


AMENDMENT OF SOLICITATION / MODIFICATION OF CONTRACT		1. Solicitation Number CFOPD-22-R-040		Page of Pages	
				1	1 plus Attachments
2. Amendment/Modification Number Amendment No. 1	3. Effective Date See Box 16C	4. Requisition/Purchase Request No.	5. Solicitation Caption Actuarial Services		
6. Issued by: Code		7. Administered by (If other than line 6)			
Office of the Chief Financial Officer Office of Contracts 1100 4 th Street SW Suite E610 Washington, DC 20024					
8. Name and Address of Contractor (No. street, city, county, state and zip code) ALL POTENTIAL OFFERORS Code Facility		X	9A. Amendment of Solicitation No. CFOPD-22-R-004		
			9B. Dated (See Item 11) August 12, 2022		
			10A. Modification of Contract/Order No.		
			10B. Dated (See Item 13)		
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS					
<input checked="" type="checkbox"/> The above numbered solicitation is amended as set forth in item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended. <input checked="" type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning a <u>1</u> written copy of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) BY separate letter or fax which includes a reference to the solicitation and amendment number. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such may be made by letter or fax, provided each letter or telegram makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.					
12. Accounting and Appropriation Data (If Required)					
13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14					
A. This change order is issued pursuant to (Specify Authority):					
B. The above numbered contract/order is modified to reflect the administrative changes.					
C. This supplemental agreement is entered into pursuant to authority of:					
D. Other (Specify type of modification and authority) Administrative					
E. IMPORTANT: Contractor <input type="checkbox"/> is not <input checked="" type="checkbox"/> is required to sign this document and return one (1) copy to the issuing office.					
14. Description of Amendment/Modification (Organized by UCF Section headings, including solicitation/contract subject matter where feasible.) The above referenced solicitation to provide Actuarial Services is hereby amended to respond to inquiries received (Attachment A) and to incorporate the most recent Actuarial Valuation report (Attachment B). ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED					
Except as provided herein, all terms and conditions of the document is referenced in Item 9A or 10A remain unchanged and in full force and effect.					
15A. Name and Title of Signer (Type or print)		16A. Name of Contracting Officer			
		Anthony A. Stover, CPPO			
15B. Name of Contractor	15C. Date Signed	16B. District of Columbia		16C. Date Signed	
(Signature of person authorized to sign)				Aug 29, 2022	
		(Signature of Contracting Officer)			

Attachment A

Set forth below are the District's responses to inquiries received:

Question 1. Please provide a copy of the most recent Actuarial Valuation Report for the Plan.

Response 1. Please See Attachment B.

Question 2. Who is the incumbent and what was the contract amount?

Response 2. Pricing information is contained in the contract (CFOPD-19-C-007) which can be found on our website. The link for the website is <https://dc.cobblestonesystems.com/Gateway/> The current Contractor is Cheiron Inc.

Question 3. Can you provide a copy of the most recent study?

Response 3. The District will not share this information. The District requires that the Contractor produce their own experience study when the contract is awarded.

Question 4. Is the OPEB Plan still using the Medicare Part D subsidy to coordinate with Medicare Part D?

Response 4. Yes

Question 5. Can you provide any lessons learned (positive or negative) from the incumbent's work?

Response 5. This question is not germane to the solicitation.

Question 6. What are the current fees and hourly rates for the current provider?

Response 6 Pricing information is contained in the contract (CFOPD-19-C-007) which can be found on our website. The link for the website is <https://dc.cobblestonesystems.com/Gateway/>

Question 7. Is the scope of this RFP and the scope of the current services the same, or are there different services being requested?

Response 7. The Offeror should compare the requirements of the current contract to the solicitation to determine if there are any differences in the requirements that may be of interest to them. The current contract number is CFOPD-19-C-007 and can be found on the website at <https://dc.cobblestonesystems.com/Gateway/> .

Question 8. Why is this out to bid at this time?

Response 8 **This question is not germane to the solicitation.**

Question 9. How long has the current actuary been in place?

Response 9 **The current contract was awarded in 2018.**

Question 10. Please provide a copy of the most recent asset allocation study of the OPEB fund.

Response 10 **The District will not share this information. The District requires that the Contractor produce their own experience study when the contract is awarded.**

Question 11. Is the census information provided in one file from one entity, or are multiple census files/multiple sources required? If multiple files/sources, please detail how many of each.

Response 11. **There are multiple sources that provides six (6) files in total.**

Question 12. Please provide a copy of the most recent experience study report.

Response 12 **See response to question number 3.**

Attachment B

District of Columbia Office of the Chief Financial Officer

Other Post-Employment Benefits Fund

Actuarial Valuation as of September 30, 2021

**Produced by Cheiron
February 2022**



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Letter of Transmittal

February 11, 2022

Ms. 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 Ms. Collis:

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, 2021. 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, 2022. 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 were rolled forward from the prior valuation using actual increases in premiums. 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, 2021, related to GASB Statements 74 and 75 were provided in a separate report on December 10, 2021 which are based on the valuation report as of September 30, 2020.

Ms. Eugenia Collis

February 11, 2022

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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. 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.

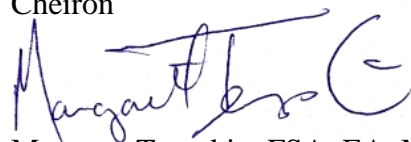
This report does not contain any adjustments for the potential impact of COVID-19. We anticipate the virus will impact both mortality and claims in the short term, as well as potentially other demographic experiences. However, the net impact over the long term is not determinable at this time.

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



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



John Colberg, FSA, EA, MAAA
Principal Consulting Actuary

**DISTRICT OF COLUMBIA OFFICE OF THE CHIEF FINANCIAL OFFICER
OTHER POST-EMPLOYMENT BENEFITS FUND
ACTUARIAL VALUATION AS OF SEPTEMBER 30, 2021**

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, 2021. 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, a 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, 2023. The remaining amortization period is 13 years.

**DISTRICT OF COLUMBIA OFFICE OF THE CHIEF FINANCIAL OFFICER
OTHER POST-EMPLOYMENT BENEFITS FUND
ACTUARIAL VALUATION AS OF SEPTEMBER 30, 2021**

SECTION I – VALUATION SUMMARY

Table I-1 below summarizes the September 30, 2021 and September 30, 2020, 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 GASB 74/75 disclosure purposes.

