

## District of Columbia Retirement Board Teachers' Retirement Plan and Police Officers and Firefighters' Retirement Plan

Actuarial Valuations as of October 1, 2023 to Determine the District's Contribution for the Fiscal Year Ending September 30, 2025

# Bolton

Submitted by: **Thomas Vicente, FSA, EA** Senior Consulting Actuary 443.573.3918 TVicente@boltonusa.com

Michelle L. Boyles, FSA, EA, MAAA Consulting Actuary 443.255.1117 MBoyles@boltonusa.com

Ann M. Sturner, FSA, EA Senior Consulting Actuary 443.573.3922 ASturner@boltonusa.com



# Table of Contents

Transmittal L	etter	Page 1
Section I	Executive Summary	2
Section II	Actuarial Certification	6
Section III	Determination of District Contributions. Derivation of Liabilities Experience Gain/Loss and Projection of Unfunded Liability Development of District Contributions Schedule of Amortization Bases	9 13 16
Section IV	Valuation of Assets Reconciliation of Assets Calculation of Actuarial Value of Assets	21
Section V	Participant Information Participant Summary Active Age/Service Distribution Including Compensation Participant Reconciliation Schedule of Retiree Member Data Member Data - Added and Removed from Rolls	29 30 33 36
Section VI	Summary of Plan Provisions. Teachers Retirement Plan Police Officers and Firefighters Retirement Plan	48
Section VII	Actuarial Methods and Assumptions	60
Section VIII	Glossary	69
Appendices .	<ol> <li>Summary of Funding Progress</li> <li>Valuation Solvency Test</li> <li>Additional Risk Assessment.</li> <li>D.C. Code § 1-907.02 (c) Adjustment to FY2025 Payment.</li> <li>Experience Gain/Loss</li> <li>Valuation Balance Sheet – Teachers.</li> <li>Valuation Balance Sheet – Police and Fire.</li> </ol>	71 72 73 80 81 82



December 11, 2023

The Board of Trustees District of Columbia Retirement Board 900 7th Street, NW, 2nd Floor Washington, DC 20001

#### Re: District of Columbia Teachers' Retirement Plan and District of Columbia Police Officers and Firefighters' Retirement Plan Actuarial Valuations

Dear Trustees:

The following sets forth the actuarial valuations of the District of Columbia Teachers' Retirement Plan and the District of Columbia Police Officers and Firefighters' Retirement Plan (collectively referred to as the Plans) as of October 1, 2023. Section I of the report provides a summary, while Sections II through VI contain the development of the District's contribution for the 2025 fiscal year, along with a summary of the census and asset data, plan provisions, assumptions and actuarial methods. Section VII provides a glossary of many of the terms used in this report. The appendices of the report provide information on plan funding, solvency, a discussion of risk, adjustments to the actuarially determined contribution, gain and loss from experience, and valuation balance sheets for the DCRB Annual Comprehensive Financial Report (ACFR).

We are available to answer any questions on the material in this report or to provide explanations or further details, as appropriate. The undersigned credentialed actuaries meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report. We are not aware of any direct or materially indirect financial interest or relationship, including investments or other services that could create a conflict of interest, which would impair the objectivity of our work.

Respectfully submitted,

Thomas Vicente, FSA, EA

Midel J Vogues

Michelle L. Boyles, FSA, EA, MAAA

Ann M. Sturner, FSA, EA





# Section I. Executive Summary

#### Background

Bolton Partners, Inc. has prepared the following report that sets forth the actuarial valuation of the District of Columbia Teachers' Retirement Plan (Teachers) and District of Columbia Police Officers and Firefighters' Retirement Plan (Police and Fire), collectively referred to as the Plans, as of October 1, 2023. Unless stated otherwise, the calculations reflected in this report are solely for the District-provided benefit and do not include the Federal portion of the benefit. Some demographic information includes a breakdown of District only, Federal only, and split annuitants.

#### Actuarially Determined Contributions (ADC)

The actuarially determined contribution (ADC) amount for all Plans increased as a dollar amount and as a percentage of payroll this year.

			(\$ in	Thousands)
Teachers, Police, and Fire	FY2023	FY2024		FY2025
ADC (before §1-907.02(c) adjustment)	\$ 132,222	\$ 142,433	\$	218,346
Total Payroll	1,136,998	1,138,337		1,274,322
Percent of Total Payroll	11.63%	12.51%		17.13%
ADC (after §1-907.02(c) adjustment)	\$ 125,343	\$ 130,107	\$	224,434
Teachers	FY2023	FY2024		FY2025
ADC (before §1-907.02(c) adjustment)	\$ 43,913	\$ 48,763	\$	75,360
Total Payroll	624,500	636,961		728,095
Percent of Total Payroll	7.03%	7.66%		10.35%
ADC (after §1-907.02(c) adjustment)	\$ 47,835	\$ 50,224	\$	80,981
Police and Fire Combined	FY2023	FY2024		FY2025
ADC (before §1-907.02(c) adjustment)	\$ 88,309	\$ 93,670	\$	142,986
Total Payroll	512,498	501,375		546,226
Percent of Total Payroll	17.23%	18.68%		26.18%
ADC (after §1-907.02(c) adjustment)	\$ 77,508	\$ 79,884	\$	143,454
Police	FY2023	FY2024		FY2025
Police ADC (before §1-907.02(c) adjustment)	\$ FY2023 61,338	\$ FY2024 65,713	\$	<b>FY2025</b> 99,428
	\$	\$	\$	
ADC (before §1-907.02(c) adjustment)	\$ 61,338	\$ 65,713	\$	99,428
ADC (before §1-907.02(c) adjustment) Total Payroll	\$ 61,338 333,307	\$ 65,713 325,927	\$	99,428 351,108
ADC (before §1-907.02(c) adjustment) Total Payroll Percent of Total Payroll	61,338 333,307 18.40%	65,713 325,927 20.16%		99,428 351,108 28.32%
ADC (before §1-907.02(c) adjustment) Total Payroll Percent of Total Payroll ADC (after §1-907.02(c) adjustment)	61,338 333,307 18.40% 53,909	65,713 325,927 20.16% 56,190		99,428 351,108 28.32% 99,601
ADC (before §1-907.02(c) adjustment) Total Payroll Percent of Total Payroll ADC (after §1-907.02(c) adjustment) Fire	\$ 61,338 333,307 18.40% 53,909 FY2023	\$ 65,713 325,927 20.16% 56,190 FY2024	\$	99,428 351,108 28.32% 99,601 FY2025
ADC (before §1-907.02(c) adjustment) Total Payroll Percent of Total Payroll ADC (after §1-907.02(c) adjustment) Fire ADC (before §1-907.02(c) adjustment)	\$ 61,338 333,307 18.40% 53,909 FY2023 26,971	\$ 65,713 325,927 20.16% 56,190 FY2024 27,957	\$	99,428 351,108 28.32% 99,601 <b>FY2025</b> 43,558



# Section I. Executive Summary

The tables below compare the actuarial accrued liabilities of the plans and the assets of the plans for the current and prior valuation dates. In addition the liabilities are compared to the assets to determine the funded ratios of the plans.

#### Funding Measures – Teachers

	Teachers	1	0/1/2022	1	0/1/2023	Percent Change
1.	Actuarial Accrued Liability					
a.	Active	\$	1,396,967	\$	1,662,948	19.04%
b.	Retirees and Beneficiaries		1,235,162		1,305,420	5.69%
c.	Inactive with Deferred Benefits		239,440		261,561	9.24%
d.	Total	\$	2,871,570	\$	3,229,928	12.48%
2.	Actuarial Value of Assets	\$	2,838,193	\$	2,966,048	4.50%
3.	Plan Funded Ratio (2. / 1.d.)		98.84%		91.83%	
4.	Market Value of Assets	\$	2,573,334	\$	2,884,320	12.08%
5.	Funded Ratio based on Market Value of Assets (4. / 1.d.)		89.61%		89.30%	

(\$ in Thousands)

## Funding Measures – Police and Fire

	Police and Fire	1	0/1/2022	1	0/1/2023	Percent Change
1.	Actuarial Accrued Liability					
a.	Active	\$	2,932,991	\$	3,212,901	9.54%
b.	Retirees and Beneficiaries		3,608,693		4,073,120	12.87%
C.	Inactive with Deferred Benefits		97,440		72,675	(25.42%)
d.	Total	\$	6,639,124	\$	7,358,696	10.84%
2.	Actuarial Value of Assets	\$	7,612,268	\$	7,864,126	3.31%
3.	Plan Funded Ratio (2. / 1.d.)		114.66%		106.87%	
4.	Market Value of Assets	\$	6,901,545	\$	7,653,760	10.90%
5.	Funded Ratio based on Market Value of Assets (4. / 1.d.)		103.95%		104.01%	

## Funding Measures – Police

	Police	1	0/1/2022	1	0/1/2023	Percent Change
1.	Actuarial Accrued Liability					
a.	Active	\$	1,911,590	\$	2,093,547	9.52%
b.	Retirees and Beneficiaries		2,663,456		3,003,059	12.75%
c.	Inactive with Deferred Benefits		71,879		55,698	(22.51%)
d.	Total	\$	4,646,924	\$	5,152,305	10.88%
2.	Actuarial Value of Assets	\$	5,220,802	\$	5,382,785	3.10%
3.	Plan Funded Ratio (2. / 1.d.)		112.35%		104.47%	
4.	Market Value of Assets	\$	4,733,562	\$	5,238,509	10.67%
5.	Funded Ratio based on Market Value of Assets (4. / 1.d.)		101.86%		101.67%	

#### (\$ in Thousands)

## Funding Measures – Fire

	Fire	1	0/1/2022	1	0/1/2023	Percent Change
1.	Actuarial Accrued Liability					
a.	Active	\$	1,021,401	\$	1,119,354	9.59%
b.	Retirees and Beneficiaries		945,238		1,070,060	13.21%
c.	Inactive with Deferred Benefits		25,561		16,977	(33.58%)
d.	Total	\$	1,992,199	\$	2,206,391	10.75%
2.	Actuarial Value of Assets	\$	2,391,466	\$	2,481,341	3.76%
3.	Plan Funded Ratio (2. / 1.d.)		120.04%		112.46%	
4.	Market Value of Assets	\$	2,167,983	\$	2,415,251	11.41%
5.	Funded Ratio based on Market Value of Assets (4. / 1.d.)		108.82%		109.47%	



#### **Risk Measures**

The primary risk that a plan sponsor incurs from a defined benefit plan is the risk of substantial increases in annual contributions. Many variables can influence future results and the sensitivity of the ADC will vary from plan to plan. As part of the annual valuation, we monitor commonly used measures of the relative riskiness of a pension plan, relative to the plan sponsor and the employee group covered by the plan. A brief review of the risk metrics and a discussion of key risks are shown in Appendix 3. Additional detailed or focused assessment of risks is outside the scope of the actuarial valuation but can be conducted as a separate assignment.

#### **Experience Analysis**

The following factors affected the District's contribution, as a percentage of payroll:

- Investment returns during FY2023 were about \$156.4 million greater than expected for Teachers and \$429.8 million greater than expected for Police and Fire. A portion of that gain is reflected in this valuation, with the remaining portions to be reflected in future valuations. The gain was offset by the continued recognition of prior investment gains and losses. There is a total of \$81.7 million in net deferred investment losses for Teachers and \$210.4 million in net deferred investments losses for Police and Fire as of October 1, 2023 that will be reflected in future valuations. These deferrals produce an overall experience loss on investment income.
- Retiree COLAs in FY2023 were more than the assumed annual increases.
- The average participant pay increased by 12.8% for Teachers, 12.4% for Police, and 9.1% for Fire. This was primarily as a result of collective bargaining agreements.
- Total participant payroll amount increased by 14.3% for Teachers and 8.9% for Police and Fire over the prior year; the assumption is 4.0% growth per year. This was primarily as a result of collective bargaining agreements.

#### Changes in Method, Assumptions, and Plan Amendments

There were no plan provision changes, other than an update to the child survivor benefits which are annually adjusted for inflation. No method or assumption changes.

#### Impact of COVID-19

Because the long-term net impact of COVID-19 on mortality, salary increases, and changes in turnover and retirement behavior is not possible to estimate at this time, we have made no adjustments to any of the assumptions.

#### Sources of Information

Membership data as of July 1, 2023, and market value of assets as of October 1, 2023 were provided by or at the direction of the District of Columbia Retirement Board. While we have reviewed this data for consistency and completeness, we have not audited this data. For valuation purposes, members were treated as remaining in the Plans as of October 1, 2023.



## Section II. Actuarial Certification

This actuarial valuation sets forth our calculation of an estimate of the liabilities of the District of Columbia Teachers' Retirement Plan and the District of Columbia Police Officers and Firefighters' Retirement Plan, together with a comparison of these liabilities with the value of the plan assets, as submitted by the District of Columbia Retirement Board (the Board). These calculations, and comparisons with assets, are applicable for the valuation date only. The future is uncertain, and the Plans may become better funded or more poorly funded in the future. This valuation does not provide any guarantee that the Plans will be able to provide the promised benefits in the future.

This report was prepared for the internal use of the Board and its auditors in connection with our actuarial valuations of the pension plan. The purpose of this report is to provide the recommended employer contribution for the 2025 fiscal year. It is neither intended nor necessarily suitable for other purposes. Bolton is not responsible for the consequences of any other use or the reliance upon this report by any other party.

This report is based on plan provisions, census data, and asset data submitted by the Board. We have relied on this information for purposes of preparing this report. We have not audited the census or asset data provided, however based on our review the data appears to be reasonable and consistent with previously provided information. Unless otherwise noted in our report, we believe the information provided is sufficiently complete and reliable for purposes of the results presented in this report. The accuracy of the results presented in this report is dependent upon the accuracy and completeness of the underlying information. The Board is solely responsible for the validity and completeness of this information.

The Board is responsible for selecting the plan's funding policy, actuarial valuation methods, asset valuation methods, and assumptions. The policies, methods and assumptions used in this valuation are those that have been so prescribed and are described in this report. The Board is solely responsible for communicating to Bolton any changes required thereto.

The Board is solely responsible for selecting the plan's investment policies, asset allocations and individual investments. Bolton's actuaries have not provided any investment advice to the Board.

This is a deterministic valuation in that it is based on a single set of assumptions. This set of assumptions is one possible basis for our calculations. We may consider that some factors are not material to the valuation of the plan and may not provide a specific assumption for those factors. We may have used other assumptions in the past. We will likely consider changes in assumptions at a future date.

Different assumptions or scenarios within the range of possibilities may also be reasonable and results based on those assumptions would be different. As a result of the uncertainty inherent in a forward-looking projection over a very long period of time, no one projection is uniquely "correct" and many alternative projections of the future could also be regarded as reasonable. Two different actuaries could, quite reasonably, arrive at different results based on the same data and different views of the future.

