206,225	\$	1,628,003	3.6%	\$	31,521,466	\$	13,684,759	43.4%
Net investment income	20,646,604	67,385,188		(46,738,584)	-69.4%		150,514,898		(83,129,710)	-55.2%
Total additions	67,480,832	112,591,413		(45,110,581)	-40.1%		182,036,364		(69,444,951)	-38.1%
Deductions										
Insurance premiums	19,678,332	16,446,608		3,231,724	19.6%		12,891,620		3,554,988	27.6%
Administrative expenses	730,088	397,007		333,081	83.9%		303,897		93,110	30.6%
Total deductions	20,408,420	16,843,615		3,564,805	21.2%		13,195,517		3,648,098	27.6%
Net Increase	47,072,412	95,747,798	\$	(48,675,386)	-50.8%		168,840,847	\$	(73,093,049)	-43.3%
Beginning Net Position	1,462,029,859	1,366,282,061			-	1	1,197,441,214			
Ending Net Position	\$ 1,509,102,271	\$ 1,462,029,859				\$ 1	,366,282,061			

Management's Discussion and Analysis (continued) September 30, 2019 and 2018

Financial Analysis – Fiduciary Net Position

Fiscal Year 2019

The Fund's investments increased by \$3.7 million or 0.3%, over the prior fiscal year. Cash and cash equivalents increased by \$46.3 million or 71.3% over the prior fiscal year. The overall change in investments and cash and cash equivalents is primarily due to net investment income of \$20.6 million and the excess of contributions over deductions of \$27.1 million during fiscal year 2019. Market conditions were marginally less favorable during fiscal year 2019 compared to 2018; and as a result, eight (8) of fourteen (14) investment funds had positive rates of return. As of September 30, 2019, the funds were invested in equities, (58.82%); debt securities, (31.17%); and commodities, (2.67%).

Receivables increased by \$0.6 million or 12.7% over the prior fiscal year due to an increase in interest and dividends receivable and trades receivable at the end of the year.

Investments and other payables increased by \$3.5 million or 42.6% over the prior fiscal year primarily because of increases in trades and administrative fees payable at the end of the year.

Fiscal Year 2018

The Fund's investments increased by \$101.7 million or 7.8%, over the prior fiscal year. Cash and cash equivalents decreased by \$17.1 million or 20.9% over the prior fiscal year. The overall change in investments and cash and cash equivalents is primarily due to net investment income of \$67.4 million and the excess of contributions over deductions of \$28.4 million during fiscal year 2018. Market conditions were less favorable during fiscal year 2018 compared to 2017, and as a result, seven (7) of fourteen (14) investment funds had positive rates of return. As of September 30, 2018, the funds were invested in equities, (62.59%); debt securities, (29.88%); and commodities, (3.10%).

Receivables increased by \$0.9 million or 25.2% over the prior fiscal year due to an increase in interest and dividends receivable and trades receivable at the end of the year.

Investments and other payables decreased by \$10.3 million or 55.9% over the prior fiscal year primarily because of a decrease in trades payable at the end of the year.

Financial Analysis – Changes in Fiduciary Net Position

Fiscal Year 2019

Additions to the Fund decreased by \$45.1 million or 40.1%, over the prior fiscal year because of an increase in contributions of \$1.6 million and a decrease in net investment income of \$46.7 million. Deductions from the Fund increased by \$3.6 million or 21.2%, over the prior fiscal year, primarily because of an increase in insurance premiums and administrative expenses. A detailed analysis of the major components of additions and deductions are provided below.

Management's Discussion and Analysis (continued) September 30, 2019 and 2018

Fiscal Year 2018

Additions to the Fund decreased by \$69.4 million or 38.1%, over the prior fiscal year because of an increase in contributions of \$13.7 million and a decrease in net investment income of \$83.1 million. Deductions from the Fund increased by \$3.6 million or 27.6%, over the prior fiscal year, primarily because of an increase in insurance premiums. A detailed analysis of the major components of additions and deductions are provided below.

Fund Contributions

For fiscal years ended September 30, 2019, 2018 and 2017, the District made actuarially based contributions in the amounts of \$46,000,000, \$44,500,000, and \$31,000,000, respectively; which were based on congressionally approved budget authority. The District made contributions to the Fund that covered current and future Fund benefits. Annuitant contributions for years ended September 30, 2019, 2018, and 2017, amounted to \$834,228, \$706,225, and \$521,466, respectively.

Investment Income

For fiscal years ended September 30, 2019, 2018 and 2017, the Fund had a rate of return (gross of fees) of 1.70%, 5.22%, 12.49%, respectively, and net investment income of \$20,646,604, \$67,385,188, and \$150,514,898, respectively. The net investment income for the Fund for the fiscal year 2019 was a result of positive rates of returns on domestic and international fixed income, and negative returns on domestic and international fixed and unrealized gains in investments. The rate of return, by investment fund manager, is listed in the table below.

Investment	Rate of Return	Benchmark	Rate of Return	Benchmark	Rate of Return	Benchmark
	2019	2019	2018	2018	2017	2017
Access Capital ETI	7.27%	7.93%	-1.80%	-0.87%	0.22%	0.29%
Artisan International Value Equity	-0.17%	-4.31%	-2.09%	0.24%	20.27%	23.22%
Baillie Gifford International Growth Equity	-4.44%	2.64%	4.64%	6.27%	32.72%	16.11%
Bernstein Global Plus	5.01%	5.34%	-2.21%	-1.45%	-0.66%	-2.42%
Bernstein Strategic Core - Plus	10.58%	10.30%	-0.56%	-1.22%	0.57%	0.07%
Brandywine Large Cap Value	-3.28%	4.00%	9.02%	9.45%	22.84%	15.12%
ClearBridge Mid Cap Core	3.67%	3.19%	9.26%	13.98%	17.85%	15.32%
Farr, Miller Washington Large Cap Growth	3.59%	3.71%	16.70%	26.30%	17.11%	21.94%
Northern Trust Company Cash Fund	2.19%	2.39%	1.38%	1.59%	0.65%	0.66%
SSgA U.S. Aggregate Bond Index Fund	10.35%	10.30%	-1.20%	-1.22%	0.09%	0.07%
SSgA Emerging Market Index Fund	-2.01%	-2.02%	-0.95%	-0.81%	22.35%	22.46%
SSgA Russell 2000 Index Fund	-8.85%	-8.89%	15.27%	15.24%	20.81%	20.74%
BlueBay Emerging Market Bond	8.26%	10.91%	-7.40%	-4.60%	5.40%	5.92%
Gresham Strategic Commodities Fund	-11.10%	-6.57%	6.68%	2.59%	2.26%	-0.29%

Management's Discussion and Analysis (continued) September 30, 2019 and 2018

In 2019, eight (8) out of fourteen (14) investment funds had positive rates of return: led by Bernstein Strategic Core – Plus, 10.58%; SSgA U.S. Aggregate Bond Index Fund, 10.35%; BlueBay Emerging Market Bond, 8.26%; and Access Capital ETI, 7.27%. The Fund had dividend and interest income in the amount of \$22,577,571, a net appreciation of \$5,327,431, and a currency loss on FX contracts and settlements of \$(3,405,111) for the year ended September 30, 2019.

In 2018, seven (7) out of fourteen (14) investment funds had positive rates of return: led by Farr, Miller Washington Large Cap Growth, 16.70%; SSgA Russell 2000 Index Fund, 15.27%; ClearBridge Mid Cap Core, 9.26%; and Brandywine Large Cap Value, 9.02%. The Fund had dividend and interest income in the amount of \$20,140,281, a net appreciation of \$51,998,762, and a currency loss on FX contracts and settlements of \$(897,146) for the year ended September 30, 2018.

In 2017, the investment funds had positive rates of return: led by Baillie Gifford International Growth Equity, 32.72%; Brandywine Large Cap Value, 22.84%; SSgA Emerging Market Index Fund, 22.35%; and SSgA Russell 2000 Index Fund, 20.81%. The Fund had dividend and interest income in the amount of \$13,971,814, a net appreciation of \$141,292,317, and a currency loss on FX contracts and settlements of \$(1,573,378) for the year ended September 30, 2017.

Insurance Carrier Premiums

Insurance carrier premiums represent amounts paid to the Fund's health and life insurance carriers. The premium expenses for the years ended September 30, 2019, 2018, and 2017 totaled \$19,678,332, \$16,446,608, and \$12,891,620, respectively. The Defined Benefit Fund insurance premiums for the years ended September 30, 2019, 2018, and 2017 totaled \$17,556,642, \$14,590,936, and \$11,458,432, respectively. All remaining insurance premiums are attributable to general employee retirees. The insurance premiums increased in fiscal year 2019, when compared to 2018, and 2017, due to rising national health care costs. The rising costs resulted in an increase in coverage cost for District employees as well as the number of annuitants receiving benefits. As of September 30, 2019, 2018, and 2017, the Fund had 1,939, 1,683, and 1,538 annuitants receiving benefits, respectively.

Administrative Expenses

Administrative expenses increased by \$0.3 million or 83.9% over the prior fiscal year because, effective for fiscal year 2019, the District allocated to the Trust, the cost of certain administrative services it provides to the Trust. An allocation of administrative services cost was not made in fiscal year 2018. Administrative expenses also include annual actuarial, accounting, audit and certain investment services fees.

Summary of Actuarial Analysis

An independent actuary was retained by the District, to perform an actuarial valuation of the District of Columbia Annuitants' Post Retirement Life and Health Plan (the Plan) as of September 30, 2019. The purpose of the valuation was to provide an estimate of the total OPEB liability and the Fund's fiduciary net position.

Management's Discussion and Analysis (continued) September 30, 2019 and 2018

Summary of Actuarial Analysis (continued)

The results of the actuarial analysis are summarized below:

	September 30, 2019		September 30, 2018		
Total OPEB Liability	\$	1,464,701,414	\$	1,391,000,862	
Fund Fiduciary Net Position		1,509,102,271		1,462,029,859	
Net OPEB Liability (Asset)	\$	(44,400,857)	\$	(71,028,997)	
Fund Fiduciary Net Position as a					
percentage of the Total OPEB Liability		103.03%		105.11%	

Actuarial valuations of an ongoing Fund involve estimates of the value of reported amounts, and assumptions about the probability of occurrence of events far into the future. An example includes assumptions about future employment, mortality, and healthcare cost trends. Actuarially determined amounts are subject to continual revision as actual results are compared to past expectations, and new assumptions are made about the future.

The District executed an experience study during the 2018 and 2017 fiscal years. The study examined participation assumptions for the Fund. The number of current retirees under the Fund is quite small because the benefit is only available to retirees who were hired by the District after September 30, 1987. Since there is currently not substantial participation experience, the participation assumption chosen for valuations prior to the 2014 valuation purposely contained a large to scale margin when compared to current actual rates of participation. The District will continue to track actual rates of participation in the future, and will continue to compile participation data so that updated analyses of participation rates can be made as part of future valuations. The District will plan to maintain a funding ratio between 90% and 120% indicating that the plan is fully funded.

The actuarial calculations included actual retired annuitants and potential annuitants employed with the District. The actuarial valuations for fiscal year 2019 and 2018, were based on annuitant data as of September 30, 2018 and 2017, and were as follows:

	September 30,		
	2018	2017	
Retired Annuitants (included those who received benefits):			
Firefighters, Police Officers and Teachers	1,344	1,156	
General Employees	170	382	
	1,514	1,538	
Potential Annuitants (in active employment with the District)	25,419	24,788	

Management's Discussion and Analysis (continued) September 30, 2019 and 2018

Investment Management and Custody Fees

Investment management and custody fees for the years ended September 30, 2019, 2018, and 2017, are detailed in the table below. Investments increased to \$1,404,403,946 as of September 30, 2019, from \$1,400,747,331 as of September 30, 2018, which is an increase of 0.3% from the prior year, and an increase of 8.11% over the past two years.

	September 30,			
Investment Firm (In dollars)	2019	2018	2017	
Farr, Miller Washington Large Cap Growth	\$ 1,258,291	\$ 1,177,810	\$ 1,016,939	
Brandywine Large Cap Value	850,844	885,358	808,142	
ClearBridge Mid Cap Core	761,025	752,925	594,028	
Bernstein Global Plus	414,955	413,643	395,487	
Bernstein Strategic Core - Plus	385,735	350,905	341,309	
SSgA Emerging Market Index Fund	131,063	141,544	121,555	
SSgA Russell 2000 Index Fund	52,070	53,544	46,983	
SSgA U.S. Aggregate Bond Index Fund	38,657	37,188	36,990	
Subtotal Management Fees from Investment Managers	3,892,640	3,812,917	3,361,433	
State Street Bank and Trust Company Custody Fees**	-	-	98,583	
Northern Trust Company Custody Fees**	240,204	241,389	-	
Subtotal Management and Custody Fees	4,132,844	4,054,306	3,460,016	
Management Fees from Net Asset Valuation				
Access Capital ETI	165,059	153,874	157,171	
BlueBay Emerging Market Bond	404,983	374,087	291,778	
Gresham Strategic Commodities Fund	303,173	341,008	319,661	
Baillie Gifford International Growth Equity	820,675	858,795	820,721	
Artisan International Value Equity	737,895	739,156	754,949	
Subtotal Management Fees from Net Asset Valuation	2,431,785	2,466,920	2,344,280	
Total Investment Management and Custody Fees	\$ 6,564,629	\$ 6,521,226	\$ 5,804,296	

Note: Management fees paid from the net asset valuation are shown as part of the net appreciation in fair value of investments in the Statement of Changes in Fiduciary Net Position.

** Northern Trust Company became Custodian of assets on May 1, 2017.

Contact Information

This financial report is designed to provide a general overview of the Fund's finances. Questions concerning any information provided in this report, or requests for additional financial information, should be addressed to the Office of the Chief Financial Officer (Office of Finance and Treasury); Government of the District of Columbia; 1101 4th Street SW, 8th Floor Washington, DC, 20024.

Statements of Fiduciary Net Position As of September 30, 2019 and 2018

	2019	2018		
ASSETS				
Cash and cash equivalents	\$ 111,234,143	\$ 64,918,000		
Receivables:				
Investment and other	2,256,828	1,901,140		
Interest and dividends	2,832,345	2,615,154		
Total receivables	5,089,173	4,516,294		
Investments:				
Equities	891,542,527	917,390,452		
Debt securities	472,438,360	437,889,118		
Commodities	40,423,059	45,467,761		
Total investments	1,404,403,946	1,400,747,331		
Total Assets	1,520,727,262	1,470,181,625		
LIABILITIES				
Investments and other payables	11,624,991	8,151,766		
Net Position Restricted for Other				
Post Employment Benefits	\$ 1,509,102,271	\$ 1,462,029,859		

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

Statements of Changes in Fiduciary Net Position For the Years Ended September 30, 2019 and 2018

	2019	2018		
ADDITIONS				
Contributions:				
District contributions	\$ 46,000,000	\$ 44,500,000		
Annuitant contributions	834,228	706,225		
Total contributions	46,834,228	45,206,225		
Investment income:				
Net appreciation in fair value of investments	5,327,431	51,998,762		
Interest	11,425,284	10,327,204		
Dividends	11,152,287	9,813,077		
Currency loss on FX contracts and settlements	(3,405,111	.) (897,146)		
Other income	279,557	197,597		
Total income from investment activities	24,779,448	71,439,494		
Less: Investment management fees	4,132,844	4,054,306		
Net investment income	20,646,604	67,385,188		
Total Additions	67,480,832	112,591,413		
DEDUCTIONS				
Insurance carrier premiums	19,678,332	16,446,608		
Administrative expenses	730,088	397,007		
Total Deductions	20,408,420	16,843,615		
Changes in Plan Net Position	47,072,412	95,747,798		
Net Position Restricted for Other				
Post Employment Benefits				
Beginning of the year	1,462,029,859	1,366,282,061		
End of the Year	\$ 1,509,102,271	\$ 1,462,029,859		

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

Notes to Financial Statements September 30, 2019 and 2018

NOTE 1 – FUND DESCRIPTION AND CONTRIBUTIONS

The Government of the District of Columbia (the District) established the Fund on October 1, 1999, under the Annuitants' Health and Life Insurance Employer Contribution Amendment Act of 1999 (the "Act"). The Fund was established to receive the District's contributions for health and life insurance premiums, from which the District's contributions would be paid. The Fund is managed and administered jointly by the District's Office of Finance and Treasury (OFT), within the District's Office of the Chief Financial Officer; and the District's Office of Human Resources, pursuant to the terms of the Plan. The Fund is a fiduciary fund of the District.

The Fund is a single employer defined benefit fund. As of September 30, 2009, the District finalized all the terms and provisions of the Fund. A trust agreement, dated September 30, 2006, designated the Chief Financial Officer of the District as the trustee of the Fund. The Trust became operational in 2007; and is administered as an irrevocable trust, through which assets are accumulated, and benefits are paid as they become due, in accordance with the Fund's plan document.

The District established an Advisory Committee to advise the Office of Finance and Treasury on the administration and investment management of the Fund. The Committee consists of the following members: four appointed by the Chief Financial Officer (CFO); one appointed by the Mayor; one appointed by the Council; and one member who is either a member of the District of Columbia Retirement Board (DCRB) or a member of DCRB's professional staff.