Table I-1 Summary of Valuation Results		
Valuation Date	September 30, 2020	September 30, 2021
Discount Rate	6.50%	6.50%
Actuarial Liability (AL)	\$ 1,588,936,238	\$ 1,698,994,377
Actuarial Value of Assets	<u>1,670,614,421</u>	<u>1,852,650,431</u>
Unfunded actuarial liability (UAL)	\$ (81,678,183)	\$ (153,656,054)
Funded Ratio (AVA/AL)	105.14%	109.04%
Expected Net Benefit Payments	36,493,629	43,085,711
Market Value of Assets	1,640,681,507	2,025,061,908
Funded Ratio (MVA/AL)	103.26%	119.19%
Fiscal Year Ending	September 30, 2022	September 30, 2023
Actuarially Determined Contribution	\$ 53,000,000	\$ 41,500,000

The Actuarial Liability increased from \$1.59 billion under the prior valuation to \$1.70 billion under this valuation. In addition to the expected increase in liability of \$122.77 million due to normal cost, benefit payments, and interest, the Plan experienced other changes in liability of (\$12.71) million attributable to an increase due to demographic experience and a decrease due to actual versus expected claims.

During the year ending September 30, 2021, the Plan's assets earned 21.50% 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 9.11%. This return was above the assumed rate of return of 6.50% and resulted in an actuarial gain on investments for the Plan.

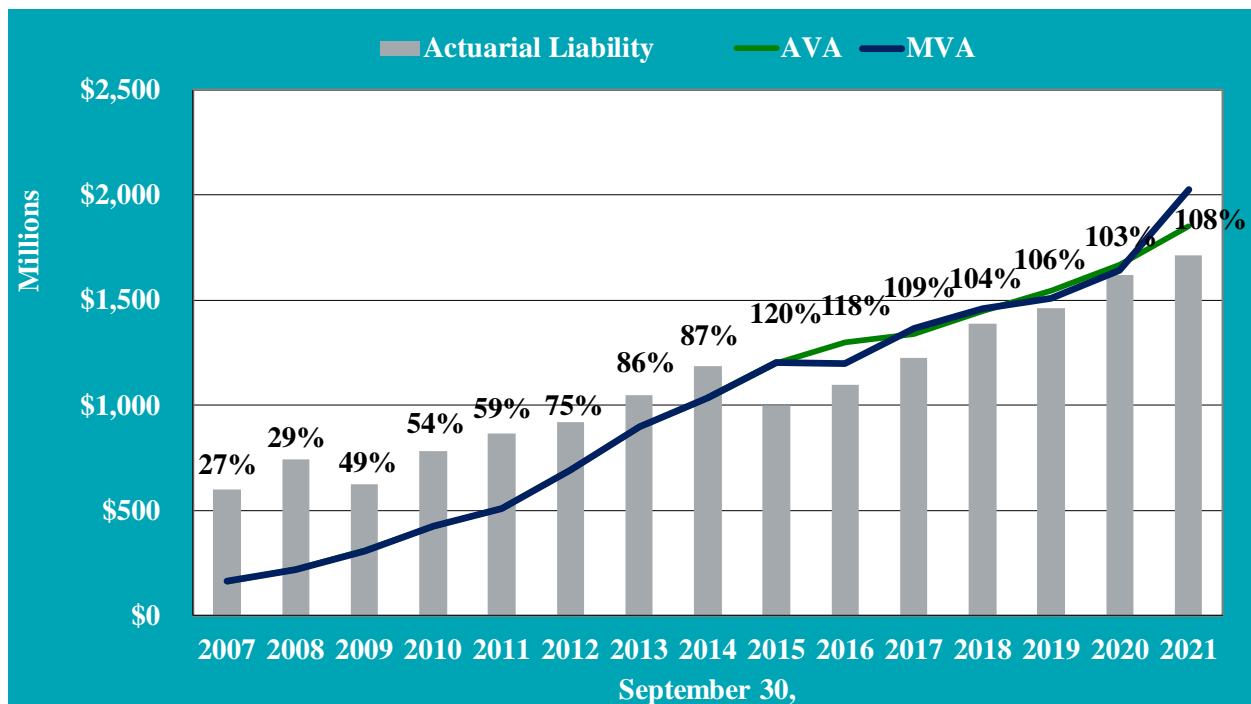
**DISTRICT OF COLUMBIA OFFICE OF THE CHIEF FINANCIAL OFFICER
OTHER POST-EMPLOYMENT BENEFITS FUND
ACTUARIAL VALUATION AS OF SEPTEMBER 30, 2021**

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.



**DISTRICT OF COLUMBIA OFFICE OF THE CHIEF FINANCIAL OFFICER
OTHER POST-EMPLOYMENT BENEFITS FUND
ACTUARIAL VALUATION AS OF SEPTEMBER 30, 2021**

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, 2021, that are used to develop the FYE 2023 ADC.

Table II-1		
Changes in Market Market Value of Assets		
	September 30, 2020	September 30, 2021
Market Value of Assets - as of beginning of Fiscal Year	\$1,509,102,271	\$1,640,681,507
<u>Additions</u>		
Employer Contributions	\$ 47,300,000	\$ 53,600,000
Participant Contributions	889,387	916,183
Total contributions	\$ 48,189,387	\$ 54,516,183
Investment Return		
Net Realized Appreciation and Unrealized Appreciation	90,596,004	341,417,106
Interest	10,524,939	8,549,598
Dividends	11,717,643	8,427,591
Currency (loss)/gain on FX contracts and settlements	(1,712,999)	1,582,182
Other Income	370,219	281,994
Total income from investment activities	\$ 111,495,806	\$ 360,258,471
Investment Expenses	(4,084,162)	(4,370,416)
Total Investment Return	\$ 107,411,644	\$ 355,888,055
<u>Deductions</u>		
Benefit Payments Made	\$ 23,436,697	\$ 25,352,804
Administrative Expenses	585,098	671,033
Total Deductions	\$ 24,021,795	\$ 26,023,837
<u>Total</u>		
Net Increase (Decrease)	\$ 131,579,236	\$ 384,380,401
Market Value of Assets - as of end of Fiscal Year	\$ 1,640,681,507	\$ 2,025,061,908
Money-weighted Market Return for Period	7.06%	21.50%

**DISTRICT OF COLUMBIA OFFICE OF THE CHIEF FINANCIAL OFFICER
OTHER POST-EMPLOYMENT BENEFITS FUND
ACTUARIAL VALUATION AS OF SEPTEMBER 30, 2021**