The Board could reasonably ask how the valuation would change if we used a different assumption set or if plan experience exhibited variations from our assumptions. This report does not contain such an analysis. That type of analysis would be a separate assignment.



In addition, decisions regarding benefit improvements, benefit changes, the trust's investment policy, and similar issues should not be based on this valuation. These issues are complex and other factors should be considered when making such decisions. Other factors might include the anticipated vitality of the local economy and future growth expectations, as well as other economic and financial factors.

The cost of this plan is determined by the benefits promised by the plan, the plan's participant population, the investment experience of the plan and many other factors. An actuarial valuation is a budgeting tool for the Board. It does not affect the cost of the plan. Different funding methods provide for different timing of contributions to the plan. As the experience of the plan evolves, it is normal for the level of contributions to the plan to change. If a contribution is not made for a particular year, either by deliberate choice or because of an error in a calculation, that contribution can be made in later years. We are not responsible for the consequences of any decision by the Board to make contributions at a future time rather than an earlier time. The Board is responsible for funding the cost of the plan.

The report is conditioned on the assumption of an ongoing plan and is not meant to present the actuarial position of the plan in the case of plan termination. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions, changes in economic or demographic assumptions, increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status), and changes in plan provisions or applicable law.

The valuation was completed using both proprietary and third-party models (including software and tools). We have tested these models to ensure they are used for their intended purposes, within their known limitations, and without any known material inconsistencies unless otherwise stated.

The calculations in this report have been computed in accordance with our understanding of generally accepted actuarial principles and practices and fairly reflect the actuarial position of the plan. The various actuarial assumptions and methods which have been used are, in our opinion, appropriate for the purposes of this report.

We make every effort to ensure that our calculations are accurately performed. We reserve the right to correct any potential errors by amending the results of this report or by including the corrections in a future valuation report.

Bolton does not practice law and, therefore, cannot and does not provide legal advice. Any statutory interpretation on which this report is based reflects Bolton's understanding as an actuarial firm. Bolton recommends that recipients of this report consult with legal counsel when making any decisions regarding compliance with ERISA, the Internal Revenue Code, or any other statute or regulation.

The Board should notify Bolton promptly after receipt of this report if the Board disagrees with anything contained in the report or is aware of any information that would affect the results of the report that has not been communicated to Bolton or incorporated herein. The report will be deemed final and acceptable to the Board unless the Board promptly provides such notice to Bolton.



The undersigned credentialed actuaries meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. We are not aware of any direct or material indirect financial interest or relationship, including investments or other services, which could create a conflict of interest that would impair the objectivity of our work.

We are available to answer any questions on the material in this report to provide explanations or further details as appropriate.

Thomas Vicente

Thomas Vicente, FSA, EA

ann M Sturner

Ann M. Sturner, FSA, EA

Midell J V soyles

Michelle L. Boyles, FSA, EA, MAAA



# Section III. Determination of District Contributions

#### **Derivation of Liabilities – Teachers**

Below is a summary of the actuarial accrued liability of the future benefits expected to be paid from the Plan.

		Teachers	10/1/2022	10/1/2023
1.	Par	ticipants		
	a.	Active	6,088	6,171
	b.	Retirees and Beneficiaries	4,065	4,066
		i. Service Retirements	3,762	3,761
		ii. Disability Retirements	102	95
		iii. Survivors	201	210
	C.	Inactive with Deferred Benefits	1,718	1,844
	d.	Total	11,871	12,081
2.	Act	ive Payroll	\$ 612,463	\$ 700,092
3.	Act	uarial Accrued Liability		
	a.	Active Participants	\$ 1,396,967	\$ 1,662,948
	b.	Retirees and Beneficiaries	1,235,162	1,305,420
		i. Service Retirements	1,178,659	1,248,305
		ii. Disability Retirements	34,459	33,544
		iii. Survivors	22,044	23,571
	C.	Inactive with Deferred Benefits	239,440	261,561
	d.	Total	2,871,570	3,229,928
4.	Act	uarial Value of Assets	\$ 2,838,193	\$ 2,966,048
5.	Unf	unded Actuarial Liability (3.d 4.)	33,376	263,880
6.	Fur	nded Ratio (4. ÷ 3.d.)	98.84%	91.83%

#### Derivation of Liabilities – Police and Fire

Below is a summary of the actuarial accrued liability of the future benefits expected to be paid from the Plan.

		Police and Fire	1	0/1/2022	1	0/1/2023
1.	Par	ticipants				
	a.	Active		5,133		5,033
	b.	Retirees and Beneficiaries		4,373		4,585
		i. Service Retirements		3,331		3,508
		ii. Disability Retirements		436		452
		iii. Survivors		606		625
_	c.	Inactive with Deferred Benefits		356		351
	d.	Total		9,862		9,969
2.	Act	ive Payroll	\$	482,092	\$	525,218
3.	Act	uarial Accrued Liability				
	a.	Active Participants	\$	2,932,991	\$	3,212,901
	b.	Retirees and Beneficiaries		3,608,693		4,073,120
		i. Service Retirements		3,140,881		3,566,173
		ii. Disability Retirements		263,258		286,680
		iii. Survivors		204,554		220,266
	c.	Inactive with Deferred Benefits		97,440		72,675
	d.	Total		6,639,124		7,358,696
4.	Act	uarial Value of Assets	\$	7,612,268	\$	7,864,126
5.	Uni	unded Actuarial Liability (3.d 4.)		(973,145)		(505,430)
6.	Fur	nded Ratio (4. ÷ 3.d.)		114.66%		106.87%

#### **Derivation of Liabilities – Police**

Below is a summary of the actuarial accrued liability of the future benefits expected to be paid from the Plan.

		Police	10	)/1/2022	10	/1/2023
1.	Pa	ticipants				
	a.	Active		3,282		3,146
	b.	Retirees and Beneficiaries		3,251		3,405
		i. Service Retirements		2,478		2,607
		ii. Disability Retirements		335		345
		iii. Survivors		438		453
	C.	Inactive with Deferred Benefits		258		260
d.	To	al		6,791		6,811
2.	Act	ive Payroll	\$	313,391	\$	337,604
3.	Act	uarial Accrued Liability				
	a.	Active Participants	\$	1,911,590	\$	2,093,547
	b.	Retirees and Beneficiaries		2,663,456		3,003,059
		i. Service Retirements		2,326,257		2,638,260
		ii. Disability Retirements		201,655		218,090
		iii. Survivors		135,544		146,709
	c.	Inactive with Deferred Benefits		71,879		55,698
	d.	Total		4,646,924		5,152,305
4.	Act	uarial Value of Assets	\$	5,220,802	\$	5,382,785
5.	Un	unded Actuarial Liability (3.d 4.)		(573,878)		(230,480)
6.	Fur	nded Ratio (4. ÷ 3.d.)		112.35%		104.47%

#### Derivation of Liabilities – Fire

Below is a summary of the actuarial accrued liability of the future benefits expected to be paid from the Plan.

		Fire	1	0/1/2022	1	0/1/2023
1.	Par	ticipants				
	a.	Active		1,851		1,887
	b.	Retirees and Beneficiaries		1,122		1,180
		i. Service Retirements		853		901
		ii. Disability Retirements		101		107
		iii. Survivors		168		172
	C.	Inactive with Deferred Benefits		98		91
	d.	Total		3,071		3,158
2.	Act	ive Payroll	\$	168,700	\$	187,614
3.	Act	uarial Accrued Liability				
	a.	Active Participants	\$	1,021,401	\$	1,119,354
	b.	Retirees and Beneficiaries		945,238		1,070,060
		i. Service Retirements		814,624		927,913
		ii. Disability Retirements		61,604		68,590
		iii. Survivors		69,010		73,557
	C.	Inactive with Deferred Benefits		25,561		16,977
	d.	Total		1,992,199		2,206,391
4.	Act	uarial Value of Assets	\$	2,391,466	\$	2,481,341
5.	Unf	unded Actuarial Liability (3.d 4.)		(399,267)		(274,950)
6.	Fur	ided Ratio (4. ÷ 3.d.)		120.04%		112.46%



#### Experience Gain/(Loss) and Projection of Unfunded Liability – Teachers

The experience gain/(loss) from October 1, 2022 to October 1, 2023 and projection of the unfunded actuarial liability from October 1, 2023 to October 1, 2024, the beginning of the fiscal year, is shown below. Please see Appendix 5 for a detailed breakdown of gain/(loss) sources.

	Experience Gain/(Loss) - Teachers	1	0/1/2023
1.	Unfunded Liability as of 10/01/2022	\$	33,376
2.	Total FY2023 Normal Cost		85,056
3.	Actual FY2023 Expenses		4,880
4.	Total FY2023 Actual Contributions		106,526
5.	Interest		4,274
6.	Expected Unfunded Liability as of 10/01/2023		21,060
7.	Change due to Plan Amendments		0
8.	Change due to Assumptions and/or Methods		0
9.	Expected Unfunded Liability as of 10/01/2023		21,060
10.	Actual Unfunded Liability as of 10/01/2023		263,880
11.	Gain/(Loss)		(242,820)
	Projected Unfunded Liability - Teachers		
1.	Actual Unfunded Liability as of 10/01/2023	\$	263,880
2.	Total Normal Cost FY2024		96,040
3.	Expected District and Employee Contributions FY2024		108,114
4.	Expected Expenses FY2024		8,793
5.	Interest		19,438

\$

280,038

(\$ in Thousands)

6. Projected Unfunded Liability as of 10/01/2024



#### Experience Gain/(Loss) and Projection of Unfunded Liability – Police

The experience gain/(loss) from October 1, 2022 to October 1, 2023 and projection of the unfunded actuarial liability from October 1, 2023 to October 1, 2024, the beginning of the fiscal year, is shown below. Please see Appendix 5 for a detailed breakdown of gain/(loss) sources.

	Experience Gain/(Loss) - Police	-	10/1/2023
1.	Unfunded Liability as of 10/01/2022	\$	(573,878)
2.	Total FY2023 Normal Cost		120,079
3.	Actual FY2023 Expenses		9,935
4.	Total FY2023 Actual Contributions		82,674
5.	Interest		(30,601)
6.	Expected Unfunded Liability as of 10/01/2023		(557,139)
7.	Change due to Plan Amendments		0
8.	Change due to Assumptions and/or Methods		0
9.	Expected Unfunded Liability as of 10/01/2023		(557,139)
10.	Actual Unfunded Liability as of 10/01/2023		(230,480)
11.	Gain/(Loss)		(326,658)
	Projected Unfunded Liability - Police		
		-	

	rojected officiated Liability - rolice	
1.	Actual Unfunded Liability as of 10/01/2023	\$ (230,480)
2.	Total Normal Cost FY2024	128,235
3.	Expected District and Employee Contributions FY2024	83,656
4.	Expected Expenses FY2024	7,301
5.	Interest	(8,740)
6.	Projected Unfunded Liability as of 10/01/2024	\$ (187,340)



#### Experience Gain/(Loss) and Projection of Unfunded Liability - Fire

The experience gain/(loss) from October 1, 2022 to October 1, 2023 and projection of the unfunded actuarial liability from October 1, 2023 to October 1, 2024, the beginning of the fiscal year, is shown below. Please see Appendix 5 for a detailed breakdown of gain/(loss) sources.

	Experience Gain/(Loss) - Fire	10/1/2023
1.	Unfunded Liability as of 10/01/2022	\$ (399,267)
2.	Total FY2023 Normal Cost	63,846
3.	Actual FY2023 Expenses	4,581
4.	Total FY2023 Actual Contributions	39,083
5.	Interest	(22,026)
6.	Expected Unfunded Liability as of 10/01/2023	(391,950)
7.	Change due to Plan Amendments	0
8.	Change due to Assumptions and/or Methods	0
9.	Expected Unfunded Liability as of 10/01/2023	(391,950)
10.	Actual Unfunded Liability as of 10/01/2023	(274,950)
11.	Gain/(Loss)	(116,999)

	Projected Unfunded Liability - Fire	
1.	Actual Unfunded Liability as of 10/01/2023	\$ (274,950)
2.	Total Normal Cost FY2024	70,379
3.	Expected District and Employee Contributions FY2024	38,578
4.	Expected Expenses FY2024	3,957
5.	Interest	(13,851)
6.	Projected Unfunded Liability as of 10/01/2024	\$ (253,044)



#### Development of District Contributions – Teachers

The breakdown of the Actuarially Determined Contribution into normal cost, amortization payment, expected administrative expenses, and D.C. Code §1-907.02(c) Adjustment is illustrated below. The calculation of the D.C. Code §1-907.02(c) Adjustment is detailed in Appendix 4.

	chers uarially Determined Contribution (ADC)	FY2025	Percentage of FY2025 Payroll
1.	Total Normal Cost as of October 1, 2023	\$ 96,040	N/A
2.	Projected Total Normal Cost as of October 1, 2024 (1. x 1.04)	99,895	13.72%
3.	Expected Member Contributions	57,520	7.90%
4.	Employer Normal Cost (2 3.)	42,375	5.82%
5.	Expenses	8,737	1.20%
6.	Amortization Payment	24,247	3.33%
7.	Actuarially Determined Contribution (ADC) (4. + 5. + 6.)	75,360	10.35%
8.	D.C. Code §1-907.02(c) Adjustment to FY2025 Payment	5,621	N/A
9.	Fiscal Year District Payment	\$ 80,981	N/A

Pre	ojected Payroll	
1.	Active Member June 30, 2023 Payroll	\$ 661,828
2.	Expected FY2024 Payroll (1. increased with one year of salary scale)	700,092
3.	Projected FY2025 Payroll (2. x 1.04)	\$ 728,095



#### Development of District Contributions – Police and Fire

The breakdown of the Actuarially Determined Contribution into normal cost, amortization payment, expected administrative expenses, and D.C. Code §1-907.02(c) Adjustment is illustrated below. The calculation of the D.C. Code §1-907.02(c) Adjustment is detailed in Appendix 4.

	lice and Fire tuarially Determined Contribution (ADC)	FY2025	Percentage of FY2025 Payroll
1.	Total Normal Cost as of October 1, 2023	\$ 198,614	N/A
2.	Projected Total Normal Cost as of October 1, 2024 (1. x 1.04)	206,540	37.82%
3.	Expected Member Contributions	43,152	7.90%
4.	Employer Normal Cost (2 3.)	163,387	29.92%
5.	Expenses	11,470	2.10%
6.	Amortization Payment	(31,873)	(5.84%)
7.	Actuarially Determined Contribution (ADC) (4. + 5. + 6.)	142,986	26.18%
8.	D.C. Code §1-907.02(c) Adjustment to FY2025 Payment	468	N/A
9.	Fiscal Year District Payment	\$ 143,454	N/A

Projecte	d Payroll	
1. Activ	re Member June 30, 2023 Payroll	\$ 495,009
2. Expe	ected FY2024 Payroll (1. increased with one year of salary scale)	525,218
3. Proje	ected FY2025 Payroll (2. x 1.04)	\$ 546,226



#### **Development of District Contributions – Police**

The breakdown of the Actuarially Determined Contribution into normal cost, amortization payment, expected administrative expenses, and D.C. Code §1-907.02(c) Adjustment is illustrated below. The calculation of the D.C. Code §1-907.02(c) Adjustment is detailed in Appendix 4.

	lice tuarially Determined Contribution (ADC)	FY2025	Percentage of FY2025 Payroll
1.	Total Normal Cost as of October 1, 2023	\$ 128,235	N/A
2.	Projected Total Normal Cost as of October 1, 2024 (1. x 1.04)	133,351	37.98%
3.	Expected Member Contributions	27,738	7.90%
4.	Employer Normal Cost (2 3.)	105,613	30.08%
5.	Expenses	7,373	2.10%
6.	Amortization Payment	(13,559)	(3.86%)
7.	Actuarially Determined Contribution (ADC) (4. + 5. + 6.)	99,428	28.32%
8.	D.C. Code §1-907.02(c) Adjustment to FY2025 Payment	173	N/A
9.	Fiscal Year District Payment	\$ 99,601	N/A

Pre	ojected Payroll	
1.	Active Member June 30, 2023 Payroll	\$ 317,268
2.	Expected FY2024 Payroll (1. increased with one year of salary scale)	337,604
3.	Projected FY2025 Payroll (2. x 1.04)	\$ 351,108



#### **Development of District Contributions – Fire**

The breakdown of the Actuarially Determined Contribution into normal cost, amortization payment, expected administrative expenses, and D.C. Code §1-907.02(c) Adjustment is illustrated below. The calculation of the D.C. Code §1-907.02(c) Adjustment is detailed in Appendix 4.