The current advisory committee consists of the following members:

- Director, District of Columbia Department of Human Resources
- Executive Director, District of Columbia Retirement Board
- Chief Education Officer, Municipal Securities Rulemaking Board
- Deputy Director, Division of Finance, Federal Deposit Insurance Corporation
- Director, Office of Revenue and Analysis
- President, BDB Investment Partnership
- Chief Financial Officer, District of Columbia Water and Sewer Authority

Fund Description

The Fund is a single employer defined benefit fund that provides health and life insurance benefits to retired eligible District employees. All employees hired after September 30, 1987, who retired under the Teachers' Retirement System or Police and Fire Retirement System, or who are eligible for retirement benefits under the Social Security Act, are eligible to participate in the Fund. The Fund was established to hold and pay the District's contributions for health and life insurance for annuitants. The purpose of the Fund (as defined in Section 1.02 of the Plan) is to manage and administer the Fund for the benefit of annuitants, as provided in the Act.

Notes to Financial Statements September 30, 2019 and 2018

NOTE 1 – FUND DESCRIPTION AND CONTRIBUTIONS (continued)

Fund Description (continued)

To continue insurance benefits into retirement, employees must have been continuously enrolled (or covered as a family member) under the D.C. Employees Health Benefits (DCEHB) program, or the D.C. Employees Group Life Insurance (DCEGLI) program for five years prior to retirement. If the employee was employed less than five years, the employee must have been enrolled for his/her length of employment. Coverage under Medicare is not considered in determining continuous coverage. Dependents are also covered if the employee elects family coverage.

As of September 30, 2019, and 2018, the Fund had 1,939 and 1,683 annuitants (inactive plan members) currently receiving benefits, respectively. The 2019 annuitants were comprised of 1,505 Firefighters, Police, and Teachers; and 434 General Employees. The 2018 annuitants were comprised of 1,309 Firefighters, Police, and Teachers; and 374 General Employees. The premium expenses for the fiscal years ended September 30, 2019 and 2018, totaled \$19,678,332 and \$16,446,608, respectively. The insurance premiums attributable to Police, Firefighter, and Teacher retirees for the fiscal years 2019 and 2018 totaled \$17,556,642 and \$14,590,936, respectively. All remaining insurance premiums are attributable to General Employee retirees.

The actuarial valuation for the fiscal year ended September 30, 2019, was based on the actuarial valuation performed as of September 30, 2018. The actuarial report showed that there was a total of 1,514 retired participants. They consisted of 1,344 Firefighters, Police, and Teachers; and 170 General Employees.

The actuarial valuation for the fiscal year ended September 30, 2018, was based on the actuarial valuation performed as of September 30, 2017. The actuarial report showed that there was a total of 1,538 retired participants. They consisted of 1,156 Firefighters, Police, and Teachers; and 382 General Employees.

Contributions

Cost sharing arrangements for annuitants vary depending on whether the employee was a General Employee, Teacher, Police Officer or Firefighter. For General Employees and Teachers, annuitants with at least 10 years of creditable District service but less than 30 years of creditable District service pay a percentage of their health insurance premiums and the District pays the remainder. The percentage paid by the annuitant is 75%, reduced by an additional 2.50% for each year of creditable service over 10 years up to a maximum of 20 such additional years. Thus, the District's contribution shall not exceed 75% of the cost of the selected health benefit plan. For annuitants with 30 or more years of creditable District service, the District pays 75% of the cost of the selected health benefit plan.

Notes to Financial Statements September 30, 2019 and 2018

NOTE 1 – FUND DESCRIPTION AND CONTRIBUTIONS (continued)

Contributions (continued)

Covered family members of General Employees and Teacher annuitants with at least 10 years of creditable District service but less than 30 years of creditable District service pay a percentage of their health insurance premiums and the District pays the remainder. The percentage paid by the covered family member is 80%, reduced by an additional 1.00% for each year of creditable District service over 10 years up to a maximum of 20 such additional years. Thus, the District's contribution shall not exceed 40% of the cost of the selected health benefit plan for covered family members of an annuitant with 30 or less years of creditable District service pays up to 60% of the cost of the selected health benefit plan.

For Police Officers and Firefighters, annuitants with at least 10 years of creditable District service but less than 25 years of creditable District service pay a percentage of their health insurance premiums and the District pays the remainder. The percentage paid by the annuitant is 70%, reduced by an additional 3.00% for each year of creditable service over 10 years up to a maximum of 15 such additional years. Thus, the District's contribution shall not exceed 75% of the cost of the selected health benefit plan. For annuitants with 25 or more years of creditable District service or Police Officer or Firefighter annuitants who are injured in the line of duty, the District pays 75% of cost of the selected health benefit plan and the annuitant pays 25% of the cost of the selected health benefit plan. Special rules apply for Police Officers and Firefighters who were hired before November 10, 1996.

Covered family members of Police Officers and Firefighter annuitants with at least 10 years of creditable District service but less than 25 years of creditable District service pay a percentage of their health insurance premiums and the District pays the remainder. The percentage paid by the covered family members is 75%, reduced by an additional 3.00% for each year of creditable District service over 10 years. However, the portion paid by the covered family member is never less than 40% and the District's contribution shall not exceed 60% of the cost of the selected health benefit plan. Covered family members of Police Officers or Firefighters who were hired before November 10, 1996 pay 40% of the cost of the selected health benefit.

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation

The accompanying financial statements have been prepared in accordance with Generally Accepted Accounting Principles (GAAP) in the United States of America, as prescribed by the Governmental Accounting Standards Board (GASB).

Notes to Financial Statements September 30, 2019 and 2018

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Measurement Focus, Basis of Accounting, and Financial Statement Presentation

The Fund's financial statements are prepared using the economic resources measurement focus and accrual basis of accounting. The Fund's policy is to recognize member contributions in the period in which the contributions are due and paid. The District's (employer) contributions to the Fund are recognized when due, and when the District has made a formal commitment to provide the contributions. Benefit related expenses and refunds are recognized when due and payable, in accordance with the terms of the Fund. Most administrative costs (employee salaries) of the Fund are paid by the District.

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, and change therein, as of the date of the financial statements; as well as the actuarial present value of accumulated benefits during the reporting period. Actual results could differ from these estimates. Further actuarial valuations of an ongoing benefits fund involve estimates of the value of reported amounts, and assumptions about the probability of occurrence of events far into the future.

Examples include assumptions about future employment, mortality, interest rates, inflation rates, and healthcare cost trends. Amounts determined regarding the funded status of the Fund and the annual required contributions of the District are subject to continual revision, as actual results are compared with past expectations and new assumptions are made about the future.

Investment Valuation and Income Recognition

Investments are reported at fair value, with realized and unrealized gains and losses included in the Statements of Changes in Fiduciary Net Position. GASB issued Statement 40, *Deposit and Investment Risk Disclosures*, provides disclosure guidance requirements on deposits and investments of state and local governments that are exposed to investment risks related to credit risk, concentration of credit risks, interest rate risk, and foreign currency risk. As an element of interest rate risk, this Statement requires certain disclosures of investments that have fair values that are highly sensitive to changes in interest rates.

In addition, deposits that are not covered by depository insurance and are (a) uncollateralized, (b) collateralized with securities held by the pledging financial institution, or (c) collateralized with securities held by the pledging financial institution's agent, but not in the depositor-government's name, are part of the requirements of this Statement.

Also, investment securities that are uninsured, are not registered in the name of the government, and are held by either (a) the counterparty; or (b) the counterparty's trust department or agent, but not in the government's name, are also part of the requirements of Statement 40. See Note 5 for the related deposits and investment risk disclosures.

Notes to Financial Statements September 30, 2019 and 2018

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Fair Value Measurements

OFT is responsible for the oversight of the investments of Fund assets, and has established the Plan to guide the administration and management of the Fund. The duties and responsibilities of the OFT also include, but are not limited to, the financial administration and management of the Fund, the establishment of investment objectives, the determination of investment policies, the establishment of management policies, and the management and control of Fund assets. Fair value is the price that would be received to sell an asset, or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Fair value is a market-based measurement, not an entity-specific measurement. For some assets and liabilities, observable market transactions or market information might be available; for others, inputs are observable for similar transactions or the inputs are unobservable. However, the objective of fair value measurement in all cases is to determine the price at which an orderly transaction to sell assets or to transfer liability would take place between market participants at the measurement date under current market conditions. The Trustee has delegated to each investment firm the responsibility to determine the fair value of an investment security when a price is not available from a pricing service or broker-dealer. The investment firm's Portfolio Management and Performance Committee (Valuation Committee) is responsible for determining whether the price provided by a pricing service or broker-dealer does not approximate fair value.

Accounting principles generally accepted in the United States requires a three-level valuation hierarchy for disclosure of fair value measurements. The valuation hierarchy is based upon the transparency of inputs to the valuation of an asset or liability as of the measurement date. The three levels are defined as follows:

Level 1 – observable market inputs that are unadjusted quoted prices for identical assets or liabilities in active markets that a government can access at the measurement date.

Level 2 – inputs, other than quoted prices included within Level 1, that are observable for the asset or liability, either directly or indirectly (for example, quoted prices for similar assets or liabilities in active markets).

Level 3 – inputs to the valuation methodology are unobservable and significant to the fair value measurement (including the District's own assumptions in determining the fair value of investments).

Notes to Financial Statements September 30, 2019 and 2018

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Recent Accounting Pronouncements

Pronouncements Adopted

GASB issued Statement No. 82, *Pension Issues - an Amendment of GASB Statements No.* 67, *No.* 68, *and No.* 73; and Statement No. 85, *Omnibus 2017* effective for the year ended June 30, 2018. The Fund adopted these statements for the year ended September 30, 2018. The adoption did not have a material impact on the financial statements.

Pronouncement to be Adopted

GASB issued Statement No. 84, *Fiduciary Activities* effective for the year ending June 30, 2020. The Fund has not completed the process of evaluating the impact that will result from adopting the GASB statement, but does not expect that the GASB statement would have a material effect on the financial statements. The Fund will adopt the GASB statement, as applicable, by their effective date.

GASB issued Statement No. 87, *Leases* effective for the year ending June 30, 2021. This Statement requires the recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and as inflows of resources or outflows of resources recognized based on the payment provisions of the contract. The Fund has not completed the process of evaluating the impact that will result from adopting the GASB statement, but does not expect that the GASB statement would have a material effect on the financial statements. The Fund will adopt the GASB statement, as applicable, by their effective date.

GASB issued Statement No. 90, *Majority Financial Interests* effective for the year ending June 30, 2020. It defines a majority equity interest and specifies that a majority equity interest in a legally separate organization should be reported as an investment if a government's holding of the equity interest meets the definition of an investment. A majority equity interest that meets the definition of an investment should be measured using the equity method, unless it is held by a special-purpose government engaged only in fiduciary activities, a fiduciary fund, or an endowment (including permanent and term endowments) or permanent fund. Those governments and funds should measure the majority equity interest at fair value. The Fund has not completed the process of evaluating the impact that will result from adopting the GASB statement, but does not expect that the GASB statement would have a material effect on the financial statements. The Fund will adopt the GASB statement, as applicable, by their effective date.

Notes to Financial Statements September 30, 2019 and 2018

NOTE 3 – MASTER CUSTODIAN CONTRACT

The Fund administrators have a Master Custodian Contract to reduce risk of loss and to improve security. Maintaining assets with the Master Custodian provides the additional advantage of tracking information provided by the investment managers, since the Master Custodian provides information on investment transactions from an independent source; as well as providing reporting capabilities for the Fund. The Master Custodian of the plan is the Northern Trust Company.

NOTE 4 – CASH AND CASH EQUIVALENTS

Custodial credit risk for cash and cash equivalents is the risk that, in the event of a financial institution failure, the Fund may not be able to recover the value of cash and cash equivalents. The Fund, through its investment firms, maintains certain cash and cash equivalent balances. These balances are not required to be collateralized by statute or policy. The Fund's cash and cash equivalents balances are uninsured and unregistered, and are held by the counterparty in the Fund's name. The Fund maintains cash and cash equivalents in investments accounts, as detailed below, as of September 30, 2019 and 2018:

	September 30,								
Funds by Investment Firm		2019	Percentage*	2018	Percentage*				
Cash Account	\$	47,249,475	3.12%	\$ 23,685,501	1.62%				
Bernstein Strategic Core - Plus		9,458,749	0.62%	12,182,984	0.83%				
Brandywine Large Cap Value		16,538,230	1.09%	4,716,579	0.32%				
Farr, Miller Washington Large Cap Growth		19,977,304	1.32%	15,789,374	1.08%				
ClearBridge Mid Cap Core		4,411,065	0.29%	3,091,590	0.21%				
Bernstein Global Plus		13,599,320	0.90%	5,451,972	0.37%				
Total Cash and Cash Equivalents	\$	111,234,143	7.34%	\$ 64,918,000	4.43%				

* Includes cash and investments.

Notes to Financial Statements September 30, 2019 and 2018

NOTE 5 – INVESTMENTS

The majority of the Fund's assets as of September 30, 2019 and 2018 were investments, which totaled \$1,404,403,946 and \$1,400,747,331, respectively. As of September 30, 2019, and 2018, the funds were invested in equities (58.82% and 62.59%); debt securities (31.17% and 29.88%); and commodities (2.67% and 3.10%). The fair values of each investment firm's assets, as of September 30, 2019 and 2018, were as follows:

	September 30,								
	20	19	201	8					
Equity Funds by Investment Firm	Amount	Percentage*	Amount	Percentage*					
Brandywine Large Cap Value	\$ 198,081,654	13.07%	\$ 217,430,160	14.83%					
Farr, Miller Washington Large Cap Growth	205,819,618	13.58%	202,199,355	13.80%					
ClearBridge Mid Cap Core	152,042,939	10.03%	147,852,602	10.09%					
Baillie Gifford International Growth Equity	86,386,848	5.70%	90,399,525	6.17%					
Artisan International Value Equity	70,275,713	4.64%	70,395,780	4.80%					
SSgA Russell 2000 Index Fund	84,997,115	5.61%	93,249,445	6.36%					
SSgA Emerging Market Index Fund	93,938,640	6.20%	95,863,585	6.54%					
Total Equity	\$ 891,542,527	58.82%	\$ 917,390,452	62.59%					
Debt Securities Funds by Investment Firm	Amount	Percentage*	Amount	Percentage*					
Bernstein Strategic Core - Plus	\$ 169,188,442	11.16%	\$ 151,014,659	10.30%					
Bernstein Global Plus	146,842,679	9.69%	143,665,645	9.80%					
SSgA U.S. Aggregate Bond Index Fund	88,483,088	5.84%	80,185,092	5.47%					
Access Capital ETI	33,011,841	2.18%	30,774,805	2.10%					
BlueBay Emerging Market Bond	34,912,310	2.30%	32,248,917	2.20%					
Total Debt Securities	\$ 472,438,360	31.17%	\$ 437,889,118	29.88%					
Commodities Funds by Investment Firm	Amount	Percentage*	Amount	Percentage*					
Gresham Strategic Commodities Fund	\$ 40,423,059	2.67%	\$ 45,467,761	3.10%					

* Includes cash and investments.

There is a three-level valuation hierarchy for disclosure of fair value measurements. The valuation hierarchy is based upon the transparency of inputs to the valuation of an asset or liability as of the measurement date. An asset or a liability categorization within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement. The summary of inputs used to determine the fair valuation of the Fund's investments as of September 30, 2019 and 2018, is as follows:

Equity Securities: These investments are primarily classified as Level 1 of the fair value hierarchy, and are valued using prices quoted in active markets for those securities. The mutual funds are deemed to be actively traded, and support classification of the fair value measurement as Level 1 in the fair value hierarchy. The real estate investment trust securities are classified as Level 1 because these are activity traded securities.

Notes to Financial Statements September 30, 2019 and 2018

NOTE 5 – INVESTMENTS (continued)

Debt Securities: These investments are primarily classified as Level 2 of the fair value hierarchy, and are valued using market pricing and other observable market inputs for similar securities from several data providers, standard in the industry; or a broker quote in a non-active market. International government issues include structured debt which are valued using inflation adjusted mid evaluation and are classified as Level 3 in the fair value hierarchy. Collateralized auto loan securities, which are included in Collateralized Debt Obligations, are classified in Level 2; and are valued using consensus pricing. The mutual funds are deemed to be actively traded, and support classification of the fair value measurement as Level 1 in the fair value hierarchy.

Commodities Fund: The investment objectives of the fund are to provide a partial price hedge with an attractive risk/return profile, as compared to other products using a commodity index or a pool of commodities. Partial or complete redemption may be made, upon five (5) days' prior written notice, on the last business day of each calendar month or at such times and on such terms as the General Partner of the fund may, in his/her sole discretion, allow. The valuation techniques and inputs categorization within the valuation hierarchy is based upon Level 3; and uses the income approach, where the advisor considers a list of factors to determine whether there has been significant decrease in the relation to normal market activity.

Investment Derivative Instruments: The Fund's derivative financial instruments are valued by a third-party investment fund's manager, based on prevailing market data derived from proprietary models, and are carried at fair value. The Fund had two types of off-balance sheet derivative financial instrument outstanding: swaps and currency forwards. These derivative instruments are financial contracts, whose values depend on the value of one or more underlying assets, or reference rates or financial indices, which dictate the rate of change of output with respect to the financial contracts. The financial instruments categorization within the valuation hierarchy is based upon Level 2, which is the lowest level of input that is significant to the fair value measurement.