SECTION II – ASSETS

Table II-2 below shows the money-weighted rate of return of plan investments. The money-weighted 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 Money-Weighted Rate of Return				
	Net External Cash Flows	Periods Invested	Period Weight	Net External Cash Flows With Interest
Beginning Value October 1, 2020	\$ 1,640,681,507	12	1.00	\$ 1,996,028,485
Monthly Net External Cash Flows:				
October	\$ (2,046,228)	11.5	0.96	(2,469,158)
November	(2,057,754)	10.5	0.88	(2,442,829)
December	(2,080,655)	9.5	0.79	(2,429,990)
January	(2,035,487)	8.5	0.71	(2,338,716)
February	(2,295,903)	7.5	0.63	(2,595,181)
March	(1,990,770)	6.5	0.54	(2,213,807)
April	(2,071,788)	5.5	0.46	(2,266,569)
May	(2,044,758)	4.5	0.38	(2,200,748)
June	51,525,731	3.5	0.29	54,557,867
July	(2,134,118)	2.5	0.21	(2,223,087)
August	(2,008,938)	1.5	0.13	(2,058,777)
September	(2,266,987)	0.5	0.04	(2,285,582)
Ending Value September 30, 2021				\$ 2,025,061,908
Money-Weighted Rate of Return				21.66%

**DISTRICT OF COLUMBIA OFFICE OF THE CHIEF FINANCIAL OFFICER
OTHER POST-EMPLOYMENT BENEFITS FUND
ACTUARIAL VALUATION AS OF SEPTEMBER 30, 2021**

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.

Table II-3 Development of Unrecognized Gain/(Loss) on Investments as of September 30, FYE					
	Fiscal Year Ending 9/30/2017	Fiscal Year Ending 9/30/2018	Fiscal Year Ending 9/30/2019	Fiscal Year Ending 9/29/2020	Fiscal Year Ending 9/30/2021
1. Market Value of Assets as of September 30, Beginning of Fiscal Year	\$1,197,441,214	\$1,366,282,061	\$1,462,029,859	\$1,509,102,271	\$1,640,681,507
Fiscal Year Cash Flow					
2. Employer Contributions for the Plan Year Ending September 30, FYE	\$ 31,000,000	\$ 44,500,000	\$ 46,000,000	\$ 47,300,000	\$ 53,600,000
3. Participant Contributions for the Plan Year Ending September 30, FYE	521,466	706,225	834,228	889,387	916,183
4. Benefit Payments through September 30, FYE	(12,891,620)	(16,446,608)	(19,678,332)	(23,436,697)	(25,352,804)
5. Administrative Expenses through September 30, FYE	(303,897)	(397,007)	(730,088)	(585,098)	(671,033)
6. Net Cash Flow	<u>\$ 18,325,949</u>	<u>\$ 28,362,610</u>	<u>\$ 26,425,808</u>	<u>\$ 24,167,592</u>	<u>\$ 28,492,346</u>
Investment Performance					
7. Interest of 6.50% on Market Value of Assets to September 30, FYE	\$ 77,833,679	\$ 88,808,334	\$ 95,031,941	\$ 98,091,648	\$ 106,644,298
8. Interest on employer contributions assuming received at the end year to September 30, FYE	0	0	0	0	0
9. Interest on participant contributions assuming received uniformly throughout the year to September 30, FYE	16,948	22,952	27,112	28,905	29,776
10. Interest on benefit payments assuming payments made uniformly throughout the year to September 30, FYE	(418,978)	(534,515)	(639,546)	(761,693)	(823,966)
11. Interest on administrative expenses assuming payments made uniformly throughout the year to September 30, FYE	(9,877)	(12,903)	(23,728)	(19,016)	(21,809)
12. Expected Investment Performance (7 + 8 + 9 + 10 + 11)	<u>\$ 77,421,772</u>	<u>\$ 88,283,868</u>	<u>\$ 94,395,779</u>	<u>\$ 97,339,844</u>	<u>\$ 105,828,299</u>
13. Expected Market Value of Assets as of September 30, FYE (1 + 6 + 12)	\$ 1,293,188,935	\$ 1,482,928,539	\$ 1,582,851,446	\$ 1,630,609,707	\$ 1,775,002,152
14. Market Value of Assets as of September 30, FYE	\$ 1,366,282,061	\$ 1,462,029,859	\$ 1,509,102,271	\$ 1,640,681,507	\$ 2,025,061,908
15. Market Value of Assets Investment Gain/(Loss) (14 - 13)	\$ 73,093,126	\$ (20,898,680)	\$ (73,749,175)	\$ 10,071,800	\$ 250,059,756

**DISTRICT OF COLUMBIA OFFICE OF THE CHIEF FINANCIAL OFFICER
OTHER POST-EMPLOYMENT BENEFITS FUND
ACTUARIAL VALUATION AS OF SEPTEMBER 30, 2021**

SECTION II – ASSETS

Table II-4 then illustrates the calculation of actuarial value of assets for the September 30, 2021, valuation.

Table II-4 Development of Actuarial Value of Assets as of September 30, 2021		
1. Actuarial Value of Assets as of September 30, 2020	\$	1,670,614,421
2. Net Cash Flow (Contributions - Benefit Payments - Expenses)	\$	28,492,346
3. Expected Investment Performance	\$	105,828,299
	Initial Unrecognized	
<u>Recognition of gain/(loss)</u>	<u>Gain/(Loss)</u>	<u>Recognition</u>
4. 20% of gain/(loss) as of September 30, 2017	\$ 73,093,126	\$ 14,618,625
5. 20% of gain/(loss) as of September 30, 2018	\$ (20,898,680)	\$ (4,179,736)
6. 20% of gain/(loss) as of September 30, 2019	\$ (73,749,175)	\$ (14,749,835)
7. 20% of gain/(loss) as of September 30, 2020	\$ 10,071,800	\$ 2,014,360
8. 20% of gain/(loss) as of September 30, 2021	\$ 250,059,756	<u>\$ 50,011,951</u>
9. Recognized gain/(loss) as of September 30, 2021 (sum of 4 - 8)	\$	47,715,365
10. Actuarial Value of Assets as of September 30, 2021 (1 + 2 + 3 + 9)	\$	1,852,650,431
Market Value of Assets as of September 30, 2021	\$	2,025,061,908
Corridor for Actuarial Value of Assets		
80% of Market Value	\$	1,620,049,526
120% of Market Value	\$	2,430,074,290
Actuarial Value of Assets as of September 30, 2021	\$	1,852,650,431
Actuarial Value as a percent of Market Value		91.5%
Money-weighted Return on Actuarial Value of Asset		9.1%

**DISTRICT OF COLUMBIA OFFICE OF THE CHIEF FINANCIAL OFFICER
OTHER POST-EMPLOYMENT BENEFITS FUND
ACTUARIAL VALUATION AS OF SEPTEMBER 30, 2021**

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 2023.