Fir Ac	e tuarially Determined Contribution (ADC)	FY2025	Percentage of FY2025 Payroll
1.	Total Normal Cost as of October 1, 2023	\$ 70,379	N/A
2.	Projected Total Normal Cost as of October 1, 2024 (1. x 1.04)	73,189	37.51%
3.	Expected Member Contributions	15,414	7.90%
4.	Employer Normal Cost (2 3.)	57,774	29.61%
5.	Expenses	4,097	2.10%
6.	Amortization Payment	(18,314)	(9.39%)
7.	Actuarially Determined Contribution (ADC) (4. + 5. + 6.)	43,558	22.32%
8.	D.C. Code §1-907.02(c) Adjustment to FY2025 Payment	295	N/A
9.	Fiscal Year District Payment	\$ 43,853	N/A

Pre	ojected Payroll	
1.	Active Member June 30, 2023 Payroll	\$ 177,741
2.	Expected FY2024 Payroll (1. increased with one year of salary scale)	187,614
3.	Projected FY2025 Payroll (2. x 1.04)	\$ 195,118

#### Schedule of Amortization Bases

Below is a schedule of the amortization bases as of October 1, 2024.

Teachers Description	Date Established	Remaining Years	Amount to be Amortized	Payment / (Credit)
Actuarial (Gain)/Loss	10/1/2023	19	33,447	2,965
Actuarial (Gain)/Loss	10/1/2024	20	246,591	21,282
Totals			\$ 280,038	\$ 24,247

Police Description	Date Established	Remaining Years	Amount to be Amortized	Payment / (Credit)
Surplus	10/1/2024	30	(187,340)	(13,559)
Totals			\$ (187,340)	\$ (13,559)

Fire Description	Date Established	Remaining Years	ount to be nortized	Payment / (Credit)
Surplus	10/1/2024	30	(253,044)	(18,314)
Totals			\$ (253,044)	\$ (18,314)

(\$ in Thousands)

Bases are amortized on a level dollar basis, assuming mid-year payments.

The unfunded liability at 10/1/2023 is projected to 10/1/2024 for the amortization of the surplus.

## Section IV. Valuation of Assets

#### **Reconciliation of Assets – Teachers**

	Teachers	FY2022	FY2023
1.	Beginning of Year Assets	\$ 2,934,307,000	\$ 2,573,334,000
2.	Adjustments	10,577,000	(409,000)
3.	Beginning of Year Assets after Adjustments	2,944,884,000	2,572,925,000
4.	Receipts		
	a. Employer Contributions	75,060,000	47,835,000
	b. Employee Contributions	46,914,000	58,691,438
	c. Net Investment Income	(388,520,000)	317,037,084
	d. Total Receipts	\$ (266,546,000)	\$ 423,563,522
5.	Deductions		
	a. Benefit Payments	\$ (95,352,000)	\$ (101,598,605)
	b. Refunds	(5,236,000)	(5,689,368)
	c. Administrative Expenses	(4,416,000)	(4,880,104)
	d. Total Deductions	\$ (105,004,000)	\$ (112,168,077)
6.	Net Increase	(371,550,000)	311,395,445
7.	End of Year Assets	\$ 2,573,334,000	\$ 2,884,320,445
8.	Rate of Return (2 x 4.c.) / (1. + 7. – 4.c.)	-13.16%	12.34%



#### Reconciliation of Assets – Police and Fire

	Police and Fire	FY2022	FY2023
1.	Beginning of Year Assets	\$ 7,963,277,000	\$ 6,901,545,000
2.	Adjustments	28,717,000	(1,100,000)
3.	Beginning of Year Assets after Adjustments	7,991,994,000	6,900,445,000
4.	Receipts		
	a. Employer Contributions	\$ 108,965,000	\$ 77,508,000
	b. Employee Contributions	36,997,000	44,249,129
	c. Net Investment Income	(1,042,397,000)	857,808,203
	d. Total Receipts	\$ (896,435,000)	\$ 979,565,332
5.	Deductions		
	a. Benefit Payments	\$ (179,984,000)	\$ (209,584,923)
	b. Refunds	(2,177,000)	(2,149,216)
	c. Administrative Expenses	(11,853,000)	(14,516,078)
	d. Total Deductions	\$ (194,014,000)	\$ (226,250,217)
6.	Net Increase	(1,090,449,000)	753,315,115
7.	End of Year Assets	\$ 6,901,545,000	\$ 7,653,760,115
8.	Rate of Return (2 x 4.c.) / (1. + 7. – 4.c.)	-13.08%	12.53%



#### **Reconciliation of Assets – Police**

		Police	FY2022	FY2023
1.	Begir	nning of Year Assets	\$ 5,478,977,416	\$ 4,733,562,435
2.	Adjus	stments	19,758,172	(754,457)
3.	Begir	nning of Year Assets after Adjustments	5,498,735,588	4,732,807,978
4.	Rece	pipts		
	a. E	Employer Contributions	\$ 68,034,000	\$ 53,909,000
	b. E	Employee Contributions	24,184,939	28,764,840
	c. N	Net Investment Income	(716,157,306)	587,698,026
	d. T	otal Receipts	\$ (623,938,367)	\$ 670,371,866
5.	Dedu	ictions		
	a. E	Benefit Payments	\$ (131,514,309)	\$ (153,164,662)
	b. F	Refunds	(1,590,734)	(1,570,647)
	c. /	Administrative Expenses	(8,129,743)	(9,935,400)
	d. T	otal Deductions	\$ (141,234,786)	\$ (164,670,709)
6.	Net I	ncrease	(765,173,153)	505,701,157
7.	End of	of Year Assets	\$ 4,733,562,435	\$ 5,238,509,135
8.		of Return .c.) / (1. + 7. – 4.c.)	-13.08%	12.53%



#### Reconciliation of Assets - Fire

	Fire		FY2022	FY2023
1.	Beginning of Year Assets	\$	2,484,299,584	\$ 2,167,982,565
2.	Adjustments		8,958,828	(345,543)
3.	Beginning of Year Assets afte	r Adjustments	2,493,258,412	2,167,637,022
4.	Receipts			
	a. Employer Contributions	\$	40,931,000	\$ 23,599,000
	b. Employee Contributions		12,812,061	15,484,289
	c. Net Investment Income		(326,239,694)	270,110,177
	d. Total Receipts	\$	(272,496,633)	\$ 309,193,466
5.	Deductions			
	a. Benefit Payments	\$	(48,469,691)	\$ (56,420,261)
	b. Refunds		(586,266)	(578,569)
	c. Administrative Expenses		(3,723,257)	(4,580,678)
	d. Total Deductions	\$	(52,779,214)	\$ (61,579,508)
6.	Net Increase		(325,275,847)	247,613,958
7.	End of Year Assets	\$	2,167,982,565	\$ 2,415,250,980
8.	Rate of Return (2 x 4.c.) / (1. + 7. – 4.c.)		-13.08%	12.53%



#### Calculation of Actuarial Value of Assets – Teachers

The actuarial asset value as of October 1, 2023 is determined by spreading the asset gain or loss for each year over a five-year period. The asset gain or loss is the amount by which the actual asset return differs from the expected asset return.

	Teachers	10/1/2023
1.	Market Value of Assets at End of Year	\$ 2,884,320,445
2.	Net investment income	317,037,084
3.	Expected Return Rate as of 09/30/2023	6.25%
4.	Expected investment income	160,631,511
5.	Gain/(Loss)	156,405,573

#### Spreading of investment gain/(loss)

Year	Original or rest	Original or restructured base % Deferred			Deferred	
FY202	3 \$	156,405,573	80%	\$	125,124,458	
FY202	2	(573,105,563)	60%		(343,863,338)	
FY202	.1	346,333,033	40%		138,533,213	
FY202	20	(7,610,383)	20%		(1,522,077)	
FY201	9	(55,652,385)	0%		-	
			Total deferred		(81,727,744)	
6. Pr	eliminary Actuarial Value	of Assets		\$	2,966,048,189	
7. Lo	ower Corridor				2,307,456,356	
8. Up	oper Corridor				3,461,184,534	
9. Fi	nal Actuarial Value of Ass	sets			2,966,048,189	
Rate o	4.71%					



#### Calculation of Actuarial Value of Assets – Police and Fire

The actuarial asset value as of October 1, 2023 is determined by spreading the asset gain or loss for each year over a five-year period. The asset gain or loss is the amount by which the actual asset return differs from the expected asset return.

	Police and Fire	10/1/2023
1.	Market Value of Assets at End of Year	\$ 7,653,760,115
2.	Net investment income	857,808,203
3.	Expected Return Rate as of 09/30/2023	6.25%
4.	Expected investment income	428,012,404
5.	Gain/(Loss)	429,795,799

#### Spreading of investment gain/(loss)

Year Ori		Original or restructured base	% Deferred	Deferred
FY2	2023	\$ 429,795,799	80%	\$ 343,836,639
FY2	2022	(1,540,395,000)	60%	(924,237,000)
FY2	2021	936,229,953	40%	374,491,981
FY2	2020	(22,287,348)	20%	(4,457,470)
FY2	2019	(156,151,165)	0%	-
			Total deferred	(210,365,850)
6.	Prelir	ninary Actuarial Value of Assets		\$ 7,864,125,965
7.	Lowe	r Corridor		6,123,008,092
8.	Uppe	r Corridor		9,184,512,138
9.	Final	Actuarial Value of Assets		7,864,125,965

Rate of Return

4.71%



#### Calculation of Actuarial Value of Assets – Police

The actuarial asset value as of October 1, 2023 is determined by spreading the asset gain or loss for each year over a five-year period. The asset gain or loss is the amount by which the actual asset return differs from the expected asset return.

	Police	10/1/2023
1.	Market Value of Assets at End of Year	\$ 5,238,509,135
2.	Net investment income	587,698,026
3.	Expected Return Rate as of 09/30/2023	6.25%
4.	Expected investment income	293,238,096
5.	Gain/(Loss)	294,459,930

#### Spreading of investment gain/(loss)

Year	Original or restructured base	% Deferred	Deferred		
FY2023	\$ 294,459,93	0 80%	\$ 235,567,944		
FY2022	(1,058,296,53	5) 60%	(634,977,921)		
FY2021	645,561,66	2 40%	258,224,665		
FY2020	(15,451,82	3) 20%	(3,090,365)		
FY2019	(108,792,993	3) 0%	-		
		Total deferred	(144,275,677)		
6. Preliminary Actuarial Value of Assets			\$ 5,382,784,812		
	Corridor		4 400 907 209		

Lower Corridor	4,190,807,308
Upper Corridor	6,286,210,962
Final Actuarial Value of Assets	5,382,784,812
	Upper Corridor

Rate of Return

4.71%



#### Calculation of Actuarial Value of Assets - Fire

The actuarial asset value as of October 1, 2023 is determined by spreading the asset gain or loss for each year over a five-year period. The asset gain or loss is the amount by which the actual asset return differs from the expected asset return.

	Fire	10/1/2023
1.	Market Value of Assets at End of Year	\$ 2,415,250,980
2.	Net investment income	270,110,177
3.	Expected Return Rate as of 09/30/2023	6.25%
4.	Expected investment income	134,774,307
5.	Gain/(Loss)	135,335,870

#### Spreading of investment gain/(loss)

Ye	ear		Original or restructured base	% Deferred	Deferred		
FY2	023	\$	135,335,870	80%	\$	108,268,696	
FY2	022		(482,098,465)	60%		(289,259,079)	
FY2	021		290,668,291	40%		116,267,316	
FY2	020		(6,835,525)	20%		(1,367,105)	
FY2	019		(47,358,172)	0%		-	
				Total deferred		(66,090,172)	
6.	Prelim	ninar	y Actuarial Value of Assets		\$	2,481,341,152	
7.	Lower	r Cor	ridor			1,932,200,784	
8.	Upper	<sup>r</sup> Cor	ridor			2,898,301,176	
9.	Final	Actu	arial Value of Assets			2,481,341,152	
Rate	e of Re	eturn				4.72%	

# Section V. Participant Information

#### **Participant Summary**

The following table summarizes the counts, ages and benefit information for Plan participants used in this valuation.

		Teachers	Police Officers	Firefighters	Total
1. A	Active				
a.	Number	6,171	3,146	1,887	11,204
b.	Average Age	41.9	40.1	39.6	41.0
C.	Average Service	8.9	12.9	13.1	10.7
d.	Average Salary	\$ 113,449	\$ 107,312	\$ 99,424	\$ 109,364
2. \	ested Terminations				
a.	Number	1,844	260	91	2,195
b.	Average Age	49.1	43.5	43.7	48.2
c.	Total Annual Benefits	\$ 27,622,850	\$ 4,427,318	\$ 1,466,540	\$ 33,516,708
	Service Retired, Disabled and ficiaries (Receiving District fits)				
a.	Number	4,066	3,405	1,180	8,651
b.	Average Age	75.2	61.4	62.6	68.0
c.	Total Annual Benefits	\$ 104,191,669	\$ 158,468,842	\$ 58,582,725	\$ 321,243,236

The following table summarizes all retiree member data and is provided for informational purposes only. The benefits are the total benefits for all members who were employed by the District and include both those that are the District's responsibility and those that are the responsibility of the U.S. Department of the Treasury. The liabilities for benefits that are the responsibility of the U.S. Department of the Treasury are not included in this actuarial valuation.