Notes to Financial Statements September 30, 2019 and 2018

NOTE 5 – INVESTMENTS (continued)

As of September 30, 2019, and 2018, the Fund had the following recurring fair value measurements:

			Fair			Value Measurements Using			
			Acti	oted Prices in ve Markets for entical Assets	Sig	nificant Other servable Inputs	5	Significant servable Inputs	
As of September 30, 2019		Total		(Level 1)		(Level 2)		(Level 3)	
Investments by fair value level									
Equity Securities									
U.S. Equities (by Industry)									
Industrials	\$	117,984,116	\$	117,984,116	\$	-	\$	-	
Consumer Retail		105,643,361		105,643,361		-		-	
Information Technology		105,130,263		105,130,263		-		-	
Financial Institutions		78,336,300		78,336,300		-		-	
Healthcare		94,863,243		94,863,243		-		-	
International Equities (by Industry)									
Industrials		4,660,087		4,660,087		-		-	
Consumer Retail		21,847,232		21,847,232		-		-	
Financial Institutions		2,520,942		2,520,942		-		-	
Healthcare		4,444,788		4,444,788		-		-	
Real Estate Investment Trust Securities		20,513,881		20,513,881		-		-	
Total equity securities		555,944,213		555,944,213		-		-	
Debt Securities									
U.S Debt Securities									
U.S. Government Issues		94,070,603		-		94,070,603		-	
Corporate Bonds		63,705,995		-		63,705,995		-	
Mortgage-backed Securities		183,864		-		183,864		-	
Credit Card/Automotive Receivables		11,440,753		-		11,440,753		-	
U.S. State and Local Government Bonds		6,522,940		-		6,522,940		-	
International Debt Securities									
International Government Issues		93,025,129		-		83,701,680		9,323,449	
Corporate Bonds		41,931,954		-		41,931,954		-	
Credit Card/Automotive Receivables		254,895		-		254,895		-	
Other Government Bonds		4,894,987		-		4,894,987		-	
Mutual Funds		33,011,841		33,011,841		-		-	
Total debt securities		349,042,961	-	33,011,841		306,707,671		9,323,449	
Commodity Investments									
Gresham Commodities Fund		40,423,059						40,423,059	
Total Investments by Fair Value Level		945,410,233	\$	588,956,054	\$	306,707,671	\$	49,746,508	
Total investments by Fair Value Level		945,410,255	¢	388,930,034	¢	300,707,071	<u>ب</u>	49,740,508	
Investments measured at the Net Asset Value (NAV)									
SSgA Emerging Market Index Fund		93,938,640							
SSgA Russell 2000 Index Fund		84,997,115							
SSgA U.S. Aggregate Bond Index Fund		88,483,088							
Ballie Gifford International Growth Equity		86,386,848							
Artisan International Value Equity		70,275,713							
BlueBay Emerging Market Bond		34,912,309							
Total investments measured at the NAV		458,993,713							
Total investments measured at fair value	\$	1,404,403,946							
Investment derivative instruments									
Interest Rate Swaps	\$	64,030	\$	-	\$	64,030	\$	-	
Credit Defaults Swaps	Ψ	(630,121)	Ψ	-	Ψ	(630,121)	Ψ	-	
Foreign Exchange Forwards		(538,315)		-		(538,315)		-	
Total investment derivative instruments	\$	(1,104,406)	\$	-	\$	(1,104,406)	\$	-	
	Ψ	(1,101,100)	Ψ		Ψ	(1,101,100)	<u> </u>		

Notes to Financial Statements September 30, 2019 and 2018

NOTE 5 – INVESTMENTS (continued)

				F	air Value	Measurements Us	sing	
As of Sontombor 30, 2018			Acti	oted Prices in ve Markets for entical Assets	Sig	nificant Other ervable Inputs	Unobs	Significant servable Inputs
As of September 30, 2018		Total		(Level 1)		(Level 2)	-	(Level 3)
Investments by fair value level								
Equity Securities								
U.S. Equities (by Industry)	¢	110 151 001	¢	112 121 001	¢		¢	
Industrials Consumer Retail	\$	113,474,991	\$	113,474,991	\$	-	\$	-
		111,291,075		111,291,075		-		-
Information Technology		104,767,636		104,767,636		-		-
Financial Institutions Healthcare		96,347,925		96,347,925		-		-
		92,275,405		92,275,405		-		-
International Equities (by Industry)		6 027 054		6 027 054				
Industrials		6,937,954		6,937,954		-		-
Consumer Retail		24,029,515		24,029,515		-		-
Financial Institutions		1,972,512		1,972,512		-		-
Healthcare		3,970,704		3,970,704		-		-
Real Estate Investment Trust Securities		12,414,401		12,414,401			-	-
Total equity securities		567,482,118		567,482,118		-		-
Debt Securities								
U.S Debt Securities								
U.S. Government Issues		85,304,105		-		85,304,105		-
Corporate Bonds		57,459,118		-		57,459,118		-
Mortgage-backed Securities		247,890		-		247,890		-
Credit Card/Automotive Receivables		13,296,093		-		13,296,093		-
U.S. State and Local Government Bonds International Debt Securities		4,615,344		-		4,615,344		-
International Government Issues		95,732,560		-		95,536,738		195,822
Corporate Bonds		35,000,805		-		35,000,805		-
Other Government Bonds		3,024,387		-		3,024,387		-
Mutual Funds		30,774,805		30,774,805		-		-
Total debt securities		325,455,107		30,774,805		294,484,480		195,822
Commodity Investments								
Gresham Commodities Fund		45,467,761		-		-		45,467,761
Total Investments by Fair Value Level		938,404,986	\$	598,256,923	\$	294,484,480	\$	45,663,583
Investments measured at the Net Asset Value (NAV)								
SSgA Emerging Market Index Fund		95,863,584						
SSgA Russell 2000 Index Fund		93,249,445						
SSgA U.S. Aggregate Bond Index Fund		80,185,093						
Ballie Gifford International Growth Equity		90,399,525						
Artisan International Value Equity		70,395,780						
BlueBay Emerging Market Bond		32,248,918						
Total investments measured at the NAV		462,342,345						
Total investments measured at fair value	\$	1,400,747,331						
Investment derivative instruments								
Interest Rate Swaps	\$	(76,888)	\$	-	\$	(76,888)	\$	-
Credit Defaults Swaps		(645,067)		-		(645,067)		-
Foreign Exchange Forwards		(899,675)		-		(899,675)		-

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Notes to Financial Statements September 30, 2019 and 2018

NOTE 5 – INVESTMENTS (continued)

Investments measured at the Net Asset Value (NAV): The NAV of an investment company is the company's total assets, minus its total liabilities. This investment category consists of six (6) funds that include funds or products that employ dynamic trading strategies aimed at achieving absolute returns. Certain investment funds below do not redeem shares on a daily basis. The funds have varying restrictions on liquidity and transferability. The fair values of the investments in this type have been determined using the NAV per share of the investments. Additional information about the nature of investments measured at the Net Asset Value per share is presented in the tables below:

	F	air Value as of	f Sep	tember 30,	Unfunded	Redemption Frequency (If Currently	Redemption Notice
Investment		2019		2018	Commitments	Eligible)	Period
SSgA Emerging Market Index Fund (1)	\$	93,938,640	\$	95,863,584	None	Monthly	5 days
SSgA Russell 2000 Index Fund (2)		84,997,115		93,249,445	None	Daily	N/A
SSgA U.S. Aggregate Bond Index Fund (3)		88,483,088		80,185,093	None	Daily	N/A
Baillie Gifford International Growth Equity (4)		86,386,848		90,399,525	None	Monthly	5 days
Artisan International Value Equity (5)		70,275,713		70,395,780	None	Monthly	5 days
BlueBay Emerging Market Bond (6)		34,912,309		32,248,918	None	Monthly	30 days
Total Investments Measured at NAV	\$	458,993,713	\$	462,342,345			

- SSgA Emerging Market Index Fund: This fund is managed, using a "passive" or "indexing" investment approach, by which SSgA attempts to match, before expenses, the performance of the MSCI Emerging Markets Index, which is a free float-adjusted market capitalization index that is designed to measure equity market performance of emerging markets. Equity securities may include common stocks, preferred stocks, depository receipts, or other securities convertible into common stock. Equity securities held by the fund may be denominated in foreign currencies and may be held outside the United States. In some cases, it may not be possible or practicable to purchase all the securities comprising the Index, or to hold them in the same weightings as they represent in the Index. In those circumstances, SSgA may employ a sampling or optimization technique to construct the portfolio.
- 2) *SSgA Russell 2000 Index Fund*: The fund is managed using a "passive" or "indexing" investment approach, by which SSgA attempts to match, before expenses, the performance of the Index. SSgA will typically attempt to invest in the equity securities comprising the Index, in approximately the same proportions as they are represented in the Index. Equity securities may include common stocks, preferred stocks, depository receipts, or other securities convertible into common stock. The strategy may purchase securities in their initial public offerings ("IPOs"). In some cases, it may not be possible or practicable to purchase all the securities comprising the Index, or to hold them in the same weightings as they represent in the Index. In those circumstances, SSgA may employ a sampling or optimization technique to construct the portfolio in question.

Notes to Financial Statements September 30, 2019 and 2018

NOTE 5 – INVESTMENTS (continued)

- 3) *SSgA U.S. Aggregate Bond Index Fund*: The fund seeks an investment return that approximates as closely as practicable, before expenses, the performance of the Barclays Capital U.S. Aggregate Bond Index (the "Index") over the long term. The fund is managed using a "passive" or "indexing" investment approach, by which SSgA attempts to replicate, before expenses, the performance of the Index. The fund may attempt to invest in the securities comprising the Index in the same proportions as they are represented in the Index. However, due to the large number of securities in the Index and the fact that many of the securities comprising the Index may be unavailable for purchase, it may not be possible for the fund to purchase some of the securities comprising the Index.
- 4) *Baillie Gifford International Growth Equity*: The fund is designed to pursue long-term capital appreciation by investing in high-quality, attractively valued, non-U.S. growth companies of all market capitalizations. Their investment process is based on a highly analytical research-driven process, and builds portfolios from the bottom-up. The strategy invests primarily in developed markets, but also may invest up to 20% of the Fund's net assets at market value, at the time of purchase, in emerging markets. Currency hedging is used for defensive purposes, and are only used under certain conditions.
- 5) Artisan International Value Equity: This fund seeks to invest in undervalued companies that are generating high returns on capital, are financially strong and are managed by people who are working to build value over time. The investment team seeks to invest in companies with histories of generating strong free cash flow, improving returns on capital and strong competitive positions in their industries. This criteria helps rule out businesses that are statistically cheap, but whose values are deteriorating over time. The team believes that investing in companies with strong balance sheets helps to reduce the potential for capital risk and provides company management the ability to build value when attractive opportunities are available.
- 6) *Blue Bay Emerging Market Bond*: This fund invests predominantly in fixed income securities issued by emerging market countries or issuers based in such countries. The fund seeks to generate excess returns via superior country and issue selection through an in-depth country and security selections process focusing on value in external credit spreads, local currencies and local interest rates. Particular emphasis is given to avoiding deteriorating credits and one-off currency devaluations. The fund has a focus on absolute returns, both their long-only and alternative strategies use short exposures (either directly or via credit derivatives) as one of a number of techniques designed to deliver absolute-style returns. There is a strong emphasis on capital preservation; the use of credit derivatives helps to maximize portfolio efficiency and potentially minimize risk.

During the year ended September 30, 2019, the Fund recognized no transfers to/from Level 1 or 2. The Fund's policy is to recognize transfers to/from Level 1, Level 2, and Level 3 at the end of the reporting period, utilizing fair value at the beginning of the period.

Notes to Financial Statements September 30, 2019 and 2018

NOTE 5 – INVESTMENTS (continued)

The annual money-weighted rate of return on OPEB plan investments is calculated as the internal rate of return on OPEB plan investments, net of OPEB plan investment expense. OPEB plan investment expense should be measured on the accrual basis of accounting. Inputs to the internal rate of return calculation should be determined at least monthly. However, the use of more frequently determined inputs is encouraged. The valuation of the weighted rate of return was 1.40% and 4.88% for fiscal year 2019 and 2018, respectively.

Custodial Credit Risk is the risk that, in the event of the failure of the counterparty to a transaction, a government may not be able to recover the value of investments or collateral securities that are in the possession of an outside party. The counterparty is the party that pledges collateral or repurchase agreement securities to the government; or that sells investments to, or buys them for, the government.

The Fund's investments are uninsured and unregistered, and are held by the counterparty in the Fund's name. The Fund is also subject to certain credit, interest rate, and foreign currency risks.

Foreign Currency Risk is the risk that changes in exchange rates will adversely affect the fair value of an investment in a foreign currency. The Fund does not have a formal policy for limiting its exposure to changes in exchange rates. The Fund's investments as of September 30, 2019 and 2018, held in currencies other than U.S. dollars, were as follows:

Notes to Financial Statements September 30, 2019 and 2018

NOTE 5 – INVESTMENTS (continued)

As of September 30, 2019

	Short Term and	Convertible and	
International Securities	Cash	Fixed Income	Total
AUSTRALIAN DOLLAR	\$ (18,404)	\$ -	\$ (18,404)
BRAZILIAN REAL	(11,154)	-	(11,154)
BRITISH POUND STERLING	(172,469)	11,131,184	10,958,715
CANADIAN DOLLAR	(13,550)	12,299,918	12,286,368
CHILEAN PESO	33,811	-	33,811
EURO	799,140	51,665,159	52,464,299
INDIAN RUPEE	(17,230)	-	(17,230)
INDONESIAN RUPIAH	34,426	984,934	1,019,360
JAPANESE YEN	122,714	31,258,236	31,380,950
MALAYSIAN RINGGIT	207,213	4,540,292	4,747,505
MEXICAN PESO	(80,517)	1,576,259	1,495,742
NEW ISRAELI SHEKEL	(21,102)	-	(21,102)
NEW ZEALAND DOLLAR	19,777	-	19,777
NORWEGIAN KRONE	(121,636)	-	(121,636)
POLISH ZLOTY	87,610	-	87,610
RUSSIAN RUBLE	44,083	1,911,197	1,955,280
SINGAPORE DOLLAR	24,552	1,272,133	1,296,685
SOUTH AFRICAN RAND	9,419	377,136	386,555
SWEDISH KRONA	95,514	3,641,807	3,737,321
Totals	\$ 1,022,197	\$ 120,658,255	\$ 121,680,452

Notes to Financial Statements September 30, 2019 and 2018

NOTE 5 – INVESTMENTS (continued)

As of September 30, 2018

	Short Term and		Convertible and		
International Securities		Cash	Fi	xed Income	 Total
ARGENTINE PESO	\$	21,242	\$	495,471	\$ 516,713
AUSTRALIAN DOLLAR		(14,268)		1,847,197	1,832,929
BRAZILIAN REAL		(72,071)		1,572,803	1,500,732
BRITISH POUND STERLING		46,049		4,223,703	4,269,752
CANADIAN DOLLAR		83,162		12,050,537	12,133,699
COLOMBIAN PESO		(18,923)		-	(18,923)
EURO		429,856		60,756,391	61,186,247
INDIAN RUPEE		3,509		-	3,509
JAPANESE YEN		430,241		31,735,502	32,165,743
MALAYSIAN RINGGIT		1,174,255		1,514,522	2,688,777
MEXICAN PESO		(55,953)		1,885,724	1,829,771
NEW ISRAELI SHEKEL		12,574		-	12,574
NEW TAIWAN DOLLAR		(16,529)		-	(16,529)
NEW ZEALAND DOLLAR		85,307		352,655	437,962
NORWEGIAN KRONE		19,311		(662)	18,649
SINGAPORE DOLLAR		9,323		1,125,081	1,134,404
SOUTH KOREAN WON		(7,957)		-	(7,957)
SWEDISH KRONA		22,508		-	22,508
URUGUAYAN PESO		1,748		-	 1,748
Totals	\$	2,153,384	\$	117,558,924	\$ 119,712,308

Notes to Financial Statements September 30, 2019 and 2018

NOTE 5 – INVESTMENTS (continued)

Credit Risk is the risk that an issuer to an investment will not fulfill its obligations. The average quality of the all the bond holdings in each investment manager's portfolio should be maintained at "A" or higher. For portfolios that were not individually managed as of September 30, 2019, the credit quality was on par with the index value of "BBB-" or higher. Exchange-traded derivatives that are valued using quoted prices are classified within Level 1 of the valuation hierarchy. The Fund has not failed to access collateral, when required. Since these derivative products have been established for some time, the Fund uses models that are widely accepted in the financial services industry. These models reflect the contractual terms of the derivatives, including the period to maturity; and market-based parameters such as interest rates, volatility, and the credit quality of the counterparty. Further, many of these models do not contain a high level of subjectivity, as the methodologies used in the models do not require significant judgment, and inputs to the model are readily observable from actively quoted contracts and credit default swaps. Such instruments are generally classified within Level 2 on the valuation hierarchy. The aggregate fair value of derivatives in net asset positions, net of collateral posted by the counter party; and the effect of master netting arrangements are reflected in net unrealized gain (loss) on Foreign Currency Forward Contracts, in the tables on pages 30 and 31.

Although the Fund executes hedging derivative instruments with various counterparties; eight contracts, comprising approximately 90 percent of the net exposure to credit risk, are based with two counterparties. There are no significant concentrations of net exposure to credit risk that has not been reduced by collateral and other off-sets.

As of September 30, 2019, and 2018, the average quality ratings by investment firm were as follows:

	September 30,				
Investment Firm	2019	2018			
Bernstein Strategic Core - Plus	AA-	AA-			
Bernstein Global Plus	Α	Α			
Access Capital ETI	AAA	AAA			
SSgA U.S. Aggregate Bond Index Fund	Aa2	Aa2			
BlueBay Emerging Market Bond	BBB-	BBB+			

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. The Fund addresses interest rate risk through a process that focuses on the review of investment managers and fund returns. The Fund also uses an independent consultant to examine how sensitive the fixed income portfolios' underlying assets are to movements in interest rates, and to recommend any appropriate investment manager changes.