Information about the actuarial liabilities of the Plan as of September 30, 2021 and September 30, 2020, are shown in Table III-1 below.

Table III-1 Actuarial Liability		
Valuation Date	September 30, 2020	September 30, 2021
Discount Rate	6.50%	6.50%
Actuarial Liability		
Current active members	\$ 1,042,296,688	\$ 1,094,001,240
Current retirees, beneficiaries, and dependents	<u>546,639,550</u>	<u>604,993,137</u>
Total Actuarial Liability (AL)	\$ 1,588,936,238	\$ 1,698,994,377
Actuarial Value of Assets (AVA)	<u>1,670,614,421</u>	<u>1,852,650,431</u>
Unfunded Actuarial Liability (UAL)	\$ (81,678,183)	\$ (153,656,054)
Funded Ratio (AVA/AL)	105.14%	109.04%
Market Value of Assets (MVA)	1,640,681,507	2,025,061,908
Unfunded Actuarial Liability (UAL)	\$ (51,745,269)	\$ (326,067,531)
Funded Ratio (MVA/AL)	103.26%	119.19%
Normal Cost	\$ 53,680,704	\$ 54,964,742

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, 2021, at a 6.50% discount rate. Note that this development of the AL and UAL are based on the actual measurement at September 30, 2021 and will be used in the determination of the Actuarially Determined Contribution for FYE 2023. The table shows the liability results separate for Firefighters, Police, Teachers, and General Employees.

Table III-2 Actuarial Liability, Normal Cost & Actuarial Asset Value as of September 30, 2021					
	Firefighters	Police	Teachers	General	Total
Actuarial Liability					
Active Employees	\$ 203,983,458	\$ 324,795,869	\$ 151,386,221	\$ 413,835,692	\$ 1,094,001,240
Retired Employees	<u>87,068,406</u>	<u>419,139,900</u>	<u>58,690,468</u>	<u>40,094,363</u>	<u>604,993,137</u>
Total Liability	\$ 291,051,864	\$ 743,935,769	\$ 210,076,689	\$ 453,930,055	\$ 1,698,994,377
Actuarial Value of Assets					<u>1,852,650,431</u>
Unfunded Actuarial Liability (UAL)					\$ (153,656,054)
Normal Cost	\$ 11,846,136	\$ 19,487,425	\$ 6,247,399	\$ 17,383,782	\$ 54,964,742

**DISTRICT OF COLUMBIA OFFICE OF THE CHIEF FINANCIAL OFFICER
OTHER POST-EMPLOYMENT BENEFITS FUND
ACTUARIAL VALUATION AS OF SEPTEMBER 30, 2021**

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, 2020	\$ 1,588,936,238
Normal Cost	53,680,704
Expected Benefits paid throughout the year	(36,493,629)
Interest	105,584,058
Expected Actuarial Liability at September 30, 2021	<u>\$ 1,711,707,371</u>
Actuarial Liability at September 30, 2021	1,698,994,377
Gain or (Loss)	\$ 12,712,994
Gain or (Loss) due to:	
Benefit changes	\$ -
Census changes	(47,994,347)
Demographic Assumption changes	-
Healthcare Claims changes	60,707,341
Total changes	\$ 12,712,994

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 changes in retirement, termination, mortality, and spouse election percent for the General Employees. There were changes to the Police, Fire, and Teachers for medical election percentage and spouse election percent.
- *Healthcare Claims changes* refers to the change in projected healthcare costs compared to the prior valuation.

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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 2022 and FYE 2023 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 2022 is based on the 2020 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	9/30/2022	9/30/2023
Normal cost	\$ 60,564,000	\$ 61,757,000
Amortization of UAL	<u>(7,564,000)</u>	<u>(20,257,000)</u>
Total ADC (not less than \$0)	\$ 53,000,000	\$ 41,500,000
Projected payroll	\$ 2,331,261,622	\$ 2,439,212,232
ADC as a percentage of pay	2.27%	1.70%
Fiscal Year Ending	September 30, 2021	September 30, 2022
Expected Net Benefit Payments	\$ 36,493,629	\$ 43,085,711

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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 September 30,	Employer Payment	Fiscal Year Ending September 30,	Employer Payment
2022	\$ 43,086,000	2037	\$ 162,601,000
2023	51,346,000	2038	170,548,000
2024	59,476,000	2039	179,843,000
2025	67,489,000	2040	189,750,000
2026	75,970,000	2041	200,043,000
2027	84,721,000	2042	210,504,000
2028	93,379,000	2043	220,751,000
2029	101,643,000	2044	232,211,000
2030	110,082,000	2045	243,229,000
2031	118,539,000	2046	254,079,000
2032	125,580,000	2047	262,834,000
2033	132,599,000	2048	269,743,000
2034	140,821,000	2049	273,886,000
2035	147,468,000	2050	276,442,000
2036	154,366,000	2051	277,551,000

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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 2023 through 2027, based on a projection of the September 30, 2021, 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 2022 is also shown and is computed based on the September 30, 2020 valuation results.

Table III-6							
Projections of Actuarial Results							
(\$ in Thousands)							
	Fiscal Year Ending September 30,						
	2022	2023	2024	2025	2026	2027	
Projected OPEB Liability	\$ 1,711,707	\$ 1,823,480	\$ 1,950,749	\$ 2,081,107	\$ 2,215,041	\$ 2,352,474	
Expected Actuarial Asset Value	<u>1,792,624</u>	<u>2,027,613</u>	<u>2,195,573</u>	<u>2,375,803</u>	<u>2,549,535</u>	<u>2,668,203</u>	
Expected Unfunded Actuarial Liability	(80,917)	(204,133)	(244,824)	(294,696)	(334,494)	(315,729)	
Funded Ratio	104.7%	111.2%	112.6%	114.2%	115.1%	113.4%	
Normal Cost	\$ 60,600	\$ 61,800	\$ 65,000	\$ 68,300	\$ 71,900	\$ 75,600	
Amortization of Unfunded Liability	<u>(7,600)</u>	<u>(20,300)</u>	<u>(26,000)</u>	<u>(33,700)</u>	<u>(41,500)</u>	<u>(43,000)</u>	
Actuarially Determined Contribution	\$ 53,000	\$ 41,500	\$ 39,000	\$ 34,600	\$ 30,400	\$ 32,600	
Amortization Period for UAL (Years)	14	13	12	11	10	9	