				Teachers Police Officers			Firefighters		
Service Retired, Disabled and Beneficiaries (Receiving District and/or Federal Benefits)									
a. Number		5,331		6,523		2,107		13,961	
b. Average Age		78.0		69.5		70.9		72.9	
c. Total Annual Benefits	\$	292,129,320	\$	428,018,846	\$	154,861,514	\$	875,009,680	



#### Active Age/Service Distribution Including Compensation – Teachers

Shown below is the distribution of active participants based on age and service. The compensation shown is the average of estimated FY2024 pay (pay rate provided as of June 30, 2023 increased with salary scale for one year).

				Y	ears of Se	rvice as o	f 10/01/202	23			
Age	Under 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Up	Total
Under 25	11	94	0	0	0	0	0	0	0	0	105
	68,015	69,053	0	0	0	0	0	0	0	0	68,944
25 - 29	27	444	103	3	0	0	0	0	0	0	577
	74,553	77,241	92,303	75,911	0	0	0	0	0	0	79,797
30 - 34	25	442	468	108	5	0	0	0	0	0	1,048
	85,193	93,730	106,001	115,025	86,927	0	0	0	0	0	101,168
35 - 39	28	325	509	312	51	1	0	0	0	0	1,226
	91,680	103,533	116,988	125,195	131,471	111,807	0	0	0	0	115,530
40 - 44	16	243	370	274	130	24	0	0	0	0	1057
	92,187	106,004	125,160	128,648	129,191	143,033	0	0	0	0	122,063
45 - 49	16	128	257	178	98	95	11	0	0	0	783
	92,183	105,569	127,211	133,391	132,240	135,147	138,667	0	0	0	126,116
50 - 54	11	101	156	121	65	107	80	7	0	0	648
	95,882	108,468	122,526	127,901	124,649	132,944	133,739	138,536	0	0	124,377
55 - 59	5	59	85	60	41	43	37	28	10	0	368
	104,986	104,644	124,812	131,254	124,160	129,978	133,913	138,835	131,965	0	125,067
60 - 64	0	34	26	31	28	29	34	8	14	0	204
	0	104,342	119,384	123,958	130,785	130,243	126,298	135,121	138,909	0	123,790
65 - 69	0	11	21	16	19	8	13	14	12	5	119
	0	96,165	117,810	126,163	127,017	137,718	122,911	144,908	137,731	126,980	125,880
70 & Up	0	4	4	5	2	6	4	4	6	1	36
	0	105,048	116,943	118,977	120,375	128,341	119,932	161,851	127,697	136,243	125,645
Totals	139	1,885	1,999	1,108	439	313	179	61	42	6	6,171
	86,241	94,053	116,775	126,816	128,480	133,695	131,570	141,217	135,317	128,524	113,449

Averages							
Age	41.9						
Service	8.9						



#### Active Age/Service Distribution Including Compensation – Police

Shown below is the distribution of active participants based on age and service. The compensation shown is the average of estimated FY2024 pay (pay rate provided as of June 30, 2023 increased with salary scale for one year).

	Years of Service as of 10/01/2023										
Age	Under 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Up	Total
Under 25	18	80	3	0	0	0	0	0	0	0	101
	72,330	76,771	82,418	0	0	0	0	0	0	0	76,147
25 - 29	32	252	156	2	0	0	0	0	0	0	442
	73,152	81,433	90,693	98,381	0	0	0	0	0	0	84,178
30 - 34	10	120	318	77	1	0	0	0	0	0	526
	72,330	82,677	96,185	104,574	73,575	0	0	0	0	0	93,835
35 - 39	9	53	154	217	102	0	0	0	0	0	535
	72,330	82,029	96,606	107,213	116,312	0	0	0	0	0	102,813
40 - 44	5	20	55	98	318	51	0	0	0	0	547
	77,246	85,046	98,529	109,022	119,859	129,597	0	0	0	0	115,018
45 - 49	3	7	29	22	123	203	44	0	0	0	431
	72,330	90,143	96,336	108,215	118,866	127,876	148,626	0	0	0	123,298
50 - 54	0	4	11	19	86	146	70	11	0	0	347
	0	79,037	96,452	116,628	116,846	126,992	149,443	146,545	0	0	127,538
55 - 59	1	3	5	2	44	65	21	28	2	0	171
	72,330	139,302	95,661	101,208	118,030	124,017	145,901	156,829	164,393	0	129,879
60 - 64	0	0	0	5	8	19	2	7	4	1	46
	0	0	0	106,841	115,983	122,976	159,004	141,417	144,772	137,266	126,584
65 - 69	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
70 & Up	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
Totals	78	539	731	442	682	484	137	46	6	1	3,146
	72,983	81,628	95,228	107,538	118,538	127,080	148,777	152,025	151,313	137,266	107,312

Averages	
Age	40.1
Service	12.9



#### Active Age/Service Distribution Including Compensation - Fire

Shown below is the distribution of active participants based on age and service. The compensation shown is the average of estimated FY2024 pay (pay rate provided as of June 30, 2023 increased with salary scale for one year).

				١	ears of Se	ervice as o	of 10/01/20	23			
Age	Under 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Up	Total
Under 25	26	57	2	0	0	0	0	0	0	0	85
	65,269	67,380	64,727	0	0	0	0	0	0	0	66,672
25 - 29	36	124	98	19	0	0	0	0	0	0	277
	65,553	72,897	81,218	85,193	0	0	0	0	0	0	75,730
30 - 34	13	113	125	37	0	0	0	0	0	0	288
	66,220	73,085	82,890	91,726	0	0	0	0	0	0	79,426
35 - 39	7	48	71	78	161	3	0	0	0	0	368
	67,517	72,216	84,842	99,228	108,357	136,396	0	0	0	0	96,623
40 - 44	0	21	22	51	202	15	1	0	0	0	312
	0	72,460	87,731	104,827	112,887	116,451	162,110	0	0	0	107,403
45 - 49	0	2	5	12	115	96	20	4	0	0	254
	0	77,827	86,474	96,818	111,183	127,691	139,828	151,396	0	0	118,883
50 - 54	0	2	4	3	26	113	26	20	0	0	194
	0	82,964	103,193	90,711	119,832	121,262	129,398	153,929	0	0	124,289
55 - 59	0	1	2	0	7	26	32	12	1	0	81
	0	116,284	95,409	0	162,393	114,671	130,786	166,741	249,563	0	134,085
60 - 64	0	0	1	0	0	4	8	5	7	1	26
	0	0	177,184	0	0	157,565	118,553	135,246	150,411	142,021	139,500
65 - 69	0	0	0	0	0	1	0	1	0	0	2
	0	0	0	0	0	119,610	0	111,604	0	0	115,607
70 & Up	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
Totals	82	368	330	200	511	258	87	42	8	1	1,887
	65,736	72,186	83,688	97,662	112,108	123,443	131,685	154,116	162,805	142,021	99,424

Averages	
Age	39.6
Service	13.1



## Participant Reconciliation – Teachers

Shown below is the reconciliation of participants between the prior and current valuation date.

		_				
Teachers	Active Participants	Retirees	Disabled Retirees	Beneficiaries	Vested Terms	Total
Participants in Last Valuation	6,088	3,762	102	201	1,718	11,871
Death	(7)	(98)	(8)	(5)	0	(118)
Disabled	0	0	0	0	0	0
Retired	(61)	94	0	0	(33)	0
Vested Termination	(238)	0	0	0	238	0
Nonvested Termination	(444)	0	0	0	0	(444)
Return of Contributions/Benefits Ended	(94)	(3)	0	(3)	(41)	(141)
New Actives	874	0	0	0	0	874
Rehire from Vested Term	38	0	0	0	(38)	0
Rehire from Nonvested Term	17	0	0	0	0	17
New Beneficiaries	0	0	0	18	0	18
Data Adjustment	(2)	6	1	(1)	0	4
Participants in This Valuation	6,171	3,761	95	210	1,844	12,081

In addition, there are 1,287 participants who are non-vested and due a refund of employee contributions.



## Participant Reconciliation - Police

Shown below is the reconciliation of participants between the prior and current valuation date.

		Inactive Participants				
Police	Active Participants	Retirees	Disabled Retirees	Beneficiaries	Vested Terms	Total
Participants in Last Valuation	3,282	2,478	335	438	258	6,791
Death	(3)	(22)	(2)	(10)	0	(37)
Disabled	(9)	0	12	0	(3)	0
Retired	(129)	152	0	0	(23)	0
Vested Termination	(46)	0	0	0	46	0
Nonvested Termination	(60)	0	0	0	0	(60)
Return of Contributions/Benefits Ended	(35)	0	0	(6)	(16)	(57)
New Actives	142	0	0	0	0	142
Rehire from Vested Term	2	0	0	0	(2)	0
Rehire from Nonvested Term	2	0	0	0	0	2
New Beneficiaries	0	0	0	30	0	30
Data Adjustment	0	(1)	0	1	0	0
Participants in This Valuation	3,146	2,607	345	453	260	6,811

In addition, there are 181 participants who are non-vested and due a refund of employee contributions.



# Participant Reconciliation - Fire

Shown below is the reconciliation of participants between the prior and current valuation date.

			Inactive	Participants		
Fire	Active Participants	Retirees	Disabled Retirees	Beneficiaries	Vested Terms	Total
Participants in Last Valuation	1,851	853	101	168	98	3,071
Death	(2)	(10)	0	(3)	0	(15)
Disabled	(6)	0	7	0	(1)	0
Retired	(47)	58	0	0	(11)	0
Vested Termination	(11)	0	0	0	11	0
Nonvested Termination	(28)	0	0	0	0	(28)
Return of Contributions/Benefits Ended	(4)	(1)	(1)	(5)	(6)	(17)
New Actives	134	0	0	0	0	134
Rehire from Vested Term	0	0	0	0	0	0
Rehire from Nonvested Term	0	0	0	0	0	0
New Beneficiaries	0	0	0	12	0	12
Data Adjustment	0	1	0	0	0	1
Participants in This Valuation	1,887	901	107	172	91	3,158

In addition, there are 91 participants who are non-vested and due a refund of employee contributions.



# Schedule of Retiree Member Data – Total Counts

The following table summarizes the total number of Service Retired, Disabled, and Beneficiary members included in the retiree member data. Only the retiree members receiving a benefit from the District are included in this valuation.

	(1) Receiving Only District Benefits	(2) Receiving Only Federal Benefits	(3) Receiving Both District and Federal Benefits	(4) = (1) + (3) Total Receiving District Benefits	(5) = (2) + (3) Total Receiving Federal Benefits	(6) = (1) + (2) + (3) Total Receiving Benefits
Teachers	627	1,265	3,439	4,066	4,704	5,331
Police	626	3,118	2,779	3,405	5,897	6,523
Fire	204	927	976	1,180	1,903	2,107
Total	1,457	5,310	7,194	8,651	12,504	13,961



# Schedule of Retiree Member Data – Teachers – Receiving District Benefits

Shown below is the schedule of retiree member data. The benefits are only those member benefits that are the District's responsibility.

	Servi	ice Retirement	Disab	oility Ref	tirement		urvivors eneficia		Total			
Attained Age	No.	Annual Benefits	No.	Annua	al Benefits	No.	Annual Benefits		No.	Annua	al Benefits	
Under 20	-	\$-	-	\$	-	5	\$	37,332	5	\$	37,332	
20 to 24	-	-	-		-	3		18,809	3		18,809	
25 to 29	-	-	-		-	-		-	-		-	
30 to 34	-	-	-		-	-		-	-		-	
35 to 39	-	-	-		-	-		-	-		-	
40 to 44	-	-	-		-	3		42,156	3		42,156	
45 to 49	-	-	-		-	4		60,171	4		60,171	
50 to 54	2	99,731	5		223,608	2		44,664	9		368,003	
55 to 59	36	2,094,054	5		190,572	3		43,581	44		2,328,206	
60 to 64	184	8,556,201	15		620,067	17		228,158	216		9,404,425	
65 to 69	508	19,843,468	18		550,075	25		281,177	551	2	20,674,719	
70 to 74	923	29,025,404	23		560,308	44		434,393	990	:	30,020,106	
75 to 79	1,211	25,881,659	26		520,960	48		338,516	1,285	2	26,741,135	
80 to 84	673	11,019,459	3		32,462	36		241,384	712		11,293,305	
85 to 89	191	2,588,725	-		-	12		85,068	203		2,673,792	
90 to 94	29	410,690	-		-	5		32,271	34		442,961	
95 and over	4	57,900	-		-	3		28,647	7		86,547	
Total	3,761	\$ 99,577,291	95	\$	2,698,052	210	\$	1,916,326	4,066	\$ 10	04,191,669	



# Schedule of Retiree Member Data – Teachers – Receiving District and/or Federal Benefits

Shown below is the schedule of all retiree member data. The benefits are the total member benefits and include both those that are the District's responsibility and those that are the responsibility of the U.S. Department of the Treasury.

	Serv	vice Retirement	Disab	ility Retirement		irvivors and eneficiaries		Total		
Attained Age	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits		
Under 20	-	\$-	-	\$-	5	\$ 37,332	5	\$ 37,332		
20 to 24	-	-	-	-	3	25,836	3	25,836		
25 to 29	-	-	-	-	-	-	-	-		
30 to 34	-	-	-	-	-	-	-	-		
35 to 39	-	-	-	-	-	-	-	-		
40 to 44	-	-	-	-	3	42,156	3	42,156		
45 to 49	-	-	-	-	4	78,276	4	78,276		
50 to 54	2	110,520	5	223,608	5	74,244	12	408,372		
55 to 59	36	2,586,156	5	190,572	5	68,988	46	2,845,716		
60 to 64	185	10,788,552	19	807,024	21	403,776	225	11,999,352		
65 to 69	511	28,039,008	21	829,188	28	609,720	560	29,477,916		
70 to 74	933	53,862,804	27	1,108,752	52	1,242,276	1,012	56,213,832		
75 to 79	1,285	75,708,576	55	2,068,980	79	1,880,304	1,419	79,657,860		
80 to 84	878	51,842,352	28	982,200	88	2,169,828	994	54,994,380		
85 to 89	512	30,302,964	24	894,168	51	1,372,584	587	32,569,716		
90 to 94	261	14,805,408	12	450,408	52	1,422,144	325	16,677,960		
95 and over	113	6,368,088	4	181,032	19	551,496	136	7,100,616		
Total	4,716	\$ 274,414,428	200	\$ 7,735,932	415	\$ 9,978,960	5,331	\$ 292,129,320		



# Schedule of Retiree Member Data – Teachers – Receiving Federal Benefits

Shown below is the schedule of retiree member data. The benefits are only those member benefits that are the responsibility of the U.S. Department of the Treasury.

