Elected Officials' Retirement System of the City of Baltimore

Actuarial Valuation Report as of June 30, 2025

Produced by Cheiron

October 2025

TABLE OF CONTENTS

Letter of Transmittal

October 31, 2025

Board of Trustees
Elected Officials' Retirement System of
The City of Baltimore
7 East Redwood Street, 12th Floor
Baltimore, Maryland 21202-3470

Dear Members of the Board:

We are pleased to submit the June 30, 2025 actuarial valuation of the Elected Officials' Retirement System of the City of Baltimore. This report contains information on System assets, liabilities, and contributions. Financial disclosures are provided in a separate Governmental Accounting Standards Board (GASB) Statements Nos. 67 and 68 reports.

The purpose of this report is to present the annual actuarial valuation of the Elected Officials' Retirement System of the City of Baltimore. This report is for the use of the Elected Officials' Retirement Board and its auditors in preparing financial reports in accordance with applicable law and accounting requirements.

This report was prepared exclusively for the Elected Officials' Retirement System of the City of Baltimore for the purpose described herein. Other users of this report are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to such other users.

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

Sincerely,
Cheiron

Anu Patel, FSA, MAAA, EA
Principal Consulting Actuary

Matt Deveney, FSA, MAAA, EA
Principal Consulting Actuary

FOREWORD

Cheiron is pleased to provide the annual actuarial valuation report of the **Elected Officials' Retirement System of the City of Baltimore** as of June 30, 2025. The purpose of this report is to:

1) **measure and disclose**, as of the valuation date, the financial condition of the System,

2) **report** on past and expected financial trends,

3) **determine** the recommended contributions for FYE 2027, and

4) **provide specific information** and documentation required by the City and the auditors of the System.

An actuarial valuation establishes and analyzes System assets and liabilities on a consistent basis and traces the progress of both from one year to the next. It includes measurement of the System's investment performance as well as an analysis of actuarial liability gains and losses. This valuation report is organized as follows:

Section I presents a summary of the valuation and compares this year's results to last year's results.

Section II identifies the primary risks to the System as well as provides background information and assessment of these risks.

Section III contains exhibits relating to the valuation of assets.

Section IV shows the measure of liabilities and develops the City's required contributions.

The appendices to this report contain a summary of the System's membership at the valuation date, a summary of the major provisions of the System, and the actuarial methods and assumptions used in the valuation.

In preparing our report, we relied on information (some oral and some written) supplied by the Retirement System's Office. This information includes, but is not limited to, the Plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standards of Practice No. 23.

The actuarial assumptions reflect our understanding of the likely future experience of the System, and the assumptions as a whole represent our best estimate for the future experience of the System. The results of this report are dependent upon future experience conforming to these assumptions. To the extent that future experience deviates from the actuarial assumptions, the true cost of the Plan could vary from our results.

SECTION I – SUMMARY

The key results of the June 30, 2025 actuarial valuation are as follows:

- Investments earned 10.69% on a market value basis, compared to the assumed rate for the year ending June 30, 2025 of 6.75%.

- The City's funding obligation is based on an actuarial asset value developed in Section III that smooths the volatility of investment returns. The investment return on an actuarial valuation basis was 8.23% compared to the expected return of 6.75%, resulting in a net asset gain of $411,265.

- The Plan's surplus increased from $9,264,174 as of June 30, 2024 to $12,189,478 as of June 30, 2025 primarily due to demographic experience for the year. Any surplus assets are used to offset the normal cost of benefits earned during the year.

- The actuarial liability decreased and there was a liability gain of $2,171,431 primarily due to changes in membership including the death of five retired members and the withdrawal of three elected officials who were not vested.

- The recommended total lump sum contribution continues to remain at $0 for FYE 2026 and FYE 2027 as the Plan remains in a surplus position. The actuarial asset value is greater than the actuarial liability by $12.2 million, and the amortization of the surplus over 2 years is greater than the normal cost of the Plan resulting in a contribution of $0.

- Due to the relatively small membership subject to elected terms, the valuation results are expected to exhibit material volatility from year to year. There were five deaths of retired members with one survivor addition from 2024 to 2025; the total population decreased from 46 to 42 participants.

- The funded ratio of actuarial asset value to actuarial liability increased from 148.1% to 170.5%. There were net asset gains based on the smoothed asset value and a large experience gain in liabilities due to a reduction in the retiree population. The funded ratio based on Market Value of Assets increased from 146.1% to 172.0%

SECTION I – SUMMARY

The table below provides details on the development of the FYE 2026 and FYE 2027 contribution results, unfunded actuarial liabilities, and statistics on Plan membership.