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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, 2021			
Healthcare Trend Rates	-1%	Base	+1%
Actuarial Liability			
Current active members	\$ 915,893,195	\$ 1,094,001,240	\$ 1,323,617,178
Current retirees, beneficiaries, and dependents	<u>551,475,533</u>	<u>604,993,137</u>	<u>669,314,346</u>
Total Actuarial Liability (AL)	\$ 1,467,368,728	\$ 1,698,994,377	\$ 1,992,931,524
Actuarial Value of Assets	1,852,650,431	1,852,650,431	1,852,650,431
Unfunded actuarial liability (UAL)	\$ (385,281,703)	\$ (153,656,054)	\$ 140,281,093
Normal Cost	\$ 44,778,160	\$ 54,964,742	\$ 68,657,409

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-2			
Discount Rate Sensitivity as of September 30, 2021			
Discount Rate	5.50%	6.50%	7.50%
Actuarial Liability			
Current active members	\$ 1,290,988,671	\$ 1,094,001,240	\$ 935,932,280
Current retirees, beneficiaries, and dependents	<u>675,349,318</u>	<u>604,993,137</u>	<u>547,275,154</u>
Total Actuarial Liability (AL)	\$ 1,966,337,989	\$ 1,698,994,377	\$ 1,483,207,434
Actuarial Value of Assets	1,852,650,431	1,852,650,431	1,852,650,431
Unfunded actuarial liability (UAL)	\$ 113,687,558	\$ (153,656,054)	\$ (369,442,997)
Normal Cost	\$ 70,624,358	\$ 54,964,742	\$ 43,164,172

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SECTION V – SCHEDULE OF FUNDING PROGRESS

The Government Finance Officers Association (GFOA) maintains a checklist of items to be included in the Annual Comprehensive Financial Report (ACFR) 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.

Table V-1 Schedule of Funding Progress for Fiscal Year Ending September 30, (\$ in Millions)						
Valuation Year	Actuarial Asset Value (a)	Actuarial Liability (b)	Unfunded Actuarial Liability (c)=(b-a)	Funded Ratio (d)=(a)/(b)	Covered Payroll (e)	UAL as a 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	1,464.7	(80.3)	105.5%	2,038.8	(3.94)%
2020	1,670.6	1,621.6	(49.0)	103.0%	2,173.5	(2.26)%
2021	1,852.7	1,711.7	(141.0)	108.2%	2,331.3	(6.05)%

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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.

Table V-2 Schedule of Employer Contributions (\$ in Millions)				
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
Fiscal Year Ended	Actuarially Determined Contribution	Amount Contributed	Percentage of ADC Contributed	OPEB Expense
2018	\$44.5	\$44.5	100.0%	\$53.4
2019	46.0	46.0	100.0%	63.8
2020	47.3	47.3	100.0%	71.7
2021	53.6	53.6	100.0%	21.4
2022	53.0	TBD	TBD	TBD
2023	41.5	TBD	TBD	TBD
2024*	39.0	TBD	TBD	TBD
2025*	34.6	TBD	TBD	TBD
2026*	30.4	TBD	TBD	TBD

*estimated

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APPENDIX A – MEMBERSHIP INFORMATION

The census data used to develop the Actuarial Liability (AL) as of September 30, 2021, was provided by the District.

September 30, 2021					
Active Participants	Fire	Police	Teachers	General	Total
Number	1,666	2,842	4,931	18,090	27,529
Average age	40.1	40.1	40.6	47.2	44.9
Average years of service	14.1	13.1	8.30	11.6	11.3
Projected payroll	\$ 146,149,063	\$ 249,828,434	\$ 469,992,373	\$ 1,573,242,362	\$ 2,439,212,232
Retirees Enrolled in Health Care					
Number of retirees	230	1,229	390	264	2,113
Average age	53.2	55.2	69.6	71.0	59.6
Numbers of spouses and dependents (excluding children)	171	789	97	85	1,142
Retirees with Life Insurance					
Number of retirees	192	1,222	638	508	2,560
Total Retirees with Medical and/or Life Insurance					
Number of retirees	253	1,392	704	571	2,920

Active Member Data as of September 30, 2021

COUNTS BY AGE/SERVICE											
Age	Service										Total
	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	
Under 25	67	170	20	0	0	0	0	0	0	0	257
25 to 29	311	1,303	541	44	0	0	0	0	0	0	2,199
30 to 34	280	1,669	1,557	410	24	0	0	0	0	0	3,940
35 to 39	173	1,192	1,472	1,122	388	21	0	0	0	0	4,368
40 to 44	140	792	953	877	823	268	5	0	0	0	3,858
45 to 49	79	553	648	645	741	718	165	41	0	0	3,590
50 to 54	60	442	525	612	625	681	329	229	8	0	3,511
55 to 59	39	301	373	469	473	438	246	280	15	0	2,634
60 to 64	17	156	227	330	345	365	176	226	13	4	1,859
65 to 69	6	67	109	170	184	149	103	124	6	2	920
70 & up	1	11	49	67	98	74	41	48	3	1	393
Total	1,173	6,656	6,474	4,746	3,701	2,714	1,065	948	45	7	27,529

Reconciliation of Members with Medical Coverage			
	Active	Retired	Total
September 30, 2020	27,115	1,871	28,986
New Hires	2,860		2,860
Retirement, Elect Medical Coverage	(194)	194	0
Termination/Retirement, No Medical Coverage	(2,252)		(2,252)
Deaths / Drop Coverage		(75)	(75)
Other Data Changes		<u>123</u>	<u>123</u>
September 30, 2021	27,529	2,113	29,642

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

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APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

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%.

Service	Salary Increase		
	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%

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 2020_b 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	2.50%
Rate of Growth in Real Income/GDP per capita 2029+	1.50%
Extra Trend due to Taste/Technology 2029+	1.10%
Expected Health Share of GDP 2030	20.00%
Health Share of GDP Resistance Point	25.00%
Year for Limiting Cost Growth to GDP Growth	2040

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APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

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 7.0% for non-Medicare and 6.0% for Medicare for the period October 1, 2020 – September 30, 2021 and declines gradually to an ultimate rate of 4.0% starting in 2041.