Notes to Financial Statements September 30, 2019 and 2018

NOTE 5 – INVESTMENTS (continued)

The average duration in years was as follows, by investment firm, for the years ended September 30, 2019 and 2018:

	Septem	1ber 30,
Investment Firm	2019	2018
Bernstein Strategic Core - Plus	5.44	5.49
Bernstein Global Plus	8.55	7.23
Access Capital ETI	3.03	5.44
SSgA U.S. Aggregate Bond Index Fund	5.79	6.03
BlueBay Emerging Market Bond	6.65	5.67

Derivative Financial Instruments: In accordance with the Fund's investment policies, the Fund regularly invests in derivative financial instruments with off-balance-sheet risk in the normal course of its investing activities, in order to enhance return on investment and manage exposure to certain risks within the fund.

Derivative instruments are financial contracts whose values depend on the value of one or more underlying assets, reference rates, or financial indices. During fiscal year 2019, the Fund invested directly in forward currency contracts.

As of September 30, 2019 and 2018, the Fund had two types of off-balance-sheet derivative financial instrument outstanding: swaps and currency forwards. The Swaps represents Interest Swaps and Credit Default Swaps which are used to hedge interest rate and credit exposure risks. Currency forwards represent foreign exchange contracts, and are used to effect settlements and to protect the base currency value of portfolio assets denominated in foreign currencies, against fluctuations in the exchange rates of those currency exchange contract is a commitment to purchase or sell a foreign currency at a future date and at a negotiated price. The credit risk of currency contracts that are exchange-traded lies with the clearinghouse of the exchange where the contracts are traded. The credit risk of currency contracts traded over the counter lies with the counterparty, and exposure usually is equal to the unrealized profit on in-the-money contracts. The market risk in foreign currency contracts is related to adverse movements in currency exchange rates.

Notes to Financial Statements September 30, 2019 and 2018

NOTE 5 – INVESTMENTS (continued)

Below is the list of derivatives aggregated by investment type, as of September 30, 2019 and 2018:

	Change in Fa	ir Value	Fair Value as of Sept	ember 30, 2019	
Investment Derivatives	Classification	Amount	Classification	Amount	Notional Amount
Credit Default Swaps Bought	Investment Revenue	\$ (43,903)	Swaps	\$ 42,760	\$ 709,000
Credit Default Swaps Written	Investment Revenue	216,739	Swaps	(672,881)	1,515,000
Fixed Income Futures Long	Investment Revenue	989,391	Futures	-	52,077,434
Fixed Income Futures Short	Investment Revenue	120,662	Futures	-	(33,542,043)
Fixed Income Options Bought	Investment Revenue	95	Options	-	-
Foreign Exchange Forwards	Investment Revenue	(3,405,111)	Forwards	(538,315)	150,441,545
Pay Fixed Interest Rate Swaps	Investment Revenue	(56,930)	Swaps	152,698	1,515,000
Receive Fixed Interest Rate Swaps	Investment Revenue	(88,668)	Swaps	(88,668)	73,250,000
Total		\$ (2,267,725)		\$ (1,104,406)	
		<u>+ (-))</u>			
As of September 30, 2018	Change in Fa		Fair Value as of Sept		
	Change in Fa Classification		Fair Value as of Sept Classification		Notional Amount
As of September 30, 2018		ir Value		ember 30, 2018	Notional Amount \$ 3,490,000
As of September 30, 2018 Investment Derivatives	Classification	ir Value Amount	Classification	ember 30, 2018 Amount	
As of September 30, 2018 Investment Derivatives Credit Default Swaps Bought	Classification Investment Revenue	<u>ir Value</u> <u>Amount</u> \$ (30,262)	Classification Swaps	ember 30, 2018 <u>Amount</u> \$ 121,271	\$ 3,490,000
As of September 30, 2018 Investment Derivatives Credit Default Swaps Bought Credit Default Swaps Written	Classification Investment Revenue Investment Revenue	ir Value <u>Amount</u> \$ (30,262) 102,245	Classification Swaps Swaps	ember 30, 2018 <u>Amount</u> \$ 121,271	\$ 3,490,000 28,480,000
As of September 30, 2018 Investment Derivatives Credit Default Swaps Bought Credit Default Swaps Written Fixed Income Futures Long	Classification Investment Revenue Investment Revenue Investment Revenue	ir Value <u>Amount</u> \$ (30,262) 102,245 (615,296)	Classification Swaps Swaps Futures	ember 30, 2018 <u>Amount</u> \$ 121,271	\$ 3,490,000 28,480,000 112,788,664
As of September 30, 2018 Investment Derivatives Credit Default Swaps Bought Credit Default Swaps Written Fixed Income Futures Long Fixed Income Futures Short	Classification Investment Revenue Investment Revenue Investment Revenue Investment Revenue	ir Value <u>Amount</u> \$ (30,262) 102,245 (615,296) 359,786	Classification Swaps Swaps Futures Futures	ember 30, 2018 <u>Amount</u> \$ 121,271	\$ 3,490,000 28,480,000 112,788,664
As of September 30, 2018 Investment Derivatives Credit Default Swaps Bought Credit Default Swaps Written Fixed Income Futures Long Fixed Income Futures Short Fixed Income Options Bought	Classification Investment Revenue Investment Revenue Investment Revenue Investment Revenue Investment Revenue	ir Value <u>Amount</u> \$ (30,262) 102,245 (615,296) 359,786 (9,091)	Classification Swaps Swaps Futures Futures Options	ember 30, 2018 Amount \$ 121,271 (766,338) - -	\$ 3,490,000 28,480,000 112,788,664 (38,040,768)
As of September 30, 2018 Investment Derivatives Credit Default Swaps Bought Credit Default Swaps Written Fixed Income Futures Long Fixed Income Futures Short Fixed Income Options Bought Foreign Exchange Forwards	Classification Investment Revenue Investment Revenue Investment Revenue Investment Revenue Investment Revenue	ir Value <u>Amount</u> \$ (30,262) 102,245 (615,296) 359,786 (9,091) (897,146)	Classification Swaps Swaps Futures Futures Options Forwards	ember 30, 2018 <u>Amount</u> \$ 121,271 (766,338) - - (899,675)	\$ 3,490,000 28,480,000 112,788,664 (38,040,768) - 102,340,986

Contingencies:

All the Fund's derivative instruments include provisions that require the Fund to post collateral in the event its credit rating falls below "AA" as issued by Standard & Poor's, or "Aa" as issued by Moody's Investors Services. The collateral posted is to be in the form of U.S. Treasury funds in the amount of the fair value of hedging derivative instruments in liability positions, net of the effect of applicable netting arrangements. If the Fund does not post collateral, the hedging derivative instrument may be terminated by the counterparty. If the collateral posting requirements were triggered, the Fund would be required to post the aggregate fair value in collateral to its counterparties. The District had ratings of "Aaa" and "Aa" for the fiscal years 2019 and 2018, respectively; therefore, no collateral were required to be posted for these fiscal years.

Notes to Financial Statements September 30, 2019 and 2018

NOTE 5 – INVESTMENTS (continued)

The net unrealized gain (loss) on foreign currency forward contracts for the years ended September 30, 2019 and 2018, were as follows:

	20	19		20	18	
			nrealized			realized
	 Cost	Ga	uin/(Loss)	 Cost	Ga	in/(Loss)
Foreign Currency Contracts Purchased						
AUSTRALIAN DOLLAR	\$ 3,428,546	\$	(4,568)	\$ 2,553,501	\$	(51,355)
BRAZILIAN REAL	7,132,922		10,135	3,236,643		64,048
CANADIAN DOLLAR	59,367		69	61,001		(109)
COLOMBIAN PESO	809,889		(27,811)	-		-
CHINESE YUAN	5,149,403		(31,272)	-		-
CHILEAN PESO	-		-	1,146,749		13,211
CZECH KORUNA	265,251		(10,425)	254,456		(2,085)
DANISH KRONE	771,880		(11,615)	815,193		(7,933)
EURO	26,645,032		(613,122)	11,763,062		(141,712)
BRISTISH POUND STERLING	9,617,428		41,394	10,752,013		(67,295)
HUNGARIAN FORINT	212,967		(12,670)	224,831		(2,841)
INDIAN RUPEE	1,538,363		(33,868)	2,233,089		(71,681)
INDONESIAN RUPIAH	-		-	696,433		(8,390)
NEW ISRAELI SHEKEL	1,618,759		(183)	-		-
JAPANESE YEN	25,925,573		(184,092)	21,879,152		(859,031)
SOUTH KOREAN WON	3,376,499		21,116	4,833,368		71,828
MALAYSIAN RINGGIT			-	758,288		(12,660)
MEXICAN PESO	2,370,713		(5,573)	-		
NORWEGIAN KRONE	270,161		(4,884)	3,264,291		4,462
POLISH ZLOTY	2,921,721		(153,867)	237,060		(1,066)
RUSSIAN RUBLE	965,917		(10,761)	352,755		2,522
SINGAPORE DOLLAR	-		-	702,902		(2,514)
SWEDISH KRONA	-		-	1,152,215		820
SWISS FRANC	1,607,504		(15,154)	1,937,203		(13,976)
THAI BAHT	903,483		6,869	832,524		29,173
Total Contracts Purchased			(1,040,282)			(1,056,584)
Foreign Currency Contracts Sold						
AUSTRALIAN DOLLAR	-		-	2,300,726		(14,268)
BRAZILIAN REAL	4,754,385		(11,154)	3,274,988		(72,071)
BRITISH POUND STERLING	7,459,225		87,132	5,590,947		29,484
CANADIAN DOLLAR	7,790,427		(21,445)	5,181,965		10,262
COLOMBIAN PESO			-	741,644		(18,923)
CHILEAN PESO	1,389,488		33,811	-		-
EURO	12,818,503		322,622	3,607,523		8,821
INDIAN RUPEE	1,466,621		(17,230)	671,695		3,509
INDONESIAN RUPIAH	134,544		334	-		-
JAPANESE YEN	6,937,882		16,830	10,754,593		241,841
MALAYSIAN RINGGIT	3,933,120		(5,773)	-		-
MEXICAN PESO	3,128,104		(50,123)	1,848,618		(24,378)
NEW ISRAELI SHEKEL	1,237,089		(21,102)	841,200		12,574
NEW TAIWAN DOLLAR	-		-	1,663,914		(16,529)
NEW ZEALAND DOLLAR	1,229,498		19,777	460,536		7,475
POLISH ZLOTY	2,275,417		87,610	-		-
RUSSIAN RUBLE	1,296,378		8,016	-		-
SINGAPORE DOLLAR	2,305,984		8,507	1,332,699		(6,916)
NEW TAIWAN DOLLAR	-		-	651,918		(7,957)
SOUTH AFRICAN RAND	289,058		9,419	-		-
SWEDISH KRONA	2,298,868		35,993	-		-
URUGAYAN PESO	-		-	187,556		1,748
Total Contracts Sold			503,224			154,672
Net Unrealized (Loss) Gain on Foreign						
Currency Forward Contracts		\$	(537,058)		\$	(901,912)

Notes to Financial Statements September 30, 2019 and 2018

NOTE 6 - NET OPEB LIABILITY

The components of the net OPEB liability for the District of Columbia as of September 30, 2019 and 2018 rolled forward, were as follows:

	 2019	 2018
Total OPEB Liability	\$ 1,464,701,414	\$ 1,391,000,862
Fund Fiduciary Net Position	 1,509,102,271	 1,462,029,859
Net OPEB Liability (Asset)	\$ (44,400,857)	\$ (71,028,997)
Fund Fiduciary Net Position as a percentage of the Total OPEB Liability	 103.03%	 105.11%

Actuarial Assumptions

The total OPEB liability was determined by an actuarial valuation as of September 30, 2018 and 2017, using the following actuarial assumptions, applied to all periods in the measurement and rolled forward to the measurement date as of September 30, 2019 and 2018:

	2019	2018		
Actuarial Cost Method	Entry Age Normal	Entry Age Normal		
Amortization Method	Level Percent of Pay, Closed	Level Percent of Pay, Closed		
Remaining Amortization Period	17 years beginning with fiscal year end 2019	18 years beginning with fiscal year end 2018		
Asset Valuation Method	Market Value	Market Value		
Investment Rate of Return	6.50%	6.50%		
Discount Rate	6.50%	6.50%		
Salary Increase Rate	3.50% (plus merit scale)	3.50% (plus merit scale)		
Medical Inflation Rate	5.4%, grading to 3.9%	5.5%, grading to 3.9%		
	Assumption utilizes the Society of Actuaries Getzen Medical Trend Model, and reaches the ultimate medical inflation rate in 2040.	Actuaries Getzen Medical Trend		
Mortality	The RP-2014 Healthy Employee Mortality Table with the MP-2018 Improvement Scale, fully generational, was used for healthy lives both pre- and post-retirement. For disabled lives, the RP-2014 Disabled Life Mortality Table was used.	The RP-2014 Healthy Employee Mortality Table with the MP-2017 Improvement Scale, fully generational, was used for healthy lives both pre- and post-retirement. For disabled lives, the RP-2014 Disabled Life Mortality Table was used.		

Notes to Financial Statements September 30, 2019 and 2018

NOTE 6 - NET OPEB LIABILITY (continued)

Long-term Expected Rate of Return

The long-term expected rate of return on OPEB plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of real rates of return for each major asset class included in the target asset allocation as of September 30, 2019 and 2018 are shown below. The 2019 rates of return are geometric real rates of return, and the 2018 returns are arithmetic real rates of return.

	2019		2018			
	Long-Term	Target	Long-Term	Target		
Asset Class	Expected Real Rate	Allocation	Expected Real Rate	Allocation		
U.S. Equity	6.6%	45.0%	7.9%	45.0%		
International Equity	6.9%	9.0%	8.9%	9.0%		
Emerging Market Equity	8.9%	4.0%	11.3%	4.0%		
Core Fixed Income	3.4%	24.0%	3.2%	24.0%		
Developed Markets Fixed Income	2.4%	10.0%	2.9%	10.0%		
Emerging Market Debt	5.7%	3.0%	6.1%	3.0%		
Commodities	4.7%	5.0%	6.4%	5.0%		
Cash	2.7%	0.0%	2.6%	0.0%		

Discount Rate

The discount rate used to measure the total OPEB liability was 6.5 percent. The projection of cash flows used to determine the discount rate assumed that the District's contributions will be made at rates equal to the actuarially determined contribution rates. Based on those assumptions, the OPEB 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 OPEB plan investments was applied to all periods of projected benefit payments to determine the total OPEB liability.

Sensitivity of the net OPEB liability to changes in the discount rate. The following presents the net OPEB liability of the District of Columbia, as well as what the District's net OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower (5.5 percent) or 1-percentage-point higher (7.5 percent) than the current discount rate:

Notes to Financial Statements September 30, 2019 and 2018

NOTE 6 – NET OPEB LIABILITY (continued)

	<u>2019</u> Impact of Change in Discount Rate					
	1% Decrease Discount Rate 1% Increase 5.50% 6.50% 7.50%			1% Increase 7.50%		
Net OPEB Liability (Asset)	\$	193,568,679	\$	(44,400,857)	\$	(235,252,424)
	<u>2018</u>					
		Impac	t of C	hange in Discoun	t Rate	e
	1% Decrease Discount Rate			1% Increase		
		5.50%		6.50%		7.50%
Net OPEB Liability (Asset)	\$	172,018,126	\$	(71,028,997)	\$	(264,571,158)

Sensitivity of the net OPEB liability to changes in the healthcare cost trend rates. The following presents the net OPEB liability of the District of Columbia, as well as what the District's net OPEB liability would be if it were calculated using healthcare cost trend rates that are 1-percentage-point lower or 1-percentage-point higher than the current healthcare cost trend rate.

	<u>2019</u>				
	Impact of Change in Healthcare Cost Trend Rate				
	1% Decrease	1% Increase			
	(4.4% to 2.9%)	(5.4% to 3.9%)	(6.4% to 4.9%)		
Net OPEB Liability (Asset)	\$ (262,150,688)	\$ (44,400,857)	\$ 235,421,154		

	<u>2018</u>				
	Impact of Change in Healthcare Cost Trend Rate				
	1% DecreaseTrend Rates1% Increase				
	(4.5% to 2.9%) (5.5% to 3.9%)		(6.5% to 4.9%)		
Net OPEB Liability (Asset)	\$ (296,586,908)	\$ (71,028,997)	\$ 222,089,549		

Notes to Financial Statements September 30, 2019 and 2018

NOTE 7 – DISTRICT CONTRIBUTIONS

The District, historically, makes its contributions to the Fund near the completion of its fiscal year, and the contribution is distributed by the Fund to the investment managers within a month of receipt from the District. Consequently, the significant cash balances in the Fund as of September 30, 2019 and 2018, were due to the receipt of the contribution of \$46,000,000 and \$44,500,000, respectively. As of September 30, 2019 and 2018, the amounts were distributed as follows:

	September 30,						
FUND		2019		2018			
Bernstein Strategic Core	\$	-	\$	13,400,000			
Blue Bay Emerging Markets Debt Fund		-		9,100,000			
Northern Trust Cash Fund		46,000,000		22,000,000			
Total	\$	46,000,000	\$	44,500,000			

NOTE 8 – CONTINGENCIES

The Fund is party to various legal proceedings, many of which occur in the normal course of the Fund's operations. These legal proceedings are not, in the opinion of the Office of the Attorney General of the District of Columbia, likely to have a material adverse impact on the Fund's financial position as of September 30, 2019 and 2018.