	Servi	ice Retirement	Disab	ility Retirement		irvivors and eneficiaries	Total			
Attained Age	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits		
Under 20	-	\$-	-	\$-	-	\$-	-	\$-		
20 to 24	-	-	-	-	2	7,027	2	7,027		
25 to 29	-	-	-	-	-	-	-	-		
30 to 34	-	-	-	-	-	-	-	-		
35 to 39	-	-	-	-	-	-	-	-		
40 to 44	-	-	-	-	-	-	-	-		
45 to 49	-	-	-	-	2	18,105	2	18,105		
50 to 54	2	10,789	-	-	3	29,580	5	40,369		
55 to 59	32	492,102	-	-	3	25,407	35	517,510		
60 to 64	140	2,232,351	10	186,957	16	175,618	166	2,594,927		
65 to 69	364	8,195,540	17	279,113	20	328,543	401	8,803,197		
70 to 74	762	24,837,400	23	548,444	44	807,883	829	26,193,726		
75 to 79	1,166	49,826,917	53	1,548,020	71	1,541,788	1,290	52,916,725		
80 to 84	831	40,822,893	28	949,738	82	1,928,444	941	43,701,075		
85 to 89	505	27,714,239	24	894,168	46	1,287,516	575	29,895,924		
90 to 94	259	14,394,718	12	450,408	52	1,389,873	323	16,234,999		
95 and over	113	6,310,188	4	181,032	18	522,849	135	7,014,069		
Total	4,174	\$ 174,837,137	171	\$ 5,037,880	359	\$ 8,062,634	4,704	\$ 187,937,651		



# Schedule of Retiree Member Data – Police – Receiving District Benefits

Shown below is the schedule of retiree member data. The benefits are only those member benefits that are the District's responsibility.

	Servi	ce Retirement	Disab	ility Retirement		rvivors and eneficiaries	Total			
Attained Age	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits		
Under 20	-	\$-	-	\$-	34	\$ 393,763	34	\$ 393,763		
20 to 24	-	-	-	-	6	47,604	6	47,604		
25 to 29	-	-	-	-	1	18,400	1	18,400		
30 to 34	-	-	10	414,264	-	-	10	414,264		
35 to 39	-	-	10	369,852	2	92,385	12	462,237		
40 to 44	-	-	14	591,672	4	108,480	18	700,152		
45 to 49	34	2,427,605	23	962,400	13	354,280	70	3,744,285		
50 to 54	318	23,947,589	58	2,624,636	52	1,296,776	428	27,869,001		
55 to 59	792	51,675,777	97	3,402,110	67	1,665,116	956	56,743,002		
60 to 64	662	36,860,244	65	1,953,605	73	1,445,921	800	40,259,769		
65 to 69	404	15,813,944	47	1,221,771	75	1,258,056	526	18,293,771		
70 to 74	279	5,810,755	16	178,165	71	1,275,464	366	7,264,384		
75 to 79	103	1,066,340	4	84,378	48	746,576	155	1,897,294		
80 to 84	15	186,021	1	19,452	6	152,926	22	358,399		
85 to 89	-	-	-	-	1	2,515	1	2,515		
90 to 94	-	-	-	-	-	-	-	-		
95 and over	-	-	-	-	-	-	-	-		
Total	2,607	\$ 137,788,275	345	\$ 11,822,304	453	\$ 8,858,263	3,405	\$ 158,468,842		



# Schedule of Retiree Member Data – Police – Receiving District and/or Federal Benefits

Shown below is the schedule of all retiree member data. The benefits are the total member benefits and include both those that are the District's responsibility and those that are the responsibility of the U.S. Department of the Treasury.

	Serv	ice Retirement	Disab	ility Retirement		irvivors and eneficiaries		Total
Attained Age	No.	Annual Benefits	No.	Annual Benefits	No. Annual Benefits		No.	Annual Benefits
Under 20	-	\$-	-	\$-	36	\$ 493,104	36	\$ 493,104
20 to 24	-	-	-	-	6	66,528	6	66,528
25 to 29	-	-	-	-	2	114,912	2	114,912
30 to 34	-	-	10	414,264	1	58,500	11	472,764
35 to 39	-	-	10	369,852	2	94,296	12	464,148
40 to 44	-	-	14	591,672	5	145,164	19	736,836
45 to 49	34	2,435,912	23	962,400	13	371,136	70	3,769,448
50 to 54	318	28,295,118	59	2,650,836	57	1,849,689	434	32,795,643
55 to 59	792	69,110,985	104	4,418,772	75	2,395,380	971	75,925,137
60 to 64	663	57,112,141	87	3,784,080	114	4,335,168	864	65,231,389
65 to 69	437	37,771,621	85	4,303,212	169	6,103,879	691	48,178,713
70 to 74	641	46,136,066	118	6,539,136	273	10,186,045	1,032	62,861,246
75 to 79	771	53,010,792	120	6,302,988	320	12,262,566	1,211	71,576,346
80 to 84	325	23,172,156	85	4,674,576	234	9,131,292	644	36,978,024
85 to 89	146	10,349,400	41	2,413,008	175	7,049,364	362	19,811,772
90 to 94	26	1,976,556	19	1,152,060	60	2,474,280	105	5,602,896
95 and	6	768,564	8	580,740	39	1,590,636	53	2,939,940
Total	4,159	\$ 330,139,310	783	\$ 39,157,596	1,581	\$ 58,721,939	6,523	\$ 428,018,846



# Schedule of Retiree Member Data – Police – Receiving Federal Benefits

Shown below is the schedule of retiree member data. The benefits are only those member benefits that are the responsibility of the U.S. Department of the Treasury.

	Servi	ice Retirement	Disab	ility Retirement		urvivors and eneficiaries	Total			
Attained Age	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits		
Under 20	-	\$-	-	\$-	15	\$ 99,341	15	\$ 99,341		
20 to 24	-	-	-	-	4	18,924	4	18,924		
25 to 29	-	-	-	-	2	96,512	2	96,512		
30 to 34	-	-	-	-	1	58,500	1	58,500		
35 to 39	-	-	-	-	1	1,911	1	1,911		
40 to 44	-	-	-	-	1	36,684	1	36,684		
45 to 49	7	8,307	-	-	1	16,856	8	25,163		
50 to 54	265	4,347,529	2	26,200	27	541,766	295	4,926,642		
55 to 59	727	17,435,208	77	1,016,662	28	730,264	832	19,182,135		
60 to 64	626	20,251,897	85	1,830,475	78	2,874,162	790	24,971,619		
65 to 69	417	21,957,677	78	3,081,441	131	4,886,975	627	29,939,578		
70 to 74	633	40,325,311	117	6,360,971	232	8,910,581	982	55,596,862		
75 to 79	770	51,944,452	119	6,218,610	290	11,515,990	1,179	69,679,052		
80 to 84	325	22,986,135	85	4,655,124	230	8,978,366	640	36,619,625		
85 to 89	146	10,349,400	41	2,413,008	175	7,046,849	362	19,809,257		
90 to 94	26	1,976,556	19	1,152,060	60	2,474,280	105	5,602,896		
95 and over	6	768,564	8	580,740	39	1,590,636	53	2,939,940		
Total	3,948	\$ 192,351,036	631	\$ 27,335,292	1,315	\$ 49,878,595	5,897	\$ 269,604,640		



# Schedule of Retiree Member Data – Fire – Receiving District Benefits

Shown below is the schedule of retiree member data. The benefits are only those member benefits that are the District's responsibility.

	Serv	vice Retirement	Disab	Disability Retirement Survivors and Beneficiaries				Total			
Attained Age	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits			
Under 20	-	\$-	-	\$-	12	\$ 142,092	12	\$ 142,092			
20 to 24	-	-	-	-	4	247,571	4	247,571			
25 to 29	-	-	-	-	-	-	-	-			
30 to 34	-	-	1	28,440	-	-	1	28,440			
35 to 39	-	-	7	231,852	3	74,374	10	306,226			
40 to 44	-	-	10	405,012	2	58,200	12	463,212			
45 to 49	-	-	10	446,112	3	55,416	13	501,528			
50 to 54	114	8,718,297	20	1,084,380	16	497,960	150	10,300,637			
55 to 59	170	12,383,934	15	459,271	24	598,258	209	13,441,463			
60 to 64	233	14,149,317	9	365,167	29	868,084	271	15,382,568			
65 to 69	225	11,305,700	16	372,837	29	860,064	270	12,538,601			
70 to 74	106	2,977,714	18	304,942	26	613,348	150	3,896,004			
75 to 79	45	796,485	1	1,617	15	265,664	61	1,063,766			
80 to 84	8	89,294	-	-	6	117,699	14	206,993			
85 to 89	-	-	-	-	3	63,624	3	63,624			
90 to 94	-	-	-	-	-	-	-	-			
95 and over	-	-	-	-	-	-	-	-			
Total	901	\$ 50,420,741	107	\$ 3,699,630	172	\$ 4,462,355	1,180	\$ 58,582,725			



# Schedule of Retiree Member Data – Fire – Receiving District and/or Federal Benefits

Shown below is the schedule of all retiree member data. The benefits are the total member benefits and include both those that are the District's responsibility and those that are the responsibility of the U.S. Department of the Treasury.

	Serv	vice Retirement	Disab	ility Retirement		irvivors and eneficiaries		Total
Attained Age	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits
Under 20	-	\$-	-	\$-	12	\$ 144,000	12	\$ 144,000
20 to 24	-	-	-	-	4	354,552	4	354,552
25 to 29	-	-	-	-	-	-	-	-
30 to 34	-	-	1	28,440	-	-	1	28,440
35 to 39	-	-	7	231,852	3	103,308	10	335,160
40 to 44	-	-	10	405,012	2	58,200	12	463,212
45 to 49	-	-	10	446,112	4	90,384	14	536,496
50 to 54	114	10,663,526	20	1,084,380	16	574,956	150	12,322,862
55 to 59	170	15,652,018	15	532,740	25	753,000	210	16,937,758
60 to 64	233	21,482,801	12	582,516	36	1,288,332	281	23,353,649
65 to 69	226	22,462,956	26	1,455,576	47	1,965,384	299	25,883,916
70 to 74	138	12,647,520	41	2,632,752	64	2,497,752	243	17,778,024
75 to 79	165	14,346,396	35	2,180,232	97	3,776,574	297	20,303,202
80 to 84	154	12,912,036	51	3,587,424	119	4,633,720	324	21,133,180
85 to 89	67	5,563,404	18	1,047,048	67	2,649,744	152	9,260,196
90 to 94	24	2,239,764	14	906,000	37	1,627,632	75	4,773,396
95 and over	1	64,596	2	126,408	20	1,062,468	23	1,253,472
Total	1,292	\$ 118,035,017	262	\$ 15,246,492	553	\$ 21,580,006	2,107	\$ 154,861,514



## Schedule of Retiree Member Data – Fire – Receiving Federal Benefits

Shown below is the schedule of retiree member data. The benefits are only those member benefits that are the responsibility of the U.S. Department of the Treasury.

	Servi	ice Retirement	Disab	ility Retirement		irvivors and eneficiaries	Total			
Attained Age	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits		
Under 20	-	\$-	-	\$-	2	\$ 1,908	2	\$ 1,908		
20 to 24	-	-	-	-	3	106,981	3	106,981		
25 to 29	-	-	-	-	-	-	-	-		
30 to 34	-	-	-	-	-	-	-	-		
35 to 39	-	-	-	-	2	28,934	2	28,934		
40 to 44	-	-	-	-	-	-	-	-		
45 to 49	-	-	-	-	1	34,968	1	34,968		
50 to 54	108	1,945,229	-	-	6	76,996	114	2,022,225		
55 to 59	161	3,268,084	10	73,469	8	154,742	179	3,496,295		
60 to 64	226	7,333,484	11	217,349	16	420,248	253	7,971,080		
65 to 69	213	11,157,256	26	1,082,739	30	1,047,745	270	13,345,315		
70 to 74	135	9,669,806	40	2,327,810	49	1,884,404	224	13,882,020		
75 to 79	165	13,549,911	35	2,178,615	89	3,510,910	289	19,239,436		
80 to 84	154	12,822,742	51	3,587,424	114	4,516,021	319	20,926,187		
85 to 89	67	5,563,404	18	1,047,048	64	2,586,120	149	9,196,572		
90 to 94	24	2,239,764	14	906,000	37	1,627,632	75	4,773,396		
95 and over	1	64,596	2	126,408	20	1,062,468	23	1,253,472		
Total	1,254	\$ 67,614,276	207	\$ 11,546,862	441	\$ 17,060,076	1,903	\$ 96,278,789		



# Schedule of Retiree Member Data – Added and Removed from Rolls – Receiving District Benefit

Shown below is the schedule of District retiree members added and removed.

					District B	enefit	(\$ in Thous	ands)	)						
		A	dded		Ren	noved			-	Rolls at	End o	of Year			
Fiscal Year Ended	Plan	Number		nnual wances	Number		nnual wances	1	rease due to Plan endments	Number		nnual wances	Percentage Increase in Annual Allowances	Average Allowa	
September 30, 2019	Teachers	141	\$	4,693	72	\$	1,278	\$	1,890	4,059	\$	81,840	6.9%	\$	20
	Police	233		12,244	27		569		1,492	2,799		96,643	15.8%		35
	Fire	68		3,673	16		252		501	900		32,270	13.8%		36
September 30, 2020	Teachers	98	\$	3,471	86	\$	1,767	\$	1,824	4,071	\$	85,368	4.3%	\$	21
	Police	188		10,010	35		757		2,835	2,952		108,731	12.5%		37
	Fire	86		5,258	9		551		884	977		37,861	17.3%		39
September 30, 2021	Teachers	96	\$	3,642	95	\$	1,524	\$	1,124	4,072	\$	88,610	3.8%	\$	22
	Police	201		11,821	58		1,173		1,192	3,095		120,571	10.9%		39
	Fire	63		3,829	20		519		440	1,020		41,611	9.9%		41
September 30, 2022	Teachers	111	\$	3,945	118	\$	2,060	\$	6,191	4,065	\$	96,686	9.1%	\$	24
	Police	199		11,329	43		866		7,842	3,251		138,876	15.2%		43
	Fire	113		7,540	11		415		2,543	1,122		51,279	23.2%		46
September 30, 2023	Teachers	119	\$	4,128	118	\$	2,116	\$	5,494	4,066	\$	104,192	7.8%	\$	26
. ,	Police	195		12,206	41		1,071		8,457	3,405		158,469	14.1%		47
	Fire	78		4,784	20		511		3,032	1,180		58,583	14.2%		50



# Schedule of Retiree Member Data – Added and Removed from Rolls – Receiving Federal and/or District Benefit

Shown below is the schedule of Federal and/or District retiree members added and removed.