Below are the healthcare trends starting October 1, 2021:

To FYE	NonMedicare Annual Trend	Medicare Annual Trend
2022	6.0%	5.7%
2023	5.5%	5.5%
2024	5.2%	5.2%
2026	5.2%	5.2%
2031	5.2%	5.2%
2036	4.4%	4.4%
2041	4.0%	4.0%

Actual trends for October 1, 2020 – September 30, 2021, were used to roll forward the claim curves from the September 30, 2020, valuation. These rates were 5.4% for non-Medicare and -0.1% for Medicare.

6. Basis for Economic Assumptions

The discount rate and inflation assumptions were selected by the District of Columbia Office of the Chief Financial Officer and are based on the assumed asset returns and current market conditions. These assumptions are reviewed each year for reasonableness.

The payroll and salary assumptions for Teachers, Fire, and Police are based on the DCRB pension valuation. For General Employees, the salary assumption was based on the prior actuary’s assumption and reviewed for reasonableness based on available data.

The trend rates were developed by Cheiron and are based on the Getzen Trend Model. In developing the trends, plan provisions and market conditions are considered.

7. Changes Since Last Valuation

None

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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:

General		Teachers			Police		Fire Fighters	
Age	General	Age	< 30 YOS	30+ YOS	Service	Rate	Service	Rate
50-54	2.5%	50-54	5.0%	5.0%	Under 25	15.0%	25	12.5%
55-59	5.0%	55-56	9.0%	22.0%	25	22.0%	26	15.0%
60-61	15.0%	57	9.0%	20.0%	26	38.0%	27	12.0%
62-64	20.0%	58	10.0%	20.0%	27	35.0%	28	20.0%
65-70	25.0%	59	10.0%	25.0%	28	34.0%	29	20.0%
71-74	30.0%	60	27.0%	28.0%	29	28.0%	30	22.0%
75+	100.0%	61	25.0%	28.0%	30	38.0%	31	40.0%
		62	22.0%	25.0%	31	32.0%	32	45.0%
		63	25.0%	22.0%	32	28.0%	33	50.0%
		64	20.0%	25.0%	33	35.0%	34	40.0%
		65	25.0%	35.0%	34	35.0%	35	40.0%
		66	30.0%	25.0%	35	18.0%	Min Ret Age = 50 100% retirement at age 60	
		67	25.0%	25.0%	36-39	16.0%		
		68	30.0%	30.0%	40+	16.0%	Min Ret Age = 50 100% retirement at age 65	
		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

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			Fire	
Age	Years of Service			Service	Years of Service		Service	Years of Service		Years of Service	
	<4	4-9	10+		Male	Female		Male	Female	Service	Unisex
20	31.42%	25.00%	10.00%	<1	26.00%	23.00%	<1	13.00%	11.00%	<1	7.50%
25	22.23%	15.00%	9.72%	1	26.00%	23.00%	1	10.00%	11.00%	1	7.50%
30	16.03%	12.00%	5.90%	2	26.00%	23.00%	2	7.00%	8.00%	2	5.00%
35	15.03%	10.00%	5.58%	3	26.00%	23.00%	3	6.00%	5.00%	3	4.00%
40	14.93%	8.00%	5.09%	4	18.00%	16.00%	4	6.00%	5.00%	4	4.00%
45	14.72%	8.00%	4.71%								
50	14.26%	8.00%	4.55%								
55	14.10%	8.00%	4.56%								
60	14.58%	8.00%	4.81%								
62+	0.00%	0.00%	0.00%								

Teachers 5 or More			Police 5 or More			Fire 5 or More	
Age	Years of Service		Age	Years of Service		Years of Service	
	Males	Females		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%
						60	0.60%

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APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

3. Rates of Disability

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

Disability Rates					
	General	Teachers	Police		Fire
Age	Unisex	Unisex	Male	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%

4. Rates of Mortality

General Employees:

Healthy Mortality: Pub-2010 General Employees Headcount-Weighted Mortality projected forward generationally from 2010 using mortality improvement scale MP-2021 for pre-retirement mortality. Pub-2010 General Retirees Headcount-Weighted Mortality projected forward generationally from 2010 using mortality improvement scale MP-2021 for post-retirement mortality. Weighted 120%.

Disabled Mortality: Pub-2010 General Disabled Retirees Headcount-Weighted Mortality projected forward generationally from 2010 using mortality improvement scale MP-2021 for post-retirement mortality.

Police, Fire, and Teachers:

Healthy Mortality: RP-2014 Healthy Employee Mortality projected forward generationally using mortality improvement scale MP-2021 for pre-retirement mortality. RP-2014 Healthy Annuitant Mortality Tables, projected forward generationally using mortality improvement scale MP-2021 for post-retirement mortality. *Previously the mortality improvement scale MP-2020 was used.*

Disabled Mortality: RP-2014 Disabled Mortality table.

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5. Percent of Retirees Electing Coverage

Pre-Medicare retiree: 90% of Police and Fire future retirees, 50% of General, and 80% of Teacher retirees are assumed to elect coverage.

Medicare-eligible retiree: 90% of Police and Fire future retirees, 70% of General, and 80% of Teacher retirees are assumed to elect coverage.

6. Spousal Coverage

	Under 65		65 and Over	
	Male Retiree	Female Retiree	Male Retiree	Female Retiree
General Employees	45%	20%	45%	25%
Teachers	35%	35%	35%	20%
Police	75%	50%	70%	50%
Fire	75%	50%	70%	50%

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. Basis for Demographic Assumptions

During 2021, an experience study was performed on the General Employees’ population. The results of this study were provided to the District of Columbia Office of the Chief Financial Officer on February 12, 2021. For the General Employees, the demographic assumptions recommended in the February 12, 2021, experience study was used in this valuation. For the Police, Fire, and Teachers’ valuation assumptions relating to election percentage and spousal assumptions were studied and a recommendation was made and used in this valuation. Additionally, we reviewed the assumptions for Police, Fire, and Teachers and recommended continuing to use the assumptions as recommended by the actuary for the D.C. Retirement Board in their May 12, 2017 experience study.

9. Changes Since Last Valuation

None

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Claim and Expense Assumptions

The claims costs were developed based on the actual premiums in effect for 2021. An adjustment was made to the claims to account for children of retirees. Additionally, 2021 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, 2021 to September 30, 2022, annual claims costs were developed based on the October 1, 2020 to September 30, 2021, annual claims costs trended forward by the increase in 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 fourth valuation in which the District has members enrolled in Medicare Advantage plans.