The Fund invests in various investment securities. Investment securities are exposed to various risks, such as interest rate risk, market risk, and credit risk. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the value of investment securities will occur in the near term, and that such changes could materially affect the amounts reported in the accompanying statements of net position.

Fund contributions are made, and the actuarial present value of accumulated plan benefits are reported based on certain assumptions pertaining to interest rates, inflation rates, and employee demographics, all of which are subject to change. Due to uncertainties inherent in the estimations and assumptions process, it is at least reasonably possible that changes in these estimates and assumptions in the near term would be material to the financial statements. **REQUIRED SUPPLEMENTARY INFORMATION**

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Required Supplementary Information September 30, 2019

Schedule of Changes in the Net OPEB Liability (Asset)

	2019	2018	2017
Total OPEB Liability			
Total OPEB liability - beginning of year	\$ 1,391,000,862	\$ 1,224,600,000	\$ 1,115,776,087
Service cost	50,105,647	52,834,621	49,609,972
Interest	89,812,264	79,095,491	72,123,416
Difference between expected and actual experience	1,626,569	(728,816)	(539,321)
Changes in assumptions	(48,999,824)	50,939,949	-
Insurance carrier premiums net of retiree contributions	(18,844,104)	(15,740,383)	(12,370,154)
Net change in total OPEB liability	73,700,552	166,400,862	108,823,913
Total OPEB liability - end of year (a)	\$ 1,464,701,414	\$ 1,391,000,862	\$ 1,224,600,000
Fund Fiduciary Net Position			
Fund Fiduciary net position - beginning of year	\$ 1,462,029,859	\$ 1,366,282,061	\$ 1,197,441,214
Contributions - employer and annuitants	46,834,228	45,206,225	31,521,466
Net investment income	20,646,604	67,385,188	150,514,898
Insurance carrier premiums (benefit payments)	(19,678,332)	(16,446,608)	(12,891,620)
Administrative expense	(730,088)	(397,007)	(303,897)
Net change in plan fiduciary net position	47,072,412	95,747,798	168,840,847
Fund fiduciary net position - end of year (b)	\$ 1,509,102,271	\$ 1,462,029,859	\$ 1,366,282,061
Net OPEB liability (asset) - end of year ((a) - (b))	\$ (44,400,857)	\$ (71,028,997)	\$ (141,682,061)
Fund fiduciary net position as a percentage of total OPEB liability	103.03%	105.11%	111.57%
Covered payroll	\$ 2,038,767,088	\$ 1,940,801,248	\$ 1,820,046,000
Fund net OPEB liability (asset) as a percentage of covered payroll	-2.18%	-3.66%	-7.78%

*These schedules are presented to illustrate the requirement to present information for 10 years. However, until a full 10-year trend is compiled, OPEB plans should present information for those years for which the information is available.

Required Supplementary Information September 30, 2019

Schedule of Contributions and Related Ratios

	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Actuarially determined contributions	\$ 46,000,000	\$ 44,500,000	\$ 31,000,000	\$ 29,000,000	\$ 91,400,000	\$ 86,600,000	\$ 85,200,000	\$ 95,500,000	\$ 94,200,000	\$ 92,200,000
Contributions in relation to the actuarially determined contributions	(46,000,000)	(44,500,000)	(31,000,000)	(29,000,000)	(91,400,000)	(86,600,000)	(107,778,000)	(109,825,000)	(94,200,000)	(90,724,800)
Contribution deficiency (excess)	\$ -	\$ -	ş -	\$ -	\$ -	ş -	\$ (22,578,000)	\$ (14,325,000)	\$ -	\$ 1,475,200
Covered payroll	\$ 2,038,767,088	\$ 1,940,801,248	\$ 1,820,046,000	\$ 1,771,334,730	\$ 1,608,000,000	\$ 1,484,300,000	\$ 1,441,100,000	\$ 1,399,100,000	\$ 1,559,800,000	\$ 1,544,500,000
Contributions as a percentage of covered payroll	2.26%	2.29%	1.70%	1.64%	5.68%	5.83%	5.91%	6.83%	6.04%	5.97%

Schedule of Investment Returns *

	2019	2018	2017
Annual money-weighted rate of return,			
net of investment expense	1.40%	4.88%	12.49%

*These schedules are presented to illustrate the requirement to present information for 10 years. However, until a full 10-year trend is compiled, OPEB plans should present information for those years for which the information is available.

Notes to Required Supplementary Information September 30, 2019

The Schedules of Changes in the Net OPEB Liability (Asset) and related ratios presents multiyear trend information about whether the Fund's OPEB liability is increasing or decreasing over time, relative to the Fund's fiduciary net position. The projection of benefits for financial reporting purposes does not explicitly incorporate the potential effects of legal or funding limitation on the pattern of cost sharing between the employer and Fund members in the future.

The Total OPEB Liability as of September 30, 2019, is an estimate based on a roll-forward of the 2018 valuation results for the Plan.

Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Percent of Pay, Closed
Remaining Amortization Period	17 years beginning with fiscal year end 2019
Asset Valuation Method	Market Value
Investment Rate of Return	6.50%
Discount Rate	6.50%
Salary Increase Rate	3.50% (plus merit scale)
Medical Inflation Rate	5.4%, grading to 3.9%
	Assumption utilizes the Society of Actuaries Getzen
	Medical Trend Model, and reaches the ultimate medical
	inflation rate in 2040.
Mortality	The RP-2014 Healthy Employee Mortality Table with the
	MP-2018 Improvement Scale, fully generational, was used for
	healthy lives both pre- and post-retirement. For disabled lives,
	the RP-2014 Disabled Life Mortality Table was used.

Method and Assumptions used in Calculations of Actuarially Determined Contributions



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

The Mayor and the Council of the Government of the District of Columbia Inspector General of the Government of the District of Columbia

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the Government of the District of Columbia Other Post-Employment Benefits Fund (the Fund) as of and for the year ended September 30, 2019, and the related notes to the financial statements, which collectively comprise the Fund's basic financial statements, and have issued our report thereon dated January 6, 2020.

Internal Control over Financial Reporting

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

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

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

Compliance and Other Matters

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

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Purpose of this Report

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

Washington, DC January 6, 2020

SB + Company, SFC

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Classic Values, Innovative Advice

District of Columbia Office of the Chief Financial Officer

Other Post-Employment Benefits Fund

Actuarial Valuation as of September 30, 2019

Produced by Cheiron March 2020

www.cheiron.us 1.877.CHEIRON (243.4766)

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-CHEIRON

Letter of Transmittal

March 12, 2020

Eugenia Collis Associate Treasurer, Asset Management Government of the District of Columbia Office of the Chief Financial Officer Office of Finance and Treasury 1101 4th Street S.W., Suite 850 West Washington, DC. 20024

Dear Eugenia:

As requested, we have performed an actuarial valuation of the post-employment benefits provided by the District of Columbia (the "District") Office of the Chief Financial Officer Other Post-Employment Benefits Fund as of September 30, 2019. The following report contains our findings and disclosures required by the Governmental Accounting Standards Board (GASB) standards and will be used as the basis for the accounting disclosures for the fiscal year ending September 30, 2020. This is the second valuation of the Plan performed by Cheiron. Valuation results shown for valuations prior to 2018 were derived from the prior actuary's report.

The purpose of this report is to present the annual actuarial valuation of the District of Columbia Office of the Chief Financial Officer Other Post-Employment Benefits Fund. This report is for the use of the District and its auditors in preparing financial reports in accordance with applicable law and accounting requirements. Any other user of this report is not an intended user and is considered a third party.

This is a roll forward valuation year, in which, the claim curves are rolled forward from the prior valuation. The census and assets are as of the current valuation date. The results of this valuation rely on future plan experience conforming to the underlying assumptions and methods outlined in this report. Future results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the assumptions; changes in assumptions; and changes in plan provisions or applicable law. Actuarial computations are calculated based on our understanding of GASB 74/75 and are for purposes of fulfilling employer financial accounting requirements. Determinations for purposes other than meeting employer financial accounting requirements may be significantly different from the results in this report. Additional accounting disclosures for the fiscal year ending September 30, 2019 related to GASB Statements 74 and 75 were provided in a separate report on December 16, 2019 and were based on the valuation report as of September 30, 2018.

Appendix A describes the Participant Data, Assumptions, and Methods used in calculating the figures throughout the report. In preparing our report, we relied without audit, on information (some oral and some written) supplied by Plan Administrators. This information includes, but is not limited to, the plan provisions, employee data, and financial information. The demographic assumptions used in this report was based on the DCRB's actuary's experience study through September 30, 2015 dated May 12, 2017 for the Police/Fire/Teachers and on the prior actuary's

Eugenia Collis March 12, 2020 Page ii

experience study dated October 23, 2018 for the general population. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23.

Appendix B contains our understanding of the substantive plan provisions based on the information provided by the District. This valuation report does not reflect future changes in benefits, penalties, taxes, or administrative costs that may be required as a result of the Affordable Care Act for which no regulations, proposed regulations, or other guidance has been issued.

This report and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices and our understanding of the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board as well as applicable laws and regulations. Furthermore, as credentialed actuaries, we collectively meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this report. This report does not address any contractual or legal issues. We are not attorneys and our firm does not provide any legal services or advice.

This actuarial valuation report was prepared for the District of Columbia Office of the Chief Financial Officer for the purposes described herein and for the use by the plan auditor in completing an audit related to the matters herein. Other users of this report are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to such other users.

Sincerely,

Cheiron

Margaret Tempkin, FSA, EA, MAAA Principal Consulting Actuary

John Colberg, FSA, EA, MAAA Principal Consulting Actuary

athe Thean

Kathleen T. Weaver, FSA, MAAA, EA Consulting Actuary



DISTRICT OF COLUMBIA OFFICE OF THE CHIEF FINANCIAL OFFICER OTHER POST-EMPLOYMENT BENEFITS FUND ACTUARIAL VALUATION AS OF SEPTEMBER 30, 2019

SECTION I – VALUATION SUMMARY

The District of Columbia Office of the Chief Financial Officer (OCFO) has engaged Cheiron to provide an analysis of its post-employment benefit liabilities as of September 30, 2019. The primary purposes of performing this actuarial valuation are to:

- Estimate the Actuarially Determined Contribution (ADC) and the Actuarial Liability (AL) of the retiree health benefits using GASB 74 and 75 methodology under the current funding strategy,
- Provide disclosures for future financial statements, and
- Provide projections for ADC, Net OPEB Liability (NOL), and actuarial liabilities.

We have determined costs, liabilities, and trends for the substantive plan using actuarial assumptions and methods that we consider reasonable.

GASB's OPEB Requirements

GASB's Statement 74 refers to the financial reporting for post-employment benefit plans other than pension plans, and Statement 75 refers to the employer accounting for these plans. Statement 74 is generally applicable where an entity has a separate trust or fund for Other Post-Employment Benefits (OPEB). We understand that the OCFO has a trust used to fund future OPEB obligations. The GASB No. 74 Statements are effective for the plan year ending September 30, 2017. The GASB 74 and 75 valuation sections are provided below.

Statement 75, which was adopted in the fiscal year ending (FYE) September 30, 2018, requires the employer to book the actuarial cost (net of employee, retiree, and their dependents' contributions) of the plan as an expense on its financial statements. Additional disclosures required by GASB 74 and 75 include a description of the substantive plan, summary of significant accounting policies (which we have not included in this report), contributions, and a statement of funding progress, along with the methods and assumptions used for these disclosures.

Funding Policy

The OCFO has a funding policy to contribute to the Actuarially Determined Contribution (ADC). For this purpose, the ADC is calculated as the normal cost determined under the Entry Age Normal Actuarial Cost Method, plus a closed 20-year, level percent of pay amortization of the unfunded actuarial liability. The amortization period was closed in FYE 2016. This report determines the ADC for the FYE September 30, 2021. The remaining amortization period is 15 years.



DISTRICT OF COLUMBIA OFFICE OF THE CHIEF FINANCIAL OFFICER OTHER POST-EMPLOYMENT BENEFITS FUND ACTUARIAL VALUATION AS OF SEPTEMBER 30, 2019

SECTION I – VALUATION SUMMARY

Table I-1 below summarizes the September 30, 2019 and September 30, 2018 actuarial valuation results. The results below are the basis for the liabilities provided in the financial statements. These results will be rolled forward to the next fiscal year end for disclosure purposes.

Table I-1 Summary of Valuation Results							
Valuation Date	Sej	ptember 30, 2018	Sej	ptember 30, 2019			
Discount Rate		6.50%		6.50%			
Actuarial Liability (AL)	\$	1,345,257,470	\$	1,493,023,648			
Actuarial Value of Assets		1,447,562,933		1,544,974,993			
Unfunded actuarial liability (UAL)	\$	(102,305,463)	\$	(51,951,345)			
Funded Ratio (AVA/AL)		107.60%		103.48%			
Market Value of Assets		1,462,029,859		1,509,102,271			
Funded Ratio (MVA/AL)		108.68%		101.08%			
Fiscal Year Ending	S	eptember 30, 2020	S	eptember 30, 2021			
Actuarially Determined Contribution	\$	47,300,000	\$	53,600,000			
Expected Net Benefit Payments		27,336,117		33,410,732			

The Actuarial Liability increased from \$1.35 billion under the prior valuation to \$1.49 billion under this valuation. In addition to the expected increase in liability of \$111.53 million due to normal cost, benefit payments and interest, the Plan experienced other changes in liability of \$36.24 million attributable to an increase due to demographic experience.

During the year ending September 30, 2019, the Plan's assets earned 1.40% on a money-weighted market value basis. The Plan's asset smoothing technique recognizes only a portion of the gains and losses for each year, and the money-weighted return on the actuarial asset value was 4.86%. This return was below the assumed rate of return of 6.50% and resulted in an actuarial loss on investments for the Plan



DISTRICT OF COLUMBIA OFFICE OF THE CHIEF FINANCIAL OFFICER OTHER POST-EMPLOYMENT BENEFITS FUND ACTUARIAL VALUATION AS OF SEPTEMBER 30, 2019

SECTION I - VALUATION SUMMARY

Historical Trends

This chart shows the historical trend of assets and the actuarial liability for the District's OPEB Fund. The first valuation complying with GASB 43 and 45 was performed in 2007.

The grey bars represent the actuarial liability used to determine the ADC. The liabilities below represent the results for the District's financial statements under GASB 43/45 and GASB 74/75. The results are based on the actuarial valuations rolled forward to the appropriate fiscal year end. As you can see, over time, the liability has grown as the Plan has matured. In 2015, the actuarial liability dropped mainly due to the change in the assumed percent of retirees and dependents electing coverage. The Market Value of Assets is represented by the blue line and the Actuarial Value of Assets is represented by the green line. Prior to 2016, the AVA was equal to the MVA. In 2016, the District adopted an actuarially smoothed asset value to determine the ADC. The Actuarial Value of Assets is developed by smoothing five years of investment returns, as seen on page 6. The percentages above the bars represent the funded ratio based on the AVA.





SECTION II – ASSETS

Assets

Table II-1 below shows the reconciliation of assets for the current and prior fiscal years. This section reconciles to the assets of September 30, 2019, that are used to develop the FYE 2021 ADC.

Table II-1 Changes in Market Market	Valu	e of Assets		
			Se	eptember 30, 2019
Market Value of Assets - as of beginning of Fiscal Year		\$1,366,282,061		\$1,462,029,859
Additions				
Employer Contributions	\$	44,500,000	\$	46,000,000
Participant Contributions		706,225		834,228
Total contributions	\$	45,206,225	\$	46,834,228
Investment Return				
Net Realized Appreciation and Unrealized Appreciation		51,998,762		5,327,431
Interest		10,327,204		11,425,284
Dividends		9,813,077		11,152,287
Currency (loss)/gain on FX contracts and settlements		(897,146)		(3,405,111)
Other Income		197,597		279,557
Total income from investment activities	\$	71,439,494	\$	24,779,448
Investment Expenses		(4,054,306)		(4,132,844)
Total Investment Return	\$	67,385,188	\$	20,646,604
Deductions				
Benefit Payments Made	\$	16,446,608	\$	19,678,332
Administrative Expenses		397,007		730,088
Total Deductions	\$	16,843,615	\$	20,408,420
Total				
Net Increase (Decrease)	\$	95,747,798	\$	47,072,412
Market Value of Assets - as of end of Fiscal Year	\$	1,462,029,859		\$1,509,102,271
Money-weighted Market Return for Period		4.88%		1.40%



SECTION II – ASSETS

Table II-2 below shows the money-weighted rate of return of plan investments. The moneyweighted rate of return considers the changing amounts actually invested during a period and weights the amount of plan investments by the proportion of time they are available to earn a return during that period. External cash flows are determined on a monthly basis and are assumed to occur at the middle of each month. The external cash inflows include the sponsor and retiree contributions. The external cash outflows include the benefit payments and administrative expenses.