			F	Federal Plus Distric	t Ben	efit (\$ in Th	ousan	ds)					
		A	dded	Rem	oved			_	Rolls at	End	of Year		
Fiscal Year Ended	Plan	Number	Annual Allowances	Number		Annual owances	t	ease due o Plan endments	Number		Annual Iowances	Percentage Increase in Annual Allowances	 e Annual ances
September 30, 2019	Teachers	165	\$ 6,648	248	\$	10,146	\$	5,088	5,923	\$	275,295	0.6%	\$ 46
	Police	314	18,580	184		8,464		7,848	6,359		347,414	5.5%	55
	Fire	98	5,985	90		4,425		3,306	2,045		124,700	4.1%	61
September 30, 2020	Teachers	124	\$ 4,710	271	\$	11,621	\$	5,880	5,776	\$	274,265	-0.4%	\$ 47
	Police	272	15,538	211		9,937		8,123	6,420		361,138	4.0%	56
	Fire	119	7,848	102		4,935		2,182	2,062		129,795	4.1%	63
September 30, 2021	Teachers	108	\$ 4,944	281	\$	12,343	\$	3,670	5,603	\$	270,537	-1.4%	\$ 48
	Police	287	17,484	246		11,413		4,658	6,461		371,867	3.0%	58
	Fire	92	5,733	113		5,751		1,657	2,041		131,434	1.3%	64
September 30, 2022	Teachers	125	\$ 5,176	256	\$	12,004	\$	19,590	5,472	\$	283,300	4.7%	\$ 52
	Police	260	15,754	215		10,418		23,931	6,506		401,134	7.9%	62
	Fire	136	9,932	75		4,200		8,211	2,102		145,378	10.6%	69
September 30, 2023	Teachers	132	\$ 5,327	273	\$	13,099	\$	16,602	5,331	\$	292,129	3.1%	\$ 55
	Police	268	16,120	251		13,492		24,311	6,523		428,073	6.7%	66
	Fire	111	6,898	106		6,030		8,616	2,107		154,862	6.5%	73



# Section VI. Summary of Plan Provisions

# **Teachers' Retirement Plan**

#### **Effective Date**

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

#### Definitions

Affiliated Employers District of Columbia Public Schools

#### **Covered Members**

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

#### **Service Credit**

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

#### **Average Salary**

Highest 36 consecutive months of pay, divided by three.

#### Vested

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

#### **Contributions**

#### **Member Contributions**

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

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

In the event a member leaves service prior to retirement, vested members may leave their contributions in the Plan or request a refund. Nonvested members must take a refund. No interest is accrued on contributions.

# Service Retirement

#### Eligibility

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

#### Members hired before November 1, 1996

Age	Service Credit
55	30, including 5 years DCPS service
60	20, including 5 years DCPS service
62	5 years DCPS service

#### Members hired on and after November 1, 1996

Age	Service Credit
Any Age	30, including 5 years DCPS service
60	20, including 5 years DCPS service
62	5 years DCPS service

#### Benefit

#### For members hired before November 1, 1996:

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

#### For members hired on or after November 1, 1996:

• 2.0% of Average Salary times service.

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

### **Involuntary Service Retirement**

#### Eligibility

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

#### All Members, regardless of date of hire

Age	Service Credit
Any Age	25, including 5 years DCPS service
50	20, including 5 years DCPS service

#### Benefit

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



# **Disability Retirement**

#### Eligibility

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

#### Benefit

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

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

## **Survivor Benefits**

#### Lump Sum

Eligibility

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

#### Benefit

Refund of member contributions.

#### **Spouse/Domestic Partner Only**

#### Eligibility

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

#### Benefit

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

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

#### Spouse/Domestic Partner & Dependent Children Eligibility

Death before retirement and married/registered domestic partnership for at least two years, or have a child by the marriage or registered domestic partnership. Children must be unmarried and not in a domestic partnership and under age 18, 22 if full-time student, or any dependent child incapable of self-support due to a disability incurred before age 18. Death does not have to occur before retirement for the children's benefit.

#### Spouse/Domestic Partner Benefit

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

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

# **Survivor Benefits**

Spouse/Domestic Partner & Dependent Children (continued) Child Benefit

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

- a. 60% of Average Salary divided by the number of eligible children
- \$8,580<sup>1</sup> (if hired before 1/1/1980), \$8,268<sup>1</sup> (if hired between 1/1/1980 and 10/31/1996), or \$7,476<sup>1</sup> (if hired on or after 11/1/1996) per child
- c. \$25,740<sup>1</sup> (if hired before 1/1/1980), \$24,804<sup>1</sup> (if hired between 1/1/1980 and 10/31/1996), or \$22,428<sup>1</sup> (if hired on or after 11/1/1996) divided by the number of children.

## **Dependent Children Only**

#### Eligibility

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

#### Benefit

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

- a. 60% of Average Salary divided by the number of eligible children
- b. \$10,500<sup>1</sup> (if hired before 1/1/1980), \$10,092<sup>1</sup> (if hired between 1/1/1980 and 10/31/1996), or \$9,048<sup>1</sup> (if hired on or after 11/1/1996) per child
- c. \$31,500<sup>1</sup> (if hired before 1/1/1980), \$30,276<sup>1</sup> (if hired between 1/1/1980 and 10/31/1996), or \$27,144<sup>1</sup> (if hired on or after 11/1/1996) divided by the number of children.

#### **Parents Only**

#### Eligibility

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

#### Benefit

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

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

<sup>&</sup>lt;sup>1</sup> Survivor benefit amounts are as of March 1, 2023 and are subject to annual inflation adjustments. *Teachers' Retirement Plan and Police Officers and Firefighters' Retirement Plan* 

# **Deferred Vested Retirement**

#### Eligibility

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

#### Benefit

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

### **Retirement Options**

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

a. Reduced Annuity with a Maximum Survivor Annuity (to Spouse/Domestic Partner):

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

- Reduced Annuity with a Partial Survivor Annuity (to Spouse/Domestic Partner) Reduced benefit paid to the member so that upon the member's death, the spouse/domestic partner will receive a partial annuity that can range from \$1 up to any amount less than 55% of the unreduced (normal life) annuity amount. Member's benefit is reduced by the same amount as option a) above, multiplied by the ratio of the chosen benefit percent to the maximum benefit percent (55%).
- c. Reduced Annuity with a Life Insurance Benefit Member elects a life insurance amount, payable in a lump sum to a designated beneficiary upon the member's death.
- d. Reduced Annuity with a Survivor Annuity to a Person with an Insurable Interest A 55% joint and survivor annuity where the original benefit is reduced by 10% plus an additional 5% for each full 5 years, up to 25 years, that the designated beneficiary is younger than the member. Maximum reduction is 40% for any beneficiary who is 25 or more years younger than the member.



# Cost-of-Living Adjustments (COLA)

Each year on March 1, benefits which have been paid for at least twelve months preceding March 1 may be increased. The increase is equal to the annual Consumer Price Index (CPI-W Washington/Baltimore area). COLA's are included in benefit payments on and after April 1. If a member's retirement is effective after March 1 of the preceding year, the COLA amount is prorated.

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

### **Changes since Prior Valuation**

The child death benefit amounts were increased with inflation effective March 1, 2023.



# Section VI. Summary of Plan Provisions

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

#### **Effective Date**

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

#### Definitions

#### **Affiliated Employers**

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

#### **Covered Members**

Sworn Police Officers and Firefighters become members on their first day of active duty (cadets are not eligible). Membership is not automatic for uniformed EMT Firefighters. EMTs must be cross-trained in fire suppression, go through the fire academy, and considered sworn Firefighters.

#### **Service Credit**

One year of service is given for each year of employment with MPD or FEMS. Service Credit may also include approved purchased lateral transferred service, prior civilian government service and prior military service. For purposes of retirement eligibility and benefit accrual, creditable Federal and District service is aggregated in determining total creditable service.

#### Average Salary

For members hired before February 15, 1980, the highest 12 consecutive months of pay. For members hired on or after February 15, 1980, the highest 36 consecutive months of pay, divided by 3. Base pay does not include overtime, holiday or military pay. Longevity pay is included in Firefighters' base pay and in Police Officers' base pay once the member has completed 25 years of service.

#### Vested

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



## Contributions

#### **Member Contributions**

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

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

In the event a vested member leaves service prior to retirement, member contributions may be left in the Plan or refunded upon request. Nonvested members must take a refund. No interest is accrued on contributions.

### Service Retirement

#### Eligibility

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

#### Members hired before November 10, 1996

Age	Service Credit
Any age	20 years departmental service (only if hired before 2/15/1980)
50	25 years departmental service
60	5 years departmental service

#### Members hired on and after November 10, 1996

Age	Service Credit
Any age	25 years departmental service
60	

#### Benefit

For members hired before November 10, 1996:

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

#### For members hired on or after November 10, 1996:

• 2.5% of Average Salary times total service.

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



# Service-Related Disability Retirement

#### Eligibility

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

#### **Benefit**

#### For members hired before February 15, 1980:

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

#### For members hired on or after February 15, 1980:

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

## Nonservice-Related Disability Retirement

#### Eligibility

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

#### Benefit

#### For members hired before February 15, 1980:

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

#### For members hired on or after February 15, 1980:

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

### **Survivor Benefits**

Lump Sum Eligibility Death before retirement without an eligible spouse/domestic partner or child.

#### Benefit

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

Lump Sum – Death In Line Of Duty Eligibility Death occurring in the line of duty, not resulting from willful misconduct.

Benefit \$50,000

## **Survivor Benefits**

Spouse Only – Death In Line Of Duty Eligibility Member killed in line of duty, after December 29, 1993.

Benefit

100% of final pay.

Spouse Only – Death Not In Line Of Duty Eligibility

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

#### Benefit

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

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

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

#### Spouse/Domestic Partner & Dependent Children

#### Eligibility

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

#### **Spouse Benefit**

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

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

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



## **Survivor Benefits**

Spouse/Domestic Partner & Dependent Children (continued) Child Benefit

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

- a. 60% of Average Salary divided by the number of eligible children
- \$5,028<sup>2</sup> (if hired before 11/10/1996) or \$4,572<sup>2</sup> (if hired on or after 11/10/1996) per child
- c.  $$15,084^2$  (if hired before 11/10/1996) or  $$13,716^2$  (if hired on or after 11/10/1996) divided by the number of children.

# Dependent Children Only

#### Eligibility

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

#### Benefit

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

# **Deferred Vested Retirement**

#### Eligibility

Active members with five or more years of departmental service.

#### Benefit

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

## **Retirement Options**

Retirement and disability benefits are payable for the life of the retired member. This includes an unreduced joint and survivor annuity as defined above in the "Survivor Benefits – Spouse/Domestic Partnership and Dependent Children" sections.

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

<sup>&</sup>lt;sup>2</sup> Survivor benefit amounts are as of March 1, 2023 and are subject to annual inflation adjustments. *Teachers' Retirement Plan and Police Officers and Firefighters' Retirement Plan* 



# Cost-of-Living Adjustments (COLA)

Each year on March 1, benefits which have been paid for at least twelve months preceding March 1 may be increased. The increase is equal to the annual Consumer Price Index (CPI-W Washington/Baltimore area). COLA's are included in benefit payments on and after April 1. If member's retirement is effective after March 1 of the preceding year, the COLA amount is prorated.

For members hired on or after November 10, 1996, the cost-of-living increase is limited to no more than 3% per year. Members hired before February 15, 1980, receive equalization pay, which is defined as the percentage increase of active employees' salary increases. Equalization increases are not paid to survivors.

## **Changes since Prior Valuation**

The child death benefit amounts were increased with inflation effective March 1, 2023.



# Section VII. Actuarial Methods and Assumptions

#### Valuation Date

All assets and liabilities are computed as of October 1, 2023. Demographic information was collected as of June 30, 2023. For valuation purposes (e.g., age, service), all members are treated as if remaining in the Plans as of October 1, 2023.

#### Investment Rate of Return

6.25% per annum, compounded annually (net of investment expenses).

#### Inflation Assumption

3.00% per annum.

#### **Payroll Growth Assumption**

4.00% per annum.

#### **Percent Married**

65% of Teachers, Police Officers, and Firefighters are assumed to be married, with the wife 3 years younger than the husband. Active members are assumed to have one dependent child aged 10.

#### **Actuarial Method**

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

#### Amortization of Unfunded Actuarial Accrued Liability

The unfunded actuarial accrued liability (UAAL) is amortized on a level dollar basis based on the following funding policy adopted by the Board in 2012 and amended in 2021:

- Amortize the legacy UAAL as of October 1, 2021 over a closed 15-year period.
- Amortize the assumption and method changes and experience gains for the October 1, 2021 valuation over a closed 20-year period from the valuation date.
- Amortize all subsequent benefit changes, assumption and method changes and experience gains or losses over a closed 20-year period from the date established.
- If a surplus exists (assets exceed liabilities), amortize over 30 years and eliminate all prior amortization bases.

#### Assets

The method of valuing assets is intended to recognize a "smoothed" market value of assets. Under this method, the difference between actual return on market value from investment experience and the expected return on market value is recognized over a five-year period. The actuarial value of assets is constrained to an 80% to 120% corridor around market value of assets.

#### Contribution Withdrawal Assumption

For Teachers, Police, and Firefighters, 20% of the vested members who terminate are assumed to elect a withdrawal of their contributions while the remaining 80% are assumed to leave their contributions in the Plan in order to be eligible for a benefit at their deferred retirement date.



#### **Other Assumptions**

To value the post-retirement death benefit for Police Officers and Firefighters, the benefit form for all retirements (normal or disabled) is assumed to be a 67.8% Joint and Survivor annuity for all participants. One-fifth of all Police Officer and Firefighter active deaths are assumed to occur in the line of duty.

#### Post Retirement Cost-of-Living Adjustment

The cost of living, as measured by the CPI, will increase at the rate of 3.25% per year for members hired prior to November 10, 1996 and 2.75% per year for members hired on or after November 10, 1996.

#### Credited Service and Date of Entry

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

#### Military Service and Unused Sick Leave Service

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

#### Administrative Expenses

For Teachers, budgeted administrative expenses of 1.20% of payroll are added to the normal cost rate. For Police Officers and Firefighters, budgeted administrative expenses of 2.10% of payroll are added to the normal cost rate.

#### **Mortality Assumptions**

**Healthy Retiree and Actives** 

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

#### **Disabled Retirees**

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

#### **Contingent Beneficiaries**

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

#### **Mortality Improvement Scale**

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

#### Liability for Terminated Non-Vested Participants

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



# Teachers

#### Salary Increase Assumption

Representative values of the assumed annual rates of future salary increases are as follows:

-	Total Increase			
Years of Service	(Next Year)			
5	7.10%			
10	4.65			
15	4.00			
>=20	4.00			

#### **Termination Assumption**

The assumed annual termination rates are shown in the following table:

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

#### **Retirement Assumption**

The assumed annual retirement rates are shown in the following table:

	Years of Service						
Age	5	6 - 19	20	21 - 24	25-29	30	31+
<=50	0%	0%	0%	0%	5%	20%	15%
50 - 59	0%	0%	5%	5%	5%	20%	15%
60 - 61	0%	0%	20%	15%	15%	20%	15%
62	20%	20%	20%	15%	15%	20%	15%
63 - 74	20%	15%	15%	15%	15%	20%	15%
75+	100%	100%	100%	100%	100%	100%	100%

### **Disability Assumption**

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

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



# **Police Officers**

#### Salary Increases

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

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

#### **Termination Assumption**

The assumed annual termination rates are shown in the following table:

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

#### **Retirement Assumption**

The assumed annual retirement rates are shown in the following table:

Age	Years of Service						
	<=24	25	26	27	28	29	>=30
<62	0%	50%	25%	25%	30%	35%	30%
>=62	100%	100%	100%	100%	100%	100%	100%

Shown rates are for Tier 3 police officers. Tier 2 rates are limited to no earlier than age 50.