We have assumed that 50% of current retirees under the age of 65 will elect the Medicare Advantage plans and the rest will remain enrolled in the plans that are also available to non-Medicare eligibles. We have assumed that 50% of current retirees over the age of 65 will elect the Medicare Advantage plans and the rest will remain enrolled in the plans that are also available to non-Medicare eligibles.

Current retirees under age 65
For Fiscal Year 10/1/2021 - 9/30/2022:

District of Columbia		
Age	Male	Female
40	\$8,387	\$11,257
45	\$10,206	\$12,423
50	\$12,415	\$14,218
55	\$14,742	\$16,013
60	\$17,850	\$17,411
64	\$21,146	\$17,311
65	\$6,474	\$5,278
70	\$7,265	\$5,569
75	\$7,868	\$5,994
80	\$8,270	\$6,396
85	\$8,474	\$6,669

Current retirees over age 65
For Fiscal Year 10/1/2021 - 9/30/2022:

District of Columbia		
Age	Male	Female
40	\$8,387	\$11,257
45	\$10,206	\$12,423
50	\$12,415	\$14,218
55	\$14,742	\$16,013
60	\$17,850	\$17,411
64	\$21,146	\$17,311
65	\$6,534	\$5,322
70	\$7,337	\$5,618
75	\$7,941	\$6,044
80	\$8,339	\$6,444
85	\$8,540	\$6,715

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We have assumed that 70% of actives employees will elect the Medicare Advantage plans and the rest will remain enrolled in the plans that are also available to non-Medicare eligibles.

Active employees

For Fiscal Year 10/1/2021 - 9/30/2022:

Age	District of Columbia	
	Male	Female
40	\$8,387	\$11,257
45	\$10,206	\$12,423
50	\$12,415	\$14,218
55	\$14,742	\$16,013
60	\$17,850	\$17,411
64	\$21,146	\$17,311
65	\$5,610	\$4,689
70	\$6,192	\$4,894
75	\$6,827	\$5,342
80	\$7,354	\$5,817
85	\$7,668	\$6,165

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2. Retiree Contributions

The monthly contributions are as of the period starting September 30, 2021. For retirees and spouses prior to October 1, 2021, the contribution percentage is the actual percentage provided by the District for these retirees. For retirees and spouse who will retire after October 1, 2021, their contributions are based on the amount of service earned under each plan. Subsequent years' premiums are based on the first-year premium adjusted with the trend.

2022 Monthly Health Premiums			
	Self	Self +1	Family
Pre-Medicare Plans			
Kaiser Permanente HMO	\$717.89	\$1,371.17	\$2,103.35
United Healthcare Choice	821.44	1,568.94	2,406.78
Aetna CDHP Plan	335.68	659.80	969.99
Aetna PPO Plan	851.15	1,673.14	2,459.67
Aetna HMO Plan	874.00	1,718.01	2,525.64
CareFirst PPO	847.59	1,618.89	2,483.42
CareFirst HMO	750.55	1,478.59	2,169.10
Medicare Plans			
Aetna Medicare Advantage	\$396.99	\$793.98	N/A
CareFirst PPO Medicare	653.27	1,306.54	N/A
CareFirst HMO Medicare	577.93	1,155.86	N/A
Kaiser Permanente Medicare Plus	246.36	492.72	N/A
United Health Care Medicare Advantage	409.81	819.62	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 District receives from the Centers for Medicare Service (CMS) has not been reflected in this valuation.

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4. Medicare Part B Premium Subsidy

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

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. Administrative Expenses

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

8. Changes Since Last Valuation

The healthcare claim curves were trended based on the increase in actual premiums from calendar year 2021 to calendar year 2022.

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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 District.

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 13 years remaining as of FYE 2023.

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 calendar year 2021 premiums trended based on increase in premiums from calendar year 2021 to 2022. Expenses were based on contractual rates.

Disclosures regarding Models Used

In accordance with Actuarial Standard of Practice No. 56 (Modeling), the following disclosures are made:

a. Valuation Software

Cheiron utilizes ProVal, an actuarial valuation software leased from Winklevoss Technologies (WinTech) to calculate the liabilities, normal costs, and projected benefit payments. We have relied on WinTech as the developer of ProVal. We have reviewed ProVal and have a basic understanding of it and have used ProVal in accordance with its original intended purpose. We have not identified any material inconsistencies in assumptions or output of ProVal that would affect this actuarial valuation.

b. Getzen Trend Model

Medical Trend assumptions were developed using the Society of Actuaries (SOA) Long-Run Medical Cost Trend Model version 2020_B. The assumptions that were input into this model are detailed in Economic Assumptions #5 on page 17.

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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.

The trends selected from 2021-2024 were based on plan design and renewal projections. The rate of inflation was based on investment assumptions, and the rate of growth in Real Income/GDP per capital is more than the baseline assumption due the fully funded nature of the Plan.

We have reviewed the assumptions for the model and found them to be reasonable and consistent with the other economic assumptions used in the valuation.

We have relied on the Society of Actuaries as the developer of the Model. We have reviewed the Model and have a basic understanding of the Model and have used the Model in accordance with its original intended purpose. We have not identified any material inconsistencies in assumptions or output of the Model that would affect this report.

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.

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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)

Plan	Eligibility			
	Criteria to qualify for retirement			
	Unreduced		Reduced	
	Age	Service	Age	Service
Teachers (note: service must include 5 years of school service)	55*	30	50	20
	60	20	Any	25
	62	5		
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.

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Summary of 2021 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), Aetna CDHP, Aetna HMO, Aetna PPO, CareFirst HMO, and CareFirst 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 several Medicare Advantage plans.