Table II-2											
Calculation of	of Mo	oney-Weighte	d Rate of	f Return							
		Net External Cash Flows	Periods Invested	Period Weight	Net External Cash Flows With Interest						
Beginning Value October 1, 2018	\$	1,462,029,859	12	1.00	\$	1,482,517,933					
Monthly Net External Cash Flows:											
October	\$	(1,555,252)	11.5	0.96		(1,576,132)					
November		(1,481,074)	10.5	0.88		(1,499,218)					
December		(1,466,169)	9.5	0.79		(1,482,411)					
January		(1,565,103)	8.5	0.71		(1,580,607)					
February		(1,611,186)	7.5	0.63		(1,625,260)					
March		(1,658,977)	6.5	0.54		(1,671,530)					
April		44,318,809	5.5	0.46		44,602,388					
May		(1,655,507)	4.5	0.38		(1,664,169)					
June		(1,708,991)	3.5	0.29		(1,715,942)					
July		(1,691,257)	2.5	0.21		(1,696,168)					
August		(1,721,355)	1.5	0.13		(1,724,352)					
September		(1,781,228)	0.5	0.04		(1,782,261)					
Ending Value September 30, 2019					\$	1,509,102,271					
Money-Weighted Rate of Return						1.40%					



SECTION II – ASSETS

Actuarial Value of Assets

The actuarial value of assets is the current market value, adjusted by a five-year smoothing of gains and losses on a market value basis. Each year's gain or loss is determined as the difference between the actual market return and the expected market return using the assumed rate of investment return. The actuarial value is adjusted to remain within 20% of the market value. Table II-3 below illustrates the calculation of the market value gains and losses.

Development o		Table II-3 recognized Gain/ of September 30,		oss) on Investmen /E	ts					
	1 · · · · ·		8		Fiscal Year Ending 9/30/2017		Fiscal Year Ending 9/30/2018		Fi	scal Year Ending 9/30/2019
1. Market Value of Assets as of September 30, Beginning of Fiscal Year		\$1,051,359,059		\$1,076,550,114		\$1,197,441,214		\$1,366,282,061		\$1,462,029,859
 Fiscal Year Cash Flow 2. Employer Contributions for the Plan Year Ending September 30, FYE 3. Participant Contributions for the Plan Year Ending September 30, FYE 4. Benefit Payments through September 30, FYE 5. Administrative Expenses through September 30, FYE 	\$	91,400,000 410,780 (6,739,591) (365,123)		29,000,000 430,587 (10,043,719) (292,482)		31,000,000 521,466 (12,891,620) (303,897)		44,500,000 706,225 (16,446,608) (397,007)		46,000,000 834,228 (19,678,332) (730,088)
6. Net Cash Flow	\$	84,706,066	\$	19,094,386	\$	18,325,949	\$	28,362,610	\$	26,425,808
Investment Performance 7. Interest of 6.50% on Market Value of Assets to September 30, FYE 8. Interest on employer contributions assuming received	\$	68,338,339	\$	69,975,757	\$	77,833,679	\$	88,808,334	\$	95,031,941
at the end year to September 30, FYE		0		0		0		0		0
 Interest on participant contributions assuming received uniformly throughout the year to September 30, FYE Interest on benefit payments assuming payments made 		13,350		13,994		16,948		22,952		27,112
uniformly throughout the year to September 30, FYE		(219,037)		(326,421)		(418,978)		(534,515)		(639,546)
 Interest on administrative expenses assuming payments made uniformly throughout the year to September 30, FYE Expected Investment Performance (7 + 8 + 9 + 10 + 11) 	\$	(11,866) 68,120,786	\$	(9,506)	¢	<u>(9,877)</u> 77,421,772	¢	(12,903) 88,283,868	ç	(23,728)
	ф Ф								ۍ د	
 13. Expected Market Value of Assets as of September 30, FYE (1 + 6 + 12) 14. Market Value of Assets as of September 30, FYE 	\$ \$	1,204,185,911 1,076,550,114	\$ \$	1,165,298,324 1,197,441,214	\$ \$	1,293,188,935 1,366,282,061	\$ \$	1,482,928,539 1,462,029,859	5 \$	1,582,851,446 1,509,102,271
15. Market Value of Assets Investment Gain/(Loss) (14 - 13)	\$	(127,635,797)	\$	32,142,890	\$	73,093,126	\$	(20,898,680)	\$	(73,749,175)



SECTION II – ASSETS

Table II-4 then illustrates the calculation of actuarial value of assets for the September 30, 2019 valuation.

Table Development of Actu as of Septem	arial Va		
1. Actuarial Value of Assets as of September 30,	2018		\$ 1,447,562,933
2. Net Cash Flow (Contributions - Benefit Payment	\$ 26,425,808		
3. Expected Investment Performance	\$ 94,395,779		
	Ini	tial Unrecognized	
Recognition of gain/(loss)		Gain/(Loss)	Recognition
4. 20% of gain/(loss) as of September 30, 2015	\$	(127,635,797)	\$ (25,527,159
5. 20% of gain/(loss) as of September 30, 2016	\$	32,142,890	\$ 6,428,578
6. 20% of gain/(loss) as of September 30, 2017	\$	73,093,126	\$ 14,618,625
7. 20% of gain/(loss) as of September 30, 2018	S	(20,898,680)	\$ (4,179,736
8. 20% of gain/(loss) as of September 30, 2019	\$	(73,749,175)	\$ (14,749,835
9. Recognized gain/(loss) as of September 30, 2019	(sum of	4 - 8)	\$ (23,409,527
0. Actuarial Value of Assets as of September 30, 2	2019 (1	+ 2 + 3 + 9)	\$ 1,544,974,993
Market Value of Assets as of September 30, 2019		1	\$ 1,509,102,271
Corridor for Actuarial Value of Assets			
80% of Market Value			\$ 1,207,281,817
120% of Market Value			\$ 1,810,922,725
Actuarial Value of Assets as of September 30, 2019			\$ 1,544,974,993
Actuarial Value as a percent of Market Value			102.4%
Money-weighted Return on Actuarial Value of A	sset		4.9%



SECTION III - VALUATION RESULTS

This section of the report calculates the current and expected future contribution requirements under the District's funding policy. This valuation calculates the contribution for the fiscal year ending 2021.

Information about the actuarial liabilities of the Plan as of September 30, 2019 and September 30, 2018 are shown in Table III-1 below.

Table III-1 Actuarial Liability										
Valuation Date	Se	ptember 30, 2018	Se	ptember 30, 2019						
Discount Rate		6.50%		6.50%						
Actuarial Liability										
Current active members	\$	923,471,258	\$	999,496,008						
Current retirees, beneficiaries, and dependents		421,786,212		493,527,640						
Total Actuarial Liability (AL)	\$	1,345,257,470	\$	1,493,023,648						
Actuarial Value of Assets (AVA)		1,447,562,933		1,544,974,993						
Unfunded Actuarial Liability (UAL)	\$	(102,305,463)	\$	(51,951,345)						
Funded Ratio (AVA/AL)		107.60%		103.48%						
Market Value of Assets (MVA)		1,462,029,859		1,509,102,271						
Unfunded Actuarial Liability (UAL)	\$	(116,772,389)	\$	(16,078,623)						
Funded Ratio (MVA/AL)		108.68%		101.08%						
Normal Cost	\$	49,117,388	\$	51,485,865						

Table III-2 below, shows the Actuarial Liability for actives and retirees, the normal cost, the Actuarial Asset Value, and the resulting unfunded actuarial liability (UAL) as of September 30, 2019 at a 6.50% discount rate. Note that this development of the AL and UAL are based on the actual measurement at September 30, 2019 and will be used in the determination of the Actuarially Determined Contribution for FYE 2021. The table shows the liability results separate for Firefighters, Police, Teachers, and General Employees.

Table III-2 Actuarial Liability, Normal Cost & Acturial Asset Value as of September, 30, 2019											
	Firefighters	Police	Teachers	General		Total					
Actuarial Liability											
Active Employees	\$182,278,418	\$314,106,819	\$89,322,621	\$413,788,150	\$	999,496,008					
Retired Employees	49,962,228	358,514,872	54,832,929	30,217,611		493,527,640					
Total Liability	\$232,240,646	\$672,621,691	\$144,155,550	\$444,005,761		\$1,493,023,648					
Actuarial Value of A	ssets					1,544,974,993					
Unfunded Actuarial I	Liability (UAL)				\$	(51,951,345)					
Normal Cost	\$10,566,529	\$18,867,525	\$4,024,433	\$18,027,378		\$51,485,865					



SECTION III – VALUATION RESULTS

Reconciliation

Table III-3 provides an estimate of the major factors contributing to the change in liability since the last actuarial valuation report (AVR).

Table III-3 Reconciliation of Actuarial Liability	
Actuarial Liability at September 30, 2018	\$ 1,345,257,470
Normal Cost	49,117,388
Expected Benefits paid throughout the year	(27,336,117)
Interest	 89,745,942
Expected Actuarial Liability at September 30, 2019	\$ 1,456,784,683
Actuarial Liability at September 30, 2019	1,493,023,648
Gain or (Loss)	\$ (36,238,965)
Gain or (Loss) due to:	
Benefit changes	\$ -
Census changes	(36,238,965)
Demographic Assumption changes	-
Healthcare Claims changes	-
Total changes	\$ (36,238,965)

Below is a brief description of each of the above components:

- *Benefits Changes* refers to changes in the Plan or eligibilities. There were no benefit changes since the prior valuation.
- *Census Changes* refers to differences in the valuation census due to members terminating, retiring, dying, and becoming disabled at rates different than expected.
- *Demographic assumption changes* refer to the changes in demographic assumptions. There were no demographic assumption changes since the prior valuation.
- *Healthcare Claims changes* refers to the change in projected healthcare costs compared to the prior valuation. There were no changes in healthcare claims assumptions this year.



SECTION III – VALUATION RESULTS

Actuarially Determined Contribution (ADC)

The ADC consists of two parts: (1) the *normal cost*, which represents the annual cost attributable to service earned in a given year, and (2) the amortization of the UAL. In Table III-4 below, we show the computed FYE 2020 and FYE 2021 ADC under the District's funding policy and a 6.50% assumed discount rate (based on a long-term view of returns on the asset allocation). Please note that the ADC calculation for FYE 2020 is based on the 2018 actuarial report rolled forward. This timing lag is used to better coordinate the District's budget timing.

Table III-4 Calculation of Actuarially Determined Contribution (ADC)											
For Fiscal Year Ending		9/30/2020		9/30/2021							
Normal cost	\$	55,135,000	\$	57,793,000							
Amortization of UAL		<u>(7,835,000)</u>		<u>(4,193,000)</u>							
Total ADC (not less than \$0)	\$	47,300,000	\$	53,600,000							
Projected payroll	\$	2,038,767,088	\$	2,173,453,518							
ADC as a percentage of pay		2.32%		2.47%							
Expected Net Benefit Payments	\$	27,336,117	\$	33,410,732							



SECTION III – VALUATION RESULTS

Projected Cash Flow

The following table presents a 30-year payout projection of employer benefit payments for the District OPEB Plan.

	Table III-5 Projected Cash Flow											
Fiscal Year Ending		Employer	Fiscal Year Ending		Employer							
Setptember 30,		Payment	Setptember 30,		Payment							
2020	\$	33,411,000	2035	\$	144,627,000							
2021		40,549,000	2036		151,353,000							
2022		47,586,000	2037		159,115,000							
2023		55,035,000	2038		166,857,000							
2024		62,578,000	2039		175,641,000							
2025		70,372,000	2040		184,926,000							
2026		78,515,000	2041		194,590,000							
2027		86,818,000	2042		204,310,000							
2028		95,112,000	2043		213,825,000							
2029		102,749,000	2044		224,034,000							
2030		110,415,000	2045		233,705,000							
2031		117,808,000	2046		241,903,000							
2032		123,954,000	2047		248,438,000							
2033		130,332,000	2048		253,617,000							
2034		137,666,000	2049		256,424,000							



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SECTION III – VALUATION RESULTS

Projections

Table III-6 shows a projection of future years' Actuarial Liability (AL), Actuarial Asset Value (AVA), Unfunded Actuarial Liability (UAL), Funded Ratio and Actuarially Determined Contribution (ADC) for FYEs 2021 through 2025, based on a projection of the September 30, 2019 valuation results. These projections are based on the adoption of a closed 20-year amortization of the UAL, effective for FYE 2016. The ADC for the FYE 2020 is also shown and is computed based on the September 30, 2018 valuation results.

Table III-6 Projections of Actuarial Results (\$ in Thousands)												
Fiscal Year Ending September 30, 2020 2021 2022 2023 2024 2025												
Projected OPEB Liability	\$	1,456,785	\$	1,612,536	\$	1,735,407	\$	1,862,120	\$	1,992,668		\$2,125,250
Expected Actuarial Asset Value		1,549,811		1,659,525		1,774,089		1,878,315		1,992,508		<u>2,127,309</u>
Expected Unfunded Actuarial Liability		(93,026)		(46,989)		(38,682)		(16,195)		160		(2,059)
Funded Ratio		106.4%		102.9%		102.2%		100.9%		100.0%		100.1%
Normal Cost	\$	55,100	\$	57,800	\$	60,900	\$	64,200	\$	67,700	\$	71,300
Amortization of Unfunded Liability		(7,800)		(4,200)		<u>(3,600)</u>		(1,600)		<u>0</u>		(200)
Actuarially Determined Contribution	\$	47,300	\$	53,600	\$	57,300	\$	62,600	\$	67,700	\$	71,100
Amortization Period for UAL (Years)		16		15		14		13		12		11



SECTION IV – SENSITIVITY OF RESULTS

The liabilities produced in this report are sensitive to the assumptions used. Table IV-1 shows liabilities under the actuarial funding scenario using a 1% increase and decrease in healthcare trend rates to provide some measure of sensitivity. In all cases, we are using the full actuarial funding assumption of 6.50% for the discount rate. GASB 74/75 requires the sensitivity figures shown below, roll-forwarded and compared to Market Value of Assets, for the next valuation.

Table IV-1 Healthcare Trend Rate Sensitivity as of September 30, 2019											
Healthcare Trend Rates-1%Base+1%											
Actuarial Liability											
Current active members	\$	833,296,191	\$	999,496,008	\$	1,215,121,911					
Current retirees, beneficiaries, and dependents		447,620,211		493,527,640		549,046,932					
Total Actuarial Liability (AL)	\$	1,280,916,402	\$	1,493,023,648	\$	1,764,168,843					
Actuarial Value of Assets		1,544,974,993		1,544,974,993		1,544,974,993					
Unfunded actuarial liability (UAL)	\$	(264,058,591)	\$	(51,951,345)	\$	219,193,850					
Normal Cost	\$	41,692,487	\$	51,485,865	\$	64,771,337					

Table IV-2 shows liabilities under the actuarial funding scenario using a 1% increase and decrease in discount rates to provide some measure of sensitivity. GASB 74/75 requires the sensitivity figures shown below, roll-forwarded and compared to Market Value of Assets, for the next valuation.

Table IV-2Discount Rate Sensitivity as of September 30, 2018											
Discount Rate 5.50% 6.50% 7.50											
Actuarial Liability											
Current active members	\$	1,183,937,819	\$	999,496,008	\$	852,332,594					
Current retirees, beneficiaries, and dependents		553,802,051		493,527,640		444,378,046					
Total Actuarial Liability (AL)	\$	1,737,739,870	\$	1,493,023,648	\$	1,296,710,640					
Actuarial Value of Assets		1,544,974,993		1,544,974,993		1,544,974,993					
Unfunded actuarial liability (UAL)	\$	192,764,877	\$	(51,951,345)	\$	(248,264,353)					
Normal Cost	\$	66,492,882	\$	51,485,865	\$	40,252,179					



SECTION V – SCHEDULE OF FUNDING PROGRESS

The Government Finance Officers Association (GFOA) maintains a checklist of items to be included in the Comprehensive Annual Financial Report (CAFR) in order to receive recognition for excellence in financial reporting. In accordance with those statements, we have prepared the following disclosures.

Schedule of Funding Progress

The schedule of funding progress compares the assets used for funding purposes to the comparable liabilities to determine how well the Plan is funded, and how this status has changed over the past several years. The actuarial liability is compared to the actuarial value of assets to determine the funding ratio. The actuarial liability under GASB is determined assuming that the Plan is ongoing and participants continue to terminate employment, retire, etc., in accordance with the actuarial assumptions.

The figures below represent the results for the District's financial statements under GASB 43/45 and GASB 74/75. The results are based on the actuarial valuations rolled forward to the appropriate fiscal year end. Years prior to 2018 were taken from the prior actuary's report.

	Scho	dulo of Funding F	Table V-1		tombor 30				
Schedule of Funding Progress for Fiscal Year Ending September 30, (\$ in Millions) Actuarial Unfunded									
Valuation Year	Asset Value (a)	Actuarial Liability (b)	Actuarial Liability (c)=(b-a)	Funded Ratio (d)=(a)/(b)	Covered Payroll (e)	Percentage of Covered Payroll (f) = (c)/(e)			
2007	\$164.2	\$600.1	\$435.9	27.4%	\$1,090.9	39.96%			
2008	219.7	745.2	525.5	29.5%	1,107.1	47.47%			
2009	309.1	625.9	316.8	49.4%	1,579.9	20.05%			
2010	424.3	784.9	360.6	54.1%	1,544.5	23.35%			
2011	511.5	866.6	355.1	59.0%	1,559.8	22.77%			
2012	693.3	919.7	226.4	75.4%	1,399.1	16.18%			
2013	897.8	1,048.0	150.2	85.7%	1,441.1	10.42%			
2014	1,036.6	1,188.3	151.7	87.2%	1,484.3	10.22%			
2015	1,202.4	1,001.2	(201.2)	120.1%	1,608.0	(12.51)%			
2016	1,298.1	1,098.5	(199.6)	118.2%	1,656.2	(12.05)%			
2017	1,339.6	1,224.6	(115.0)	109.4%	1,820.0	(6.32)%			
2018	1,447.6	1,391.0	(56.6)	104.1%	1,940.8	(2.91)%			
2019	1,545.0	1,456.8	(88.2)	106.1%	2,038.8	(4.32)%			



SECTION V – SCHEDULE OF FUNDING PROGRESS

Schedule of Employer Contributions

The schedule of employer contributions, Table V-2, shows whether the employer has made contributions that are consistent with an actuarially sound method of funding the benefits to be provided.