#### **Disability Assumption**

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

Age	Disability Retirement Rates
30	0.083%
40	0.173%
50	0.315%
60	0.383%

60% of Police disabilities are assumed to qualify as line of duty.



# Firefighters

#### **Salary Increases**

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

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

#### **Termination Assumption**

The assumed annual termination rates are shown in the following table:

Percent Separating in the Next Year				
Service	Male	Female		
0	9.0%	16.0%		
1	7.0%	12.0%		
2	4.2%	2.1%		
3	4.2%	2.1%		
4	3.4%	2.1%		
5	3.4%	1.8%		
6	3.4%	2.3%		
7	1.7%	2.3%		
8	1.7%	2.3%		
9	1.7%	2.3%		
>=10	1.0%	0.5%		

#### **Retirement Assumption**

The assumed annual retirement rates are shown in the following table:

Aco	Years of Service						
Age	<=24	25	26	27	28	29	>=30
<62	0%	15%	15%	15%	25%	25%	40%
>=62	100%	100%	100%	100%	100%	100%	100%

Shown retirements rates are for Tier 3 firefighters. Tier 2 rates are limited to no earlier than age 50.

#### **Disability Assumption**

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

Age	Disability Retirement Rates
30	0.135%
40	0.225%
50	0.300%
60	0.375%

60% of Fire disabilities are assumed to qualify as line of duty.



#### Rationale for Assumptions

The economic and demographic assumptions are based on the experience study for the period ending September 30, 2020, and were adopted by the Board on October 19, 2021.

# Changes Since Prior Valuation

None.



# Section VIII. Glossary

#### Actuarial Accrued Liability (AAL)

The difference between the Present Value of Future Benefits and the Present Value of Future Normal Costs or the portion of the present value of future benefits allocated to service before the valuation date in accordance with the actuarial cost method. Represents the present value of benefits expected to be paid from the plan in the future allocated to service prior to the date of the measurement.

#### **Actuarial Assumptions**

Estimates of future plan experience such as investment return, expected lifetimes and the likelihood of receiving a pension from the pension plan. Demographic, or "people" assumptions include rates of mortality, retirement and separation. Economic, or "money" assumptions, include expected investment return, inflation and salary increases.

#### **Actuarial Cost Method**

A procedure for allocating the Present Value of Future Benefits into the Present Value of Future Normal Costs and the Actuarial Accrued Liability. Also known as the "funding method".

#### Actuarial Value of Assets (AVA)

The value of the assets as of a given date, used by the actuary for valuation purposes. The AVA may be the market or fair value of plan assets or a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the actuarially determined contribution (ADC).

#### Actuarially Determined Contribution (ADC)

The employer's periodic determined contribution to a pension plan, calculated in accordance with the assumptions and methods used by the plan actuary.

#### **Amortization Method**

A procedure for payment of the Unfunded Actuarial Accrued Liability (UAAL) by means of periodic contributions of interest and principal. The components of the amortization payment for the UAAL includes the amortization period length, amortization payment increase (level dollar or level percentage of pay), and amortization type (closed or open).

#### **Experience Gain/Loss**

A measure of the difference between actuarial experience and experience anticipated by a set of actuarial assumptions during the period between two actuarial valuation dates, in accordance with the actuarial cost method being used.

#### **Funded Ratio**

The actuarial value of assets expressed as a percentage of the plan's actuarial accrued liability.

#### Low Default-Risk Obligation Measure (LDROM)

The present value of benefits accrued at the valuation date using actuarial assumptions that are generally the same as those used in determining the plan's funding liability, with the discount rate changed to reflect the expected return on a low-default-risk investment portfolio. For plans using a funding method that does not quantify gains and losses annually (but rather spreads them over future years through the changes in the normal cost), the actuarial cost method is also changed to reflect a different pattern of allocating costs to historical periods than is used to determine the ADC.



#### Market Value of Assets (MVA)

The value of the assets as of a given date held in the trust available to pay for benefits of the pension plan.

#### Normal Cost

That portion of the Present Value of Future Benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method.

#### Present Value of Future Benefits (PVFB)

The present value of amounts which are expected to be paid at various future times to active members, retired members, beneficiaries receiving benefits, and inactive, non-retired members entitled to either a refund or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would provide sufficient assets to pay all projected benefits and expenses when due.

#### Present Value of Future Normal Cost (PVFNC)

The portion of the Present Value of Future Benefits (PVFB) allocated to future service.

#### Unfunded Actuarial Accrued Liabilities (UAAL)

The difference between the Actuarial Accrued Liability (AAL) and the Actuarial Value of Assets (AVA).

## Summary of Funding Progress

	(1)	(2)	(3)		(4)	(5)	(6)
Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liability	Percentage Funded (1) / (2)	Unfunded Actuarial Accrued Liability (2) - (1)		Annual Covered Payroll	Unfunded Actuarial Accrued Liability as a Percentage of Covered Payroll (4) / (5)
Teachers' F	Retirement Plan						
10/1/2019	\$ 2,271,160	2,494,291	91.1%	\$	223,131	516,609	43.2%
10/1/2020	2,431,075	2,640,803	92.1%		209,728	551,835	38.0%
10/1/2021	2,684,368	2,698,618	99.5%		14,250	600,481	2.4%
10/1/2022	2,838,193	2,871,570	98.8%		33,376	612,463	5.4%
10/1/2023	2,966,048	3,229,928	91.8%		263,880	700,092	37.7%
Police Offic	ers and Firefight	ers' Retirement	Plan				
10/1/2019	\$ 6,269,628	5,604,573	111.9%	\$	(665,055)	495,809	(134.1%)
10/1/2020	6,676,013	6,023,843	110.8%		(652,169)	507,348	(128.5%)
10/1/2021	7,290,173	6,181,614	117.9%		(1,108,559)	492,787	(225.0%)
10/1/2022	7,612,268	6,639,124	114.7%		(973,145)	482,092	(201.9%)
10/1/2023	7,864,126	7,358,696	106.9%		(505,430)	525,218	(96.2%)
Total							
10/1/2019	\$ 8,540,788	8,098,864	105.5%	\$	(441,924)	1,012,418	(43.7%)
10/1/2020	9,107,088	8,664,646	105.1%		(442,442)	1,059,182	(41.8%)
10/1/2021	9,974,541	8,880,232	112.3%		(1,094,309)	1,093,267	(100.1%)
10/1/2022	10,450,461	9,510,693	109.9%		(939,768)	1,094,555	(85.9%)
10/1/2023	10,830,174	10,588,624	102.3%		(241,550)	1,225,309	(19.7%)

#### (\$ in Thousands)

Analysis of the dollar amounts of net assets available for benefits, actuarial accrued liability, and unfunded actuarial accrued liability in isolation can be misleading. Expressing the net assets available for benefits as a percentage of the actuarial accrued liability provides one indication of funding status on a going-concern basis. Analysis of this percentage over time indicates whether the plan is becoming financially stronger or weaker. Generally, the greater this percentage, the stronger the plan. Trends in unfunded actuarial accrued liability and annual covered payroll are both affected by inflation. Expressing the unfunded actuarial accrued liability as a percentage of annual covered payroll approximately adjusts for the effects of inflation and aids analysis of the District's progress made in accumulating sufficient assets to pay benefits when due. Generally, the smaller this percentage, the stronger the plan.



#### Valuation Solvency Test

The following table shows the accrued liabilities and the portion of accrued liabilities covered by reported assets.

Aggregate Accrued Liabilities For				Portion of Accrued Liabilities Covered by Reported Asset				
Valuation Date	(1) Active Member Contributions	(2) Retirees, Survivors and Inactive Members	(3) Active Members (Employer Financed Portion)	Reported Assets	(1)	(2)	(3)	
		т	EACHERS' RETIREME	ENT PLAN				
10/1/2019	228,893	1,263,613	1,001,785	2,264,428	100.0%	100.0%	77.1%	
10/1/2020	302,072	1,304,905	1,033,826	2,411,390	100.0%	100.0%	77.8%	
10/1/2021	333,512	1,336,297	1,028,810	2,934,307	100.0%	100.0%	100.0%	
10/1/2022	297,570	1,474,603	1,099,397	2,573,334	100.0%	100.0%	72.9%	
10/1/2023	329,140	1,566,980	1,333,808	2,884,320	100.0%	100.0%	74.1%	
		POLICE OFFICE	ERS AND FIREFIGHTE	RS' RETIREMENT PLA	N			
10/1/2019	338,775	2,547,138	2,828,542	6,256,213	100.0%	100.0%	100.0%	
10/1/2020	352,281	2,903,981	2,817,790	6,620,190	100.0%	100.0%	100.0%	
10/1/2021	357,729	3,106,359	2,741,743	7,963,277	100.0%	100.0%	100.0%	
10/1/2022	348,012	3,706,133	2,635,421	6,901,545	100.0%	100.0%	100.0%	
10/1/2023	371,342	4,145,794	2,883,761	7,653,760	100.0%	100.0%	100.0%	

(\$ in Thousands)



### **Risk Measures**

Pension plans are complicated financial instruments designed to provide income security for plan participants as they move through their working lives and into retirement. As such they can be subject to many different forces that can put the plan in better or worse positions over time. The primary risk that a plan sponsor incurs from a defined benefit plan is the risk of substantial increases in annual contributions.

The "maturity" level of a plan can indicate the likely sensitivity the plan will have to different events whether positive or negative. Variations in the investment returns are a common source of these types of events or shocks. Other sources might be experience that differs from that assumed, assumption changes or plan changes.

The purpose of this section is to provide the reader with a basic understanding of the fundamentals of pension financing and the associated risks, including implications of the Plan's funding policy on future plan funding, how future experience may differ from the assumptions used, and the potential volatility of future measurements resulting from these differences.

## **Elements of Pension Plan Financing**

The following equation lays out the fundamental elements of pension plan financing:

#### Contributions + Investment Returns = Benefit Payments + Expenses

Employers and employees **contribute** to a plan based on the statutory requirements, plan terms, and plan sponsor funding policy. The plan invests these contributions and earns a **return** on that investment. Together, these contributions and investment returns are the sole sources of income to the plan. **Benefits** are paid to participants who have met the eligibility and vesting requirements defined by the plan. Plans also pay administrative, investment, auditing, legal, and other **expenses** for maintaining the plan. **Over time, contributions and investment earnings must equal benefits and expenses**.

From this equation, it is evident that funding, investment, and benefit policies must be developed together. Once the benefit terms are established, each plan sponsor must determine the desired balance of contributions versus investment returns needed to finance benefits accrued to participants. It is important to remember that the plan sponsor's investment and funding policies, along with the selected actuarial assumptions, determine the <u>assumed</u> balance between contributions and investment returns. The <u>actual cost</u> of a plan is based on the <u>actual experience</u> of the plan and may result in a different balance than is assumed. Ultimately, the expected return does not impact the long-term relationship between the contributions required and the benefit level that can be supported by such contributions. Using a higher or lower expected return assumption may give a incorrect sense of benefit security if the plan does not realize that level of actual returns over time.



The development of integrated benefit, funding, and investment policies generally requires consideration of many factors such as:

- Balancing benefit security and intergenerational equity;
- Risk appetite and ability to absorb short-term volatility in plan contributions;
- Current plan funded status;
- Timing and expected duration of benefit payments; and
- Nature and frequency of past and anticipated future plan amendments.

## Significant Risks Affecting Pension Plans

Examples of risk common to most public plans include the following (generally listed from greatest to least risk):

- Investment risk: The potential that investment returns will be different than expected.
- Contribution risk: the potential that actual future contributions are not made in accordance with the plan's actuarially based funding policy.
- Longevity and other demographic risks: The potential that mortality or other demographic experience will be different than expected.
- Asset/liability mismatch risk: The potential that changes in the value of liabilities are not matched by changes in asset values.
- Cash flow risks: The potential that contributions to the plan will not cover benefit payments and expenses.

Investment risk is often the single most significant risk for defined benefit plans. Plans that seek a higher investment return are typically forced to accept a higher level of volatility that can change the plan's funded status drastically year-to-year. Use of an asset smoothing method that phases in investment gains and losses over a period of years can give the perception of less volatility in the funded status from year to year.

Contribution risk most commonly results from either large contribution increases that are difficult for the plan sponsor to meet, or from a material decrease in the number of covered employees and/or covered payroll.

Assumptions regarding mortality and other demographic factors related to participant behavior bring the risk that future experience will diverge from the reasonable assumptions utilized within the actuarial valuation model. For example, participants living longer than expected will increase plan costs, while people terminating sooner than expected will generally decrease plan costs. Additionally, what is considered a reasonable assumption may change over time and lead to an increase or decrease in future contributions. Since the start of the COVID-19 pandemic, there has been much discussion about how this event will affect longevity, both over the short-term and long-term, and how certain demographic groups may be impacted to a greater degree than others. Actual life expectancies may be longer or shorter than what is reflected in the valuation and benefit payment projections, and will increase or decrease the cost of the plan as actual experience emerges.



Asset/liability mismatch risk is also another potential risk for many pension plans. To the extent that the duration of plan assets is not matched to the duration of plan liabilities a change in discount rates could have an impact on the plan's funded status. For most public pension plans, changes in asset values and interest rates do not directly affect the measurement of the plan's liability.

As plans mature, they become more reliant on investment returns to pay benefits and expenses. When plans have negative cash flows, they must spend interest and dividends, or may be forced to sell assets at inopportune times, to meet those obligations.

One item left off this list is "interest rate risk" (i.e., the potential that interest rates will be different than expected). This risk is common in corporate ERISA plans where funding is based on bond rates. Interest rates on bonds are still an important consideration when setting an expected return assumption and can change over time, along with long-term capital market expectations. Together these may lead to a change in the interest rate used to value plan liabilities which will increase or decrease the measurement of plan liabilities and the actuarially determined contribution.

### Quantifying Investment and Funded Status Risk

Although cash and money market funds have the lowest absolute investment risk, they are typically not the lowest risk investment for a pension plan. With respect to interest rate risk, a pension plan liability behaves like the price of a bond because both equal the discounted value of a series of future cash flows. The present value will change in the opposite direction to a change in interest rates. Therefore, a bond portfolio with the timing of expected income cash flows matched to the expected benefit payment outflows is typically the lowest risk investment approach for a pension plan.