January 1, 2022 Plans				
Plan	Aetna CDHP	Aetna PPO	Aetna HMO	Kaiser Permanente HMO
<u>In-Network (INN) Benefits</u>				
Deductible (Individual / Family)	\$1,400 / \$2,800	\$750 / \$1,500	\$0	\$0
Coinsurance	85%	85%	100%	100%
Out-of-Pocket Max (Individual / Family)	\$3,425 / \$6,850	\$1,500 / \$3,000	\$3,500 / \$9,400	\$3,500 / \$9,400
Coverages				
Preventive Care	Fully Covered	Fully Covered	Fully Covered	Fully Covered
Office Visit (OV)-Primary Care	DC*	\$15 Copay	\$10 Copay	\$10 Copay
OV - Specialist Care Provider (SCP)	DC*	\$15 Copay	\$20 Copay	\$20 Copay
Hospital Emergency Room (ER)	DC*	\$100 Copay	\$100 Copay	\$50 Copay
Urgent Care (UC)	DC*	\$25 Copay	\$20 Copay	\$20 Copay
Outpatient Surgery	DC*	DC*	\$50 Copay	\$50 Copay
Hospital Inpatient	DC*	DC*	\$100 Copay per stay	\$100 Copay per stay
Lifetime Max	No Limit	No Limit	No Limit	No Limit
<u>Out-of-Network (OON) Benefits</u>				
Deductible (Individual / Family)	\$2,500 / \$5,000	\$1,500 / \$3,000		
Coinsurance	60%	75%		
Out-of-Pocket Max (Individual / Family)	\$6,450 / \$12,900	\$3,000 / \$6,000		
<u>Prescription Drug Benefits</u>				
Retail (30 Days) - Generic/Formulary/Non-form. Copay	\$10 / \$30 / \$60	\$20 / \$40 / \$55	\$20 / \$40 / \$55	\$10/\$20/\$35 Plan Pharmacy; \$20/\$40/\$55 Participating
Mail Order (90 Days) - Generic/Formulary/Non-form. Copay	\$20 / \$60 / \$120	\$20 / \$40 / \$55	\$20 / \$40 / \$55	\$8 / \$18 / \$33
Separate Drug Out of Pocket Max	N/A	\$5,100 / \$10,200	\$3,100 / \$3,800	N/A
<u>Detail Benefits</u>				
Mental Health and Substance Abuse Inpatient	DC*	DC*	\$100 Copay per stay	\$100 Copay per stay
Mental Health and Substance Abuse Outpatient	DC*	\$5 Copay	\$5 Copay	\$10 / \$5 group
Rehabilitation	DC*	DC*	\$10	\$20
Chiropractors	DC*	DC*	\$20	\$20
Dental	Not covered	Not covered	Not covered	\$30
Vision Exam	100%	100%	\$10 Copay	\$10 Copay
Vision Lens/Frames/Contacts	\$100/ 24 months	\$100/ 24 months	\$100/ 24 months	Every 24 months

*DC = Deductible and Coinsurance

¹No network, benefits same as in-network benefits

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January 1, 2022 Plans			
Plan	CareFirst HMO	CareFirst PPO	United Health Care HMO
<u>In-Network (INN) Benefits</u>			
Deductible (Individual / Family)	\$0	\$750 / \$1,500	\$0
Coinsurance	100%	100%	100%
Out-of-Pocket Max (Individual / Family)	\$3,500 / \$9,400	\$1,500 / \$3,000	\$3,500 / \$9,400
Coverages			
Preventive Care	Fully Covered	Fully Covered	Fully Covered
Office Visit (OV)-Primary Care	\$10 Copay	\$15 Copay	\$10 Copay
OV - Specialist Care Provider (SCP)	\$20 Copay	\$15 Copay	\$20 Copay
Hospital Emergency Room (ER)	\$100 Copay	\$100 Copay	\$100 Copay
Urgent Care (UC)	\$20 Copay	\$25 Copay	\$20 Copay
Outpatient Surgery	\$50 Copay	DC*	\$50 Copay
Hospital Inpatient	\$100 Copay per stay	DC*	\$100 Copay per stay
Lifetime Max	No Limit	No Limit	No Limit
<u>Out-of-Network (OON) Benefits</u>			
Deductible (Individual / Family)		\$1,500 / \$3,000	
Coinsurance		100%	
Out-of-Pocket Max (Individual / Family)		\$3,000 / \$6,000	
<u>Prescription Drug Benefits</u>			
Retail (30 Days) - Generic/Formulary/Non-form. Copay	\$20 / \$40 / \$55	\$20 / \$40 / \$55	\$20 / \$40 / \$55
Mail Order (90 Days) - Generic/Formulary/Non-form. Copay	\$40 / \$80 / \$110	\$40 / \$80 / \$110	\$16 / \$36 / \$66
Separate Drug Out of Pocket Max	N/A	\$5,100 / \$10,200	N/A
<u>Detail Benefits</u>			
Mental Health and Substance Abuse Inpatient	\$100 Copay per stay	DC*	\$100 Copay per stay
Mental Health and Substance Abuse Outpatient	\$10 Copay	\$15 Copay	\$10 Copay
Rehabilitation	\$10 Copay	DC*	\$10 Copay
Chiropractors			
Dental	Not covered	Not covered	Not covered
Vision Exam	\$10 Copay	\$10 Copay	Not covered
Vision Lens/Frames/Contacts			Not covered

*DC = Deductible and Coinsurance

¹No network, benefits same as in-network benefits

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Plan	Aetna Medicare PPO with ESA	Kaiser Permanente Medicare Advantage HMO	United Health Care Group Medicare Advantage (PPO)
<u>In-Network (INN) Benefits</u>			
Deductible (Individual / Family)	\$0	\$0	\$0
Coinsurance	100%	100%	100%
Out-of-Pocket Max (Individual / Family)	\$7,550	\$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	Fully Covered	Fully Covered
Hospital Inpatient	Fully Covered	\$100 Copay per stay	\$100 Copay per stay
Lifetime Max	No Limit	No Limit	No Limit
<u>Out-of-Network (OON) Benefits</u>			
Deductible (Individual / Family)	\$0		
Coinsurance	0%		
Out-of-Pocket Max (Individual / Family)	\$7,550		
<u>Prescription Drug Benefits</u>			
Retail (30 Days) - Generic/Formulary/Non-form. Copay	\$10 / \$20 / \$40	\$12.50	\$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
<u>Detail Benefits</u>			
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	100%	\$30 Copay	\$10 Copay
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

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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:

Percentage of Plan Aggregate Cost Rate Paid by Retiree		
Annuitant's Years of Service	Retiree Coverage	Dependent/Survivor's 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.

Percentage of Plan Aggregate Cost Rate Paid by Retiree		
Annuitant's Years of Service	Retiree Coverage	Dependent/Survivor's 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%

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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.

Percentage of Plan Aggregate Cost Rate Paid by Retiree		
Annuitant's Years of Service	Retiree Coverage	Dependent/Survivor's Coverage
Hired before 11/10/1996		
Less than 5	100%	100%
5 or more	25%	40%
Hired on or after 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

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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:

<u>Amount</u>		<u>Probability of Payment</u>		$\frac{1}{(1+\text{Discount Rate})}$	<u>Present Value</u>
\$100	x	(1 - .01)	x	=	\$90

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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 costs 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.

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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 is 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.

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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.