Years prior to 2018 were taken from the prior actuary's report.

	Schedule	Table V-2 of Employer Con (\$ in Millions)	tributions	
Fiscal Year Ended	Annual Required Contribution (ARC)	Amount Contributed	Percentage of ARC Contributed	Net OPEB Obligation
2008	\$103.4	\$110.8	107.2%	\$42.1
2009	130.9	81.1	62.0%	44.7
2010	92.2	90.7	98.4%	45.6
2011	94.2	94.2	100.0%	32.2
2012	95.5	109.8	115.0%	9.9
2013	85.2	107.8	126.5%	10.0
2014	86.6	86.6	100.0%	10.0
2015	91.4	91.4	100.0%	10.0
2016	29.0	29.0	100.0%	10.0
2017	31.0	31.0	100.0%	10.0
	Actuarially		Percentage of	
Fiscal Year	Determined	Amount	ADC	OPEB Expense
Ended	Contribution	Contributed	Contributed	OI ED Expense
2018	\$44.5	\$44.5	100.0%	\$53.4
2019	46.0	46.0	100.0%	63.8
2020	47.3	TBD	TBD	TBD
2021	53.6	TBD	TBD	TBD
2022*	57.3	TBD	TBD	TBD
2023*	62.6	TBD	TBD	TBD
2024*	67.7	TBD	TBD	TBD

*estimated



APPENDIX A – MEMBERSHIP INFORMATION

The census data used to develop the Actuarial Liability (AL) as of September 30, 2019 was provided by the District.

	5	eptember 30, 20	19		
Active Participants	Fire	Police	Teachers	General	Total
Number	1,581	2,949	4,513	17,044	26,087
Average age	40.0	39.9	39.7	46.5	44.2
Average years of service	14.3	12.9	7,70	11.0	10.8
Projected payroll	\$ 135,984,955	\$ 247,078,677	\$ 413,466,842	\$ 1,376,923,044	\$ 2,173,453,518
Retirees Enrolled in Health Care					
Number of retirees	136	996	367	179	1,678
Average age	51.8	53.6	68.9	69.8	58.5
Numbers of spouses and dependents (excluding children)	91	648	94	60	893
Retirees with Life Insurance					
Number of retirees	124	990	599	420	2,133
Total Retirees with Medical and/o	r Life Insurance	e			
Number of retirees	152	1124	648	470	2,394

Active Member Data as of September 30, 2019

COUNTS BY AGE/SERVICE											
Service											
Age	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up	Total
Under 25	109	193	34	0	0	0	0	0	0	0	336
25 to 29	382	1,537	522	30	0	0	0	0	0	0	2,471
30 to 34	357	1,613	1,330	526	26	0	0	0	0	0	3,852
35 to 39	245	1,198	1,077	1,188	351	5	0	0	0	0	4,064
40 to 44	133	729	717	918	769	190	16	0	0	0	3,472
45 to 49	116	527	544	817	819	523	301	72	0	0	3,719
50 to 54	65	406	389	666	572	399	449	148	1	0	3,095
55 to 59	49	260	322	516	451	299	344	171	5	0	2,417
60 to 64	18	153	188	403	300	206	234	127	5	3	1,637
65 to 69	5	60	70	169	146	102	121	61	2	0	736
70 & up	1	16	24	74	63	45	44	20	<u>0</u>	1	288
Total	1,480	6,692	5,217	5,307	3,497	1,769	1,509	599	13	4	26,087

Reconciliation of Members with Medical Coverage							
	Active	Retired	Total				
September 30, 2018	25,419	1,514	26,933				
New Hires	2,713		2,713				
Retirement, Elect Medical Coverage	(124)	124	0				
Termination/Retirement, No Medical Coverage	(1,921)		(1,921)				
Deaths / Drop Coverage	10 mil	(52)	(52)				
Other Data Changes		92	92				
September 30, 2019	26,087	1,678	27,765				

Please note that the above data was used to project the figures in this report.



APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions for this valuation were selected based on recent experience and expectations for the future. In 2018, the prior actuary performed an experience study dated October 23, 2018. In addition, the DCRB's actuary performed an experience study date on May 12, 2017. With the direction of the District, we have updated the demographic experience using the DCRB's actuary's recommendations in their May 2017 report for the Police/Fire/Teachers assumptions. For the assumptions for general employees, we used the demographic assumptions recommended by the prior actuary. For other assumptions related to medical elections and spouse coverage, we have used the prior actuary's recommendations. We have not performed our own experience study but reviewed the reports and letters of the actuaries and believe the assumptions to be reasonable.

Economic Assumptions

1. Discount Rate	6.50% per year. The assets are sufficient to cover all expected benefits, thus the long-term rate of return is used.
2. Inflation Assumption	2.75%
3. Payroll Increase Rate	3.50% per year for purposes of attributing individual costs under the Entry Age actuarial cost method

4. Salary Increase Rate

The base inflation rate used was 2.75% plus a productivity increase of 0.75%. Merit and seniority increases are additional and are shown below. The General population salary increase is assumed to be a flat 3.5%.

Salary Increase								
Service	Teachers	Police	Fire					
5	4.00%	3.56%	2.50%					
10	3.00%	2.58%	2.50%					
15	0.50%	2.31%	2.50%					
20	0.20%	2.50%	2.50%					
30	0.20%	0.50%	2.50%					



APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

5. Per Person Health Care Cost Trends

Medical Trend assumptions used were developed using the Society of Actuaries (SOA) Long-Run Medical Cost Trend Model. The SOA model was released in December 2007, and version 2018_c was used for this valuation and the prior valuation. The following assumptions were used as input variables into this model:

Trend Assumption Inputs							
Variable	Rate						
Rate of Inflation	2.75%						
Rate of Growth in Real Income/GDP per capita 2027+	1.10%						
Extra Trend due to Taste/Technology 2027+	1.00%						
Expected Health Share of GDP 2027	20.00%						
Health Share of GDP Resistance Point	25.00%						
Year for Limiting Cost Growth to GDP Growth	2040						

The SOA Long-Run Medical Cost Trend Model and its baseline projection are based on an econometric analysis of historical U.S. medical expenditures and the judgments of experts in the field. The long-run baseline projection and input variables have been developed under the guidance of the SOA Project Oversight Group. Sample medical trends are listed in the table below. The initial health cost trend was 5.5% for the period October 1, 2018 – September 30, 2019 and declines gradually to an ultimate rate of 3.9% starting in 2040. The 5.5% trend was applied to the claim curves shown below on page 22.

From FYE	Annual Trend
2019	5.4%
2020	5.3%
2021	5.2%
2022	5.1%
2025	5.0%
2030	4.9%
2035	4.3%
2040	3.9%

6. Changes Since Last Valuation

None



APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

Demographic Assumptions

1. Retirement Rates

Retirement rates for each group vary by age and service with the District. Sample rates are shown in the tables below:

			Teachers	
Age	General	Age	< 30 YOS	30+ YOS
50-54	2.5%	50-54	5.0%	5.0%
55-59	5.0%	55-56	9.0%	22.0%
60-61	15.0%	57	9.0%	20.0%
62-64	25.0%	58	10.0%	20.0%
65-69	35.0%	59	10.0%	25.0%
70	30.0%	60	27.0%	28.0%
71-74	50.0%	61	25.0%	28.0%
75+	100.0%	62	22.0%	25.0%
		63	25.0%	22.0%
		64	20.0%	25.0%
		65	25.0%	35.0%
		66	30.0%	25.0%
		67	25.0%	25.0%
		68	30.0%	30.0%
		69	25.0%	30.0%
		70	30.0%	30.0%
		71	25.0%	30.0%
		72	35.0%	30.0%
		73-74	35.0%	35.0%
		75	100.0%	100.0%

YOS = Years of Service



APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

2. Rates of Withdrawal

Withdrawal rates for each group vary by age and service with the District. Sample rates are shown in the tables below:

	General	Employees			Teachers			Police		Fi	re	
	Ye	ars of Servi	ice		Years o	f Service		Years of Service			Years of Service	
Age	<4	4-9	10+	Service	Male	Female	Service	Male	Female	Service	Unisex	
20	25.00%	25.00%	10.00%	<1	26.00%	23.00%	<1	13.00%	11.00%	<1	7.50%	
25	20.00%	15.00%	10.00%	1	26.00%	23.00%	1	10.00%	11.00%	1	7.50%	
30	15.00%	12.00%	3.75%	2	26.00%	23.00%	2	7.00%	8.00%	2	5.00%	
35	15.00%	10.00%	3.75%	3	26.00%	23.00%	3	6.00%	5.00%	3	4.00%	
40	15.00%	8.00%	3.75%	4	18.00%	16.00%	4	6.00%	5.00%	4	4.00%	
45	15.00%	8.00%	3.75%									
50	15.00%	8.00%	3.75%		Teachers			Police		Fi	re	
55	15.00%	8.00%	3.75%		5 or	More		5 or	More	5 or More		
60	15.00%	8.00%	3.75%		Years o	f Service		Years o	f Service	Years of Servi		
62+	0.00%	0.00%	0.00%	Age	Males	Females	Age	Male	Female	Age	Unisex	
				25	18.00%	18.00%	25	5.00%	5.00%	25	3.00%	
				30	16.00%	16.00%	30	4.25%	4.50%	30	2.60%	
				35	12.00%	10.00%	35	2.75%	3.50%	35	1.80%	
				40	12.00%	8.00%	40	1.50%	1.50%	40	1.40%	
				45	8.00%	6.50%	45	1.50%	1.50%	45	1.20%	
				50	8.00%	6.50%	50	1.50%	1.50%	50	1.20%	
				55	8.00%	6.50%	55	1.50%	1.50%	55	0.80%	
				9			P			60	0.60%	

3. Rates of Disability

Disability rates for each group vary by age. Sample rates are shown in the table below:

	Disability Rates									
Age	General Unisex	Teachers Unisex	Po Male	lice Female	Fire Fighters Unisex					
20	0.03%	0.01%	0.02%	0.04%	0.01%					
25	0.03%	0.01%	0.05%	0.08%	0.05%					
30	0.05%	0.02%	0.10%	0.12%	0.18%					
35	0.07%	0.03%	0.22%	0.28%	0.25%					
40	0.07%	0.07%	0.25%	0.40%	0.30%					
45	0.08%	0.12%	0.30%	0.62%	0.35%					
50	0.12%	0.20%	0.40%	0.70%	0.40%					
55	0.25%	0.25%	0.60%	0.75%	0.45%					
60	0.40%	0.30%	0.80%	0.90%	0.50%					
62+	0.00%	0.00%	0.00%	0.00%	0.00%					



APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

4. Rates of Mortality

Healthy Mortality: RP-2014 Healthy Employee Mortality projected forward generationally using mortality improvement scale MP-2019 for preretirement mortality. RP-2014 Healthy Annuitant Mortality Tables, projected forward generationally using mortality improvement scale MP-2019 for post-retirement mortality. Previously the mortality improvement scale MP-2018 was used.

Disabled Mortality: RP-2014 Disabled Mortality table.

5. Percent of Retirees Electing Coverage

Pre-Medicare retiree: 75% of Police and Fire future retirees and 50% of General and Teacher retirees are assumed to elect coverage.

Medicare-eligible retiree: 70% of future retirees who are eligible for Medicare are assumed to elect coverage.

6. Spousal Coverage

70% of Police and Fire participant's spouses, 50% of male General participant's spouses, 25% of female General participant's spouses, 45% of male Teacher participant's spouses, and 30% of female Teacher participant's spouses are assumed to elect the Healthcare Benefits Plan.

7. Dependent Age

For current retirees, the actual spouse date of birth was used when available. For future retirees and missing spouse dates of birth, husbands are assumed to be 3-years older than wives.

8. Administrative Expenses

Health plan administrative expenses are included in the per capita claims costs.

10. Basis for Demographic Assumptions

The demographic assumptions used in this report was based on the DCRB's actuary's experience study through September 30, 2015 dated May 12, 2017 for the Police/Fire/Teachers and on the prior actuary's experience study dated October 23, 2018 for the general population.

11. Changes Since Last Valuation

The Mortality improvement scale was updated to MP2019 from MP2018, as expected each year.



APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

Claim and Expense Assumptions

The claims costs were developed based on the actual premiums in effect for 2019. An adjustment was made to the claims to account for children of retirees. Additionally, 2019 contractual administrative expenses are included. The resulting per person per month (PPPM) cost is then adjusted using age curves.

1. Average Annual Claims and Expense Assumptions

The following October 1, 2018 to September 30, 2019 annual claims costs were developed based on the total premium rates charged by plan and tier. Subsequent years' costs are based on the first-year cost adjusted with the trend. These costs are net of deductibles and other benefit plan cost-sharing provisions. These claims are derived from actual blended premiums and allocated using Cheiron's aging factors to each age and by gender, including an assumed cost for children. The medical costs reduce at age 65 when the retiree becomes eligible for Medicare and Medicare is primary for their covered services. This is the first valuation in which the District has members enrolled in Medicare Advantage plans. We have assumed that 49% of future retirees will elect the Medicare Advantage plans and the rest will remain enrolled in the plans that are also available non-Medicare eligibles. The claim curves below were trended by 5.5% to bring them to the fiscal year October 1, 2019 – September 30, 2020.

		•.
	District of	Columbia
Age	Male	Female
40	\$7,882	\$10,582
45	\$9,588	\$11,673
50	\$11,664	\$13,360
55	\$13,937	\$15,133
60	\$16,574	\$16,162
64	\$19,699	\$16,092
65	\$6,394	\$5,194
70	\$7,192	\$5,490
75	\$7,769	\$5,896
80	\$8,138	\$6,274
85	\$8,318	\$6,526

For Fiscal Year 10/1/2018 - 9/30/2019:



APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

2. Retiree Contributions

The monthly contributions are as of the period starting September 30, 2018. For retirees and spouses prior to October 1, 2018, the contribution percentage is the actual percentage provided by the District for these retirees. For retirees and spouse who retire after October 1, 2018, the contributions are based on the amount of service earned under each plan. The 2020 Monthly Health Premiums are based on the rates below, trended at 5.5%. Subsequent years' premiums are based on the first year premium adjusted with the trend

2019 Monthly Health Premiums					
	Self	Self+1	Family		
Pre-Medicare Plans					
Kaiser Permanente HMO	\$636.31	\$1,215.36	\$1,864.34		
United Healthcare Choice	770.54	1,471.72	2,257.65		
Aetna CDHP Plan	385.33	757.44	1,113.53		
Aetna PPO Plan	833.05	1,637.53	2,407.33		
Aetna HMO Plan	822.28	1,616.34	2,376.18		
Medicare Plans					
Aetna Medicare Advantage	\$358.18	\$716.36	N/A		
Kaiser Permanente Medicare Plus	246.32	462.64	N/A		
United Health Care Medicare Advantage	423.68	847.36	N/A		

For General and Teachers, the District contribution for future retirees is 2.5% of the premium for each year of service up to a maximum of 75%. For spouses, the District contribution is 2.0% of the premium for each year of service up to a maximum of 60%.

For Police/Fire who were hired prior to November 10, 1996, the District will contribute 75% for retirees and 60% for spouses as long as the member can demonstrate that he or she has five years of creditable service. For Police/Fire who were hired on or after November 10, 1996, the benefits are 75% after 25 years of service for retirees and 60% for spouses with the amount reduced proportionately for those who retiree with less than 25 years of service. For Police/Fire who died or become disabled in the line of duty, the benefit is 75% of the premium for both retirees and spouses.

3. Medicare Part D Subsidy

Per GASB guidance, any Retiree Drug Subsidy that the City receives from the Centers for Medicare Service (CMS) has not been reflected in this valuation.

4. Medicare Part B Premium Subsidy

Assumed that Medicare-eligible retirees pay the Medicare Part B premiums.



APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

5. Medicare Eligibility

All retirees who turn age 65 are assumed to be eligible for Medicare.

6. Geography

Implicitly assumed to remain the same as current retirees.

7. Changes Since Last Valuation

None



APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

Methodology

The Entry Age Normal Actuarial Cost method is used to determine costs. Under this funding method, a normal cost rate is determined as a level percent of pay for each active Plan member and then summed to produce the total normal cost for the City.

The Actuarial Accrued Liability is that portion of the present value of projected benefits that will not be paid by future employer normal costs or member contributions. The difference between this liability and funds accumulated as of the same date is referred to as the unfunded actuarial liability.

The portion of the Actuarial Liability in excess of OPEB Trust's assets is amortized to develop additional costs or savings, which is added to each year's employer normal cost. Under this cost method, actuarial gains and losses are directly reflected in the size of the unfunded actuarial liability.

The unfunded actuarial liability is amortized over a closed 20-year period effective FYE 2016. The amortization is a level dollar amortization. There are 15 years remaining as of FYE 2021.

The liabilities presented in this section are based on the assumption of an ongoing plan and would not be appropriate for measuring the settlement value of plan obligations.

The claims costs were developed using actual 2019 premiums. Expenses were based on contractual rates. From this data, we developed per person per month (PPPM) costs for January 1, 2019 to December 31, 2019. The per person per month was then adjusted to a per adult per month then adjusted using age curves, such that the total expected claims are determined. The fiscal year 10/1/2019-9/30/2020 claim curves and per adult curves were developed based on the 10/1/2018-9/30/2019 claim curves and per adult curves, trended by 5.5%.

Actuarial Value of Assets

For purposes of determining the contribution rate to the Plan, we use an actuarial value of assets. The asset adjustment method dampens the volatility in asset values that could occur because of fluctuations in market conditions. Use of an asset smoothing method is consistent with the long-term nature of the actuarial valuation process.