Corporate, Treasury, and municipal bonds, often considered lower risk investment classes, can still have a high level of interest rate risk in their present values. If the duration (timing and pattern of income payments) of the fixed income assets are misaligned with the duration of the plan's liability, there can be significant funded status volatility as interest rates change. The way to mitigate this volatility is minimizing the asset/liability (or duration) mismatch risk.

One means of quantifying the expected cost of assuming future investment and asset/liability mismatch risk is to compare the Plan's current assets to a liability calculated assuming very low default risk. One such measure is called a **Low Default-Risk Obligation Measure** (LDROM). An example of an LDROM is the Plan's Funding Liability determined using a discount rate based on the yields on high quality municipal bonds, similar to what is referenced under GASB statement 68.

	Liability Measure	Assumed Return
Actuarial Liability – Funding Policy Return	\$ 10,588,624	6.25%
Actuarial Liability – Municipal Bond Yield (LDROM)	\$ 13,790,673	4.63%

The difference between the LDROM and the Actuarial Liability used to determine funding contributions can be viewed in several ways, and certain views of this measure may be more relevant for different plan sponsors:



- The expected long-term contribution savings to be achieved by investing in asset classes with higher expected risk and returns than bonds.
- The cost of investing in an all-bond portfolio and significantly lowering expected longterm investment returns in exchange for protecting the Plan's current funded status.
- A measure of the Plan's non-diversifiable investment risk.

Investors expect to be compensated for assuming risk when they make an investment. The risk premium of an investment is the return an asset is expected to generate in excess of the risk-free rate of return. The more risk assumed by the investor, the greater the return they expect to achieve in exchange for accepting that risk.

For plans whose assumed long-term rate of return on plan assets is greater than the municipal bond yield used for the LDROM calculation, the expected cost to the plan sponsor of funding the plan will be lower because of the greater level of investment risk accepted. This in turn leads to greater volatility in the plan's funded status because the actual return on plan investments is expected to vary considerably year-to-year. Conversely, if a plan has taken steps to reduce asset/liability mismatch risk the expected cost of contributions to fund the plan will be greater (if the plan is not already fully funded) and the volatility in the plan's funded status will be reduced.

Selecting the right level of investment risk (and associated asset/liability mismatch risk) for a plan requires complex analysis that goes beyond the scope of these basic disclosures. Included in any such analysis must be an evaluation of the plan sponsor's funding policy.

## Risk Considerations in Assessing a Funding Policy

When assessing a plan's funding policy, two primary considerations are:

- whether the contributions are determined using reasonable and appropriate actuarial cost, amortization, and asset valuation methods (i.e., is the contribution an Actuarially Determined Contribution (ADC)), and
- the projected period until any Unfunded Actuarial Accrued Liability (UAAL) is fully amortized.

Under the current funding policy, the annual contribution is an ADC. The Plan's UAAL is required to be amortized over 20 years, with new layered amortization bases established annually.

Assuming all actuarial assumptions reflected in the annual valuation are met and the funding policy contributions are made as expected, this funding policy is expected to reduce the plan's UAAL in future years. The funding policy contribution is at least equal to the sum of the normal cost and interest on the UAAL. The effect of declining interest rates, investment losses, or other actuarial losses may offset the favorable effect of these contributions and cause the UAAL to remain steady or increase in future years.

Some examples of changes from year to year that will shorten or lengthen the period until the UAAL is fully amortized include:

Factors that Shorten the Amortization Period	Factors that Lengthen the Amortization Period
Contributing more than the ADC	Contributing less than the ADC
Investment and demographic gains	Investment and demographic losses
Increasing interest rates	Decreasing interest rates
Shorter life expectancies	Longer life expectancies
Reducing or eliminating future benefit accruals	Increasing benefit accruals (past and/or future)

## Historical Plan Risk and Maturity Measures

While historical plan experience is no guaranteed predictor of the future, it can be informative in assessing the degree of risk and variability in the annual valuation results year-to-year, and in understanding how certain factors influence future outcomes.

There are several plan maturity measures that can be significant to understanding the risks associated with the plan and how they change over time. The following table shows four commonly used measures of the relative riskiness of a pension plan, relative to the plan sponsor and the employee group covered by the plan and how they have changed over time.

Teachers Risk Measure	10/1/2021	10/1/2022	10/1/2023	Conservative Measures
Retiree Liability as a Percent of Total Liability	42%	43%	40%	<50%
Assets to Payroll (Asset Volatility Ratio)	4.9	4.2	4.1	<5
Liabilities to Payroll (Liability Volatility Ratio)	4.5	4.7	4.6	<5
Benefit Payments to Contributions	0.8	0.8	1.0	<3

Police and Fire Risk Measure	10/1/2021	10/1/2022	10/1/2023	Conservative Measures
Retiree Liability as a Percent of Total Liability	49%	54%	55%	<50%
Assets to Payroll (Asset Volatility Ratio)	16.2	14.3	14.6	<5
Liabilities to Payroll (Liability Volatility Ratio)	12.5	13.8	14.0	<5
Benefit Payments to Contributions	1.1	1.2	1.7	<3



The Asset Volatility Ratio (AVR) is equal to the market value of assets (MVA) divided by payroll. A higher AVR implies that the Plan is exposed to greater contribution volatility. The current Teachers AVR of 4.1 indicates that a 1% asset gain/loss can be related to about 4.1% of the annual payroll. The current Police and Fire AVR of 14.6 indicates that a 1% asset gain/loss can be related to about 14.6% of the annual payroll. The Plan amortizes asset gains/losses over a period of 30 years since both plans currently have a surplus. This would result in a change in the District's contribution of about 0.3% of payroll for Teachers and 1.1% of payroll for Police and Fire for each 1.0% change in market assets in each Plan.

The Liability Volatility Ratio (LVR) is equal to the Actuarial Accrued Liability (AAL) divided by payroll. A higher LVR implies that the Plan is exposed to greater contribution volatility due to changes in liability measurements. The current Teachers LVR of 4.6 indicates that a 1% liability gain/loss can be related to about 4.6% of the annual payroll. The current Police and Fire LVR of 14.0 indicates that a 1% liability gain/loss can be related to about 4.6% of the annual payroll. The current Police and Fire LVR of 14.0 indicates that a 1% liability gain/loss can be related to about 14.0% of the annual payroll. The Plans amortize current surpluses over a period of 30 years. This would result in a change in the District's contribution of about 0.3% of payroll for Teachers and about 1.0% of payroll for Police and Fire for each 1.0% change in each Plan. Note, as a plan approaches a 100% funded level, the AVR will converge to the LVR.

The use of payroll in these risk measures is an easily available substitute for the employer's revenue and often reflects the employer's ability to afford the plan. Each of these measures is a measure of plan maturity. Some ratios are approaching or outside of the "conservative" range because the plans are becoming more mature. Mature plans present more risk to plan sponsors because changes to the liability or assets will result in large changes in the unfunded liability as compared to the overall size of the employer as measured by payroll.

## **Additional Review**

In some instances, more detailed quantitative assessment of risks is warranted either by the above maturity metrics, part of a periodic self-assessment of risks, or due to changes in investment allocations and capital market assumptions. When risks are identified and discussed early, Plan Sponsors may have more options available to them to address those risks. As plans mature, however, certain tools become less effective for addressing potential future funding shortfalls.

The following are examples of tests that could be performed:

- Scenario Test—A process for assessing the impact of one possible event, or several simultaneously or sequentially occurring possible events, on a plan's financial condition. A scenario test could show, for example, the effect of a layoff or reduction in workforce, or early retirement program.
- Sensitivity Test—A process for assessing the impact of a change in an actuarial assumption on an actuarial measurement. A sensitivity analysis could demonstrate, for example, the impact of a decrease in the valuation discount rate or a change in future life expectancies.
- Stochastic Modeling—A process for generating numerous potential outcomes by allowing for random variations in one or more inputs over time for the purpose of assessing the distribution of those outcomes. This type of analysis could show, for example, a range of potential future contribution levels and the likelihood of contributions increasing to a certain level.



• Stress Test—A process for assessing the impact of adverse changes in one or relatively few factors affecting a plan's financial condition. A stress test could show, for example, the impact of a single year or period of several years with significant investment losses.



## D.C. Code §1-907.02(c) Adjustment to FY2025 Payment

Beginning in fiscal year 2001, the District payment was adjusted pursuant to D.C. Code §1-907.02(c). This section stipulates that "...the enrolled actuary shall determine whether the amount appropriated for the applicable fiscal year resulted in an overpayment or a shortfall based upon the actual covered payroll."

The D.C. Code §1-907.02(c) adjustment to the fiscal year 2025 District payment is calculated by taking the actual fiscal year 2023 covered payroll for each employee class and multiplying by the corresponding fiscal year 2023 contribution rates, which were determined as of October 1, 2021. This result is the fiscal year 2023 contribution that was required to be made by the District, based on actual payroll. The required contribution is then compared to the actual contribution that was paid by the District based on projected payroll. The difference between the required and actual contributions is the D.C. Code §1-907.02(c) adjustment. Any adjustment amount that cannot be used in a given year is carried forward to the next fiscal year.

		Те	achers	Police	Fire
1.	Actual FY2023 Covered Payroll	\$	704,605	\$ 334,297	\$ 181,169
2.	FY2023 Contribution Rate		7.03%	18.40%	15.05%
3.	Actual FY2023 Contribution Required		49,534	61,511	27,266
4.	Actual FY2023 Contribution Paid without Adjustment		43,913	61,338	26,971
5.	Preliminary D.C. Code §1-907.02(c) Adjustment to FY2025 Payment (3 4.)		5,621	173	295
6.	FY2023 Unrecognized Amount		0	0	0
7.	Final D.C. Code §1-907.02(c) Adjustment to FY2025 Payment (5. + 6.)		5,621	173	295
8.	Adjustment Applied to FY2025 Payment	\$	5,621	\$ 173	\$ 295
9.	Carryover Adjustment (7 8.)		0	0	0

The following table shows the D.C. Code §1-907.02(c) Adjustment to FY2025 Payment.

(\$ in Thousands)

## Experience Gain/(Loss)

The following table shows the gain/(loss), or change in unfunded accrued liability, due to experience other than expected.

Experience Gain/(Loss)	Те	achers	P	olice		Fire		ice and Fire	٦	otal
Age & Service Retirements					-					
If members retire at older ages, there is a gain; if younger ages, a loss.	\$	(1.7)	\$	(11.9)	\$	(3.8)	\$	(15.7)	\$	(17.4)
Disability Retirements										
If disability claims are less than assumed, there is a gain; if more claims, a loss.		0.5		(5.2)		0.5		(4.7)		(4.2)
Death-in Service Benefits										
If survivor claims are less than assumed, there is a gain; if more claims, there is a loss.		2.3		2.7		0.8		3.6		5.9
Withdrawal from Employment						- <b>-</b>				(0,0)
If more liabilities are released by withdrawals than assumed, there is a gain; if smaller releases, a loss.		(2.7)		(0.7)		0.5		(0.2)		(2.9)
Pay Increases										
If there are smaller pay increases than assumed, there is a gain; if greater increases, a loss.		(133.1)		(139.6)		(62.6)		(202.2)		(335.3)
New Members				(( ))						
Additional unfunded actuarial accrued liability will produce a loss.		(37.6)		(4.8)		(2.1)		(6.8)		(44.4)
Investment Income										
If there is greater investment income than assumed, there is a gain; if less income, a loss.		(43.7)		(79.8)		(36.4)		(116.2)		(159.9)
Death after Retirement										
If retirees live longer than assumed, there is a loss; if not as long, a gain.		1.0		(4.3)		(3.1)		(7.4)		(6.5)
COLA/CPI		<i>(</i> )		<i>(</i> )		<i>(</i> )				
If inflation is different than expected, gains or losses can occur.		(30.7)		(76.1)		(26.8)		(102.9)		(133.6)
Other						47.4		40.7		47.4
Miscellaneous gains and losses resulting from data adjustments, timing of financial transactions, etc.		4.4		(4.4)		17.1		12.7		17.1
Gain/(Loss) During Year from Experience		(241.3)		(324.1)		(115.9)		(439.9)		(681.2)
Non-Recurring Items										
Adjustments for plan amendments, assumption changes, method changes or audit changes.		-		-		-		-		-
Composite Gain/(Loss) During Year	\$	(241.3)	\$	(324.1)	\$	(115.9)	\$	(439.9)	\$	(681.2)
	Ŧ	(= · · · •)	Ŧ	(0)	Ŧ	()	Ŧ	()	Ŧ	(00)

(\$ in Millions)



## Valuation Balance Sheet – Teachers

The following table shows the Teachers valuation balance sheet (present and prospective assets and the actuarial liabilities) as of October 1, 2023 which is presented in the DCRB ACFR.

Teachers Present and Prospective Assets								
Actuarial Value of Present Assets			\$	2,966,048,189				
Present Value of Future Members' Contributions				483,704,170				
Present Value of Future Employer Contributions								
Normal contributions	\$	351,389,580						
Unfunded accrued liability contributions		263,880,194						
Total Prospective Employer Contributions				615,269,774				
Total Present and Prospective Assets			\$	4,065,022,133				

Teachers Actuarial Liabilities								
Present Value of benefits payable on account of retired members and survivors of deceased members now drawing retirement benefits			\$	1,305,419,543				
Present Value of prospective benefits payable on account of inactive members				261,560,746				
Present Value of prospective benefits payable on account of present active members								
Service retirement benefits	\$	2,006,065,969						
Disability retirement benefits		35,420,235						
Survivor benefits		19,676,320						
Separation benefits		436,879,320						
Total				2,498,041,844				
Total Actuarial Liabilities			\$	4,065,022,133				



## Valuation Balance Sheet – Police and Fire

The following table shows the Police and Fire valuation balance sheet (present and prospective assets and the actuarial liabilities) as of October 1, 2023 which is presented in the DCRB ACFR.

Police and Fire Combined Present and Prospective Assets								
Actuarial Value of Present Assets			\$ 7,864,125,965					
Present Value of Future Members' Contributions			458,809,076					
Present Value of Future Employer Contributions								
Normal contributions	\$	1,777,335,009						
Unfunded accrued liability contributions		(505,430,436)						
Total Prospective Employer Contributions			1,271,904,573					
Total Present and Prospective Assets			\$ 9,594,839,614					

Police and Fire Combined Actuarial Liabilities								
Present Value of benefits payable on account of retired members and survivors of deceased members now drawing retirement benefits			\$ 4,073,119,533					
Present Value of prospective benefits payable on account of inactive members			72,674,674					
Present Value of prospective benefits payable on account of present active members								
Service retirement benefits	\$	4,887,429,148						
Disability retirement benefits		214,180,860						
Survivor benefits		50,796,663						
Separation benefits		296,638,736						
Total			5,449,045,407					
Total Actuarial Liabilities			\$ 9,594,839,614					