The actuarial value of assets is the current market value, adjusted by a five-year smoothing of gains and losses on a market value basis. Each year's gain or loss is determined as the difference between the actual market return and the expected market return using the assumed rate of investment return. The actuarial value is adjusted to remain within 20% of the market value.



APPENDIX C – SUMMARY OF PLAN PROVISIONS

Summary of Key Substantive Plan Provisions

Eligibility

Employees hired after September 30, 1987 are eligible for post-employment health and life insurance coverage if they have been continuously enrolled in a District health benefit plan for at least 5 years and they:

- 1. Are classified as a General Employee, are at least age 60, have at least 10 years of creditable District service, are covered under the District defined contribution program and have obtained a Social Security award letter (including disability); or
- 2. Have at least 10 years of creditable District service and retire under the Teachers' Retirement System, the Judges' Retirement System or the Teachers' Insurance and Annuity Association program; or
- 3. Retire under the Police Officers' & Firefighters Retirement Plan with at least 10 years of creditable District service (5 years if hired before 11/10/1996)

Eligibility		to qualify	for ret	irement
Plan	Unre	duced	Re	educed
	Age	Service	Age	Service
Teachers (note: service must include 5 years of school service)	55* 60 62	30 20 5	50 Any	20 25
Police & Firefighters - hired before 11/10/1996**	50	25	NA	NA
	60	5	NA	NA
Police & Firefighters - hired on or after 11/10/1996	Any	25	NA	NA
	60	None	NA	NA

*If hired on or after 11/1/1996, there is no age requirement if have 30 years of service.

**If hired prior to 2/15/1980, retirement available after 20 years of service, regardless of age.

A surviving spouse may continue healthcare coverage upon the retiree's death.



APPENDIX C – SUMMARY OF PLAN PROVISIONS

Summary of 2019 Benefit Plans

Currently, the District of Columbia's Other Post-Employment Benefits Fund offers the same health plans as active employees. Benefits are payable under the plan for medical care obtained from the District's health care insurers. The District currently allows the participant to choose from a PPO, POS, or several HMOs. These choices are Kaiser HMO, United HealthCare (UHC) HMO, United HealthCare POS. Aetna HMO and Aetna PPO plans. Once a participant becomes eligible for Medicare, the plans pay as if Medicare is primary, even if the retiree does not enroll in Medicare. In addition, the retiree has the choice of three Medicare Advantage plans.



APPENDIX C – SUMMARY OF PLAN PROVISIONS

January 1, 2019 Aetna Plans					
Plan	Aetna CDHP	Aetna PPO	Aetna HMO		
In-Network (INN) Benefits					
Deductible (Individual / Family)	\$1,350 / \$2,700	\$750 / \$1,500	\$0		
Coinsurance	85%	85%	100%		
Out-of-Pocket Max (Individual / Family)	\$3,425 / \$6,850	\$1,500 / \$3,000	\$3,500 / \$9,400		
Coverages					
Preventive Care	Fully Covered	Fully Covered	Fully Covered		
Office Visit (OV)-Primary Care	DC*	\$15 Copay	\$10 Copay		
OV - Specialist Care Provider (SCP)	DC*	\$30 Copay	\$20 Copay		
Hospital Emergency Room (ER)	DC*	\$100 Copay	\$100 Copay		
Urgent Care (UC)	DC*	\$25 Copay	\$20 Copay		
Outpatient Surgery	DC*	DC*	\$50 Copay		
Hospital Inpatient	DC*	DC*	\$100 Copay per stay		
Lifetime Max	No Limit	No Limit	No Limit		
Out-of-Network (OON) Benefits					
Deductible (Individual / Family)	\$2,500 / \$5,000	\$1,500 / \$3,000			
Coinsurance	60%	75%			
Out-of-Pocket Max (Individual / Family)	\$6,400 / \$12,900	\$3,000 / \$6,000			
Prescription Drug Benefits					
Retail (30 Days) - Generic/Formulary/Non-	\$10 / \$30 / \$60	\$20 / \$40 / \$55	\$20 / \$40 / \$55		
form. Copay	\$107 \$307 \$00	φ207 φ 1 07 φ33	\$207 \$ 1 07 \$55		
Mail Order (90 Days) -	\$20 / \$C0 / \$120	¢40 / ¢90 / ¢110	#0 / #10 / # 22		
Generic/Formulary/Non-form. Copay	\$20 / \$60 / \$120	\$40 / \$80 / \$110	\$8 / \$18 / \$33		
Separate Drug Out of Pocket Max	N/A	\$5,100 / \$10,200	\$3,100 / \$3,800		
Detail Benefits					
Mental Health and Substance Abuse Inpatient	DC*	\$15 Copay	\$100 Copay per stay		
Mental Health and Substance Abuse Outpatient	DC*	DC*	\$10		
Rehabilitation	DC*	DC*	\$20		
Chiropractors	DC*	DC*	\$20		
Dental	Not covered	Not covered	Not covered		
Vision Exam	100%	100%	\$20 Copay		
Vision Lens/Frames/Contacts	\$100/24 months	\$100/24 months	\$100/24 months		

*DC = Deductible and Coinsurance

¹ No network, benefits same as in-network benefits



APPENDIX C – SUMMARY OF PLAN PROVISIONS

Plan	Kaiser Permanente HMO	United Health Care
In-Network (INN) Benefits		
Deductible (Individual / Family)	\$0	\$0
Coinsurance	100%	100%
Out-of-Pocket Max (Individual / Family)	\$3,500 / \$9,400	\$3,500 / \$9,400
Coverages		
Preventive Care	Fully Covered	Fully Covered
Office Visit (OV)-Primary Care	\$10 Copay	\$10 Copay
OV - Specialist Care Provider (SCP)	\$20 Copay	\$20 Copay
Hospital Emergency Room (ER)	\$50 Copay	\$100 Copay
Urgent Care (UC)	\$20 Copay	\$20 Copay
Outpatient Surgery	\$50 Copay	\$50 Copay
Hospital Inpatient	\$100 Copay per stay	\$100 Copay per stay
Lifetime Max	No Limit	No Limit
Out-of-Network (OON) Benefits		
Deductible (Individual / Family)		
Coinsurance		
Out-of-Pocket Max (Individual / Family)		
Prescription Drug Benefits		
Retail (30 Days) - Generic/Formulary/Non-	\$10/\$20/\$35 Plan Pharmacy;	POD / PAD / P55
form. Copay	\$20/\$40/\$55 Participating	\$20 / \$40 / \$55
Mail Order (90 Days) -	<u> </u>	
Generic/Formulary/Non-form. Copay	\$8 / \$18 / \$33	\$16 / \$36 / \$66
Separate Drug Out of Pocket Max	N/A	N/A
Detail Benefits		
Mental Health and Substance Abuse Inpatient	\$100 Copay per stay	\$100 Copay per stay
Mental Health and Substance Abuse Outpatient	\$10 / \$5 group	\$10
Rehabilitation	\$20	\$10
Chiropractors	\$20	\$10
Dental	Not covered	Not covered
Vision Exam	\$10 Copay	Not covered
Vision Lens/Frames/Contacts	Every 24 months	Not covered

*DC = Deductible and Coinsurance

¹ No network, benefits same as in-network benefits



APPENDIX C – SUMMARY OF PLAN PROVISIONS

Plan	Aetna Medicare PPO with ESA	Kaiser Permanente Medicare Advantage HMO	United Health Care Group Medicare Advantage (PPO)
In-Network (INN) Benefits			
Deductible (Individual / Family)	\$0	\$0	\$0
Coinsurance	100%	100%	100%
Out-of-Pocket Max (Individual / Family)	\$6,700	\$3,400	\$500
Coverages			
Preventive Care	Fully Covered	Fully Covered	Fully Covered
Office Visit (OV)-Primary Care	\$15 Copay	\$15 Copay	\$5 Copay
OV - Specialist Care Provider (SCP)	\$15 Copay	\$15 Copay	\$10 Copay
Hospital Emergency Room (ER)	\$50 Copay	\$50 Copay	\$65 Copay
Urgent Care (UC)	\$15 Copay	\$15 Copay	\$5 Copay
Outpatient Surgery	Fully Covered	\$50 Copay	Fully Covered
Hospital Inpatient	Fully Covered	\$100 Copay per stay	\$100 Copay per stay
Lifetime Max	No Limit	No Limit	No Limit
Out-of-Network (OON) Benefits			
Deductible (Individual / Family)	\$0		
Coinsurance	0%		
Out-of-Pocket Max (Individual / Family)	\$6,700		
Prescription Drug Benefits			
Retail (30 Days) - Generic/Formulary/Non- form. Copay	\$10 / \$20 / \$40	\$7.50 Plan Pharmacy; \$12.50 Participating	\$10 / \$30 / \$40
Mail Order (90 Days) - Generic/Formulary/Non-form. Copay	\$20 / \$40 / \$80	\$10	\$20 / \$60 / \$80
Separate Drug Out of Pocket Max	N/A	N/A	N/A
Detail Benefits			
Mental Health and Substance Abuse Inpatient	Fully Covered	Fully Covered	\$100 Copay per stay
Mental Health and Substance Abuse Outpatient	\$15 Copay	\$15 Copay	\$10 Copay
Rehabilitation	\$15 Copay	\$15 Copay	\$5 Copay
Chiropractors	\$15 Copay	\$15 Copay	\$10 Copay
Medicare Covered Dental	\$15 Copay	\$30 Copay	Not covered
Vision Exam	100%	\$15 Copay	\$10 Copay
Vision Lens/Frames/Contacts	\$100/ 24 months	20% to Medicare's Limit	Not covered

*DC = Deductible and Coinsurance

¹ No network, benefits same as in-network benefits



APPENDIX C – SUMMARY OF PLAN PROVISIONS

Retiree Contributions

General Employees

Retirees under the age of 62 pay the full aggregate active-life rate for coverage. Thus, prior to age 62, the retiree healthcare plan is an access-only plan. Once a retiree attains age 62, the retiree pays a portion of the aggregate, active-life rate, as determined under the following schedule:

General Control Description of the Description of t					
Annuitant's Years of Service	Percentage of Plan Aggregate Cost Rate Paid by Retiree for Retiree Dependent/Survivor's Coverage Coverage				
Less than 10	100%	100%			
10-25	75% minus 2.5% for each year of service in excess of 10	80% minus 2.5% for each year of service in excess of 10			
25-29	75% minus 2.5% for each year of service in excess of 10	40%			
30 or more	25%	40%			

Teachers

For annuitants who are injured in the line of duty, the retiree contributes 25% of the Plan aggregate, active-life rate for both the retiree and dependent coverage, regardless of years of service.

	Teachers			
Annuitant's	ant's Percentage of Plan Aggregate Cost Rate Paid by Retiree for:			
Years of	Retiree	Dependent/Survivor's		
Service	Coverage	Coverage		
Less than 10	100%	100%		
10-25	75% minus 2.5% for each year of service in excess of 10	80% minus 2.5% for each year of service in excess of 10		
25-29	75% minus 2.5% for each year of service in excess of 10	40%		
30 or more	25%	40%		



APPENDIX C – SUMMARY OF PLAN PROVISIONS

Police & Fire

For annuitants who are injured in the line of duty, the retiree contributes 25% of the Plan aggregate, active-life rate for both retiree and dependent coverage, regardless of years of service.

Police & Fire Annuitant's Percentage of Plan Aggregate Cost Rate Paid by Retiree for:					
Annuitant's Years of	Retiree	Dependent/Survivor's			
Service	Coverage	Coverage			
Hired before 1	11/10/1996				
Less than 5	100%	100%			
5 or more	25%	40%			
Hired on or af	fter 11/10/1996				
Less than 10	100%	100%			
10-21	70% minus 3.0% for each year of service in excess of 10	75% minus 3.0% for each year of service in excess of 10			
25-29	70% minus 3.0% for each year of service in excess of 10	40%			
30 or more	25%	40%			

Life Insurance

The District offers Basic Life Insurance coverage with the continuation of Supplemental Life insurance. Participants may elect to continue the amount of the basic preretirement group life insurance amount in retirement, which is one times earnings, plus \$2,000. Under the 75% reduction option, participant biweekly premiums of \$0.065 per \$1,000 of insurance are required until age 65, with no participant contribution thereafter. Under the 75% reduction option, coverage reduces 2% per month after age 65 until the coverage amount reaches 25% of the original insurance amount and is level thereafter.

Retirees may also elect a 50% or a 0% reduction option, which require additional retiree contributions. Retirees may also purchase additional life insurance coverage beyond the basic coverage, on a retiree-pay-all basis.

Changes Since Prior Valuation

None



APPENDIX D – GLOSSARY OF TERMS

1. Actuarial Assumptions

Assumptions as to the occurrence of future events affecting OPEB costs, such as mortality, withdrawal, and retirement; changes in compensation; rates of investment earnings and asset appreciation or depreciation; procedures used to determine the actuarial value of assets; and other relevant items.

2. Actuarial Cost Method

A procedure for determining the actuarial present value of OPEB plan benefits and expenses and for developing an allocation of such value to each year of service, usually in the form of a normal cost and an actuarial liability.

3. Actuarially Determined Contribution

A target or recommended contribution for the reporting period, determined in conformity with Actuarial Standards of Practice based on the most recent measurement available when the contribution for the reporting period was adopted.

4. Actuarial Gain (Loss)

A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

5. Actuarial Liability

The portion of the actuarial present value of projected benefits, which will not be paid by future normal costs. It represents the value of the past normal costs with interest to the valuation date.

6. Actuarial Present Value (Present Value)

The value as of a given date of a future amount or series of payments, the actuarial present value discounts the payments to the given date at the assumed investment return and includes the probability of the payment being made. As a simple example: assume you owe \$100 to a friend one year from now. Also, assume there is a 1% probability of your friend dying over the next year, in which case you will not be obligated to pay him. If the assumed investment return is 10%, the actuarial present value is:

		Probability		1/	Present
<u>Amount</u>		of Payment		(1+Discount Rate)	Value
\$100	х	(101)	х	1/(1+.1) =	\$90



APPENDIX D – GLOSSARY OF TERMS

7. Actuarial Valuation Date

The date as of which an actuarial valuation is performed. This date may be up to 24 months prior to the measurement date and up to 30 months prior to the employer's reporting date.

8. Actuarial Value of Assets

The value of cash, investments, and other property belonging to an OPEB plan as used by the actuary for the purpose of an actuarial valuation. The purpose of an actuarial value of assets is to smooth out fluctuations in market values. This way long-term cost are not distorted by short-term fluctuations in the market.

9. Amortization Payment

The portion of the OPEB plan contribution, which is designed to pay interest and principal on the unfunded actuarial liability in order to pay for that liability in a given number of years.

10. Entry Age Normal Actuarial Cost Method

A method under which the actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis over the earnings of the individual between entry age and assumed exit ages.

11. Normal Cost

That portion of the actuarial present value of OPEB plan benefits and expenses, which is allocated to a valuation year by the actuarial cost method.

12. Unfunded Actuarial Liability

The excess of the actuarial liability over the actuarial value of assets.

13. Funded Percentage

The ratio of the actuarial value of assets to the actuarial liabilities.

14. Mortality Table

A set of percentages, which estimate the probability of death at a particular point in time. Typically, the rates are annual and based on age and sex.



APPENDIX D – GLOSSARY OF TERMS

15. Discount Rate

The assumed interest rate used for converting projecting dollar related values to a present value as of the valuation date.

16. Medical Trend

The assumed increase in dollar-related values in the future due to the increase in the cost of health care.

17. Deferred Inflow of Resources

An acquisition of net assets by a government employer that is applicable to a future reporting period. In the context of GASB 75, these are experience gains on the total OPEB liability, assumption changes reducing the total OPEB liability, or investment gains that are recognized in future reporting periods.

18. Deferred Outflow of Resources

A consumption of net assets by a government employer that is applicable to a future reporting period. In the context of GASB 75, these are experience losses on the total OPEB liability, assumption changes increasing the total OPEB liability or investment losses that are recognized in future reporting periods.

19. Entry Age Actuarial Cost Method

The actuarial cost method required for GASB 74 and 75 calculations. Under this method, the actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis over the earnings of the individual between entry age and assumed exit ages. The portion of this actuarial present value allocated to a valuation year is called the Service Cost. The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future service costs is called the total OPEB liability.

20. Measurement Date

The date as of which the total OPEB liability and plan fiduciary net position are measured, the total OPEB liability may be projected from the Actuarial Valuation Date to the Measurement Date. The Measurement Date must be the same as the Reporting Date for the plan.



APPENDIX D – GLOSSARY OF TERMS

21. Net OPEB Liability

The liability of employers and non-employer contributing entities for employees for benefits provided through a defined benefit OPEB plan. It is calculated as the total OPEB liability less the plan fiduciary net position.

22. Plan Fiduciary Net Position

The fair or Market Value of Assets.

23. Reporting Date

The last day of the plan or employer's fiscal year.

24. Service Cost

The portion of the actuarial present value of projected benefit payments that is attributed to the current period of employee service in conformity with the requirements of GASB 74 and 75. The Service Cost is the normal cost calculated under the entry age actuarial cost method.

25. Total OPEB Liability

The portion of the actuarial present value of projected benefit payments that is attributed to past periods of employee service in conformity with the requirements of GASB 74 and 75. The total OPEB liability is the Actuarial Liability calculated under the entry age actuarial cost method.



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District of Columbia Other Post-Employment Benefits Fund Office of the Chief Financial Officer Annual Report FY 2019