Table I-1 Valuation Summary				
	2024 Valuation Applies to FYE 2026		**2025 Valuation Applies to FYE 2027**	
Contributions	**Amount**	**% of Pay**	**Amount**	**% of Pay**
Normal Cost (Excluding Expenses)	$ 332,107	20.47%	$ 322,994	19.45%
Amortization of Unfunded Actuarial Liability	(3,291,819)	-202.93%	(6,293,721)	-378.99%
Interest to Beginning of Next FY	(199,781)	-12.32%	(403,024)	-24.27%
Total Lump Sum Cost	$ 0	0.00%	$ 0	0.00%
Total Considered Payroll	$ 1,622,112		$ 1,660,657	
Unfunded Liabilities				
Actuarial Liability (AL)				
Active	$ 3,938,097		$ 3,490,477	
Terminated Vested	0		0	
Retirees and Dependents	15,333,639		13,796,556	
Total	$ 19,271,736		$ 17,287,033	
Less: Actuarial Value of Assets (AVA)	$ 28,535,910		$ 29,476,511	
Unfunded Actuarial Liability	$ (9,264,174)		$ (12,189,478)	
Funded Ratio based on Actuarial Assets	148.1%		170.5%	
Funded Ratio based on Market Assets	146.1%		172.0%	

SECTION I – SUMMARY

Historical Trends

It is important to take a step back from these latest results and view them in the context of the System's recent history. Below, we present a series of charts which display key factors in the valuations of the last 10 years.

Assets and Liabilities
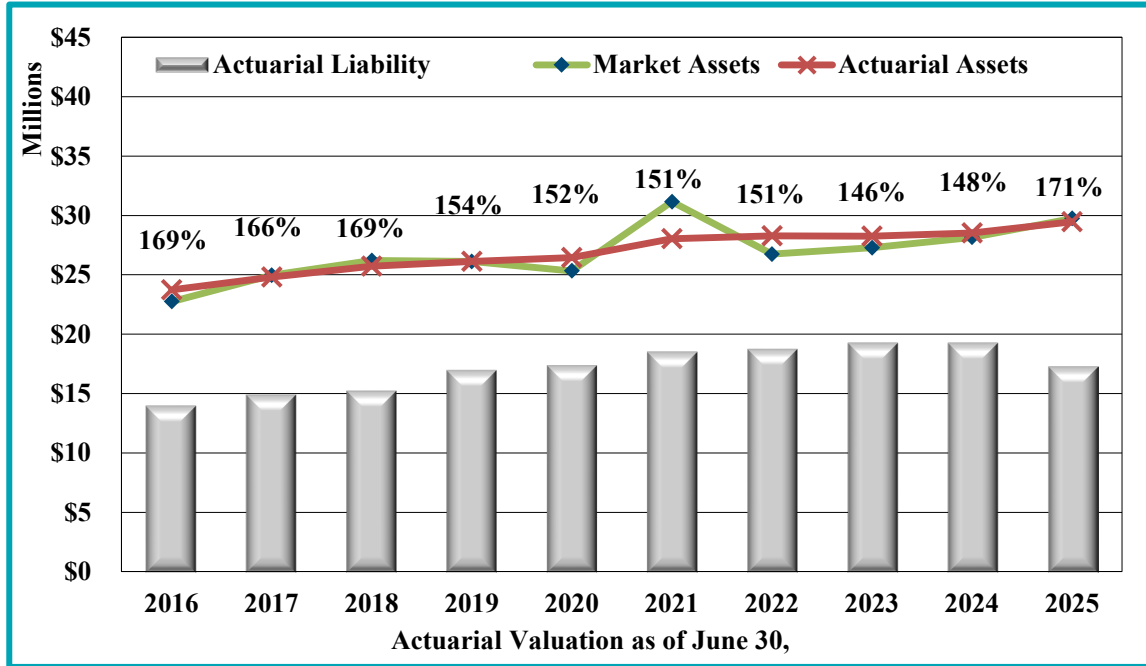
The bars represent actuarial liabilities and the lines represent the asset values. We compare the actuarial asset value to the actuarial liability in developing the funded percentage. These are the percentages shown in the graph labels. The funded ratio ranged from 166% to 169% between 2016 and 2018. In 2019 the ratio decreased due to a change in assumptions. For the current measurement period, there was an increase from 148.1% to 170.5% resulting from an experience gain due to retiree mortality. On a market value basis, the funded percentage during 2025 increased from 146.1% to 172.0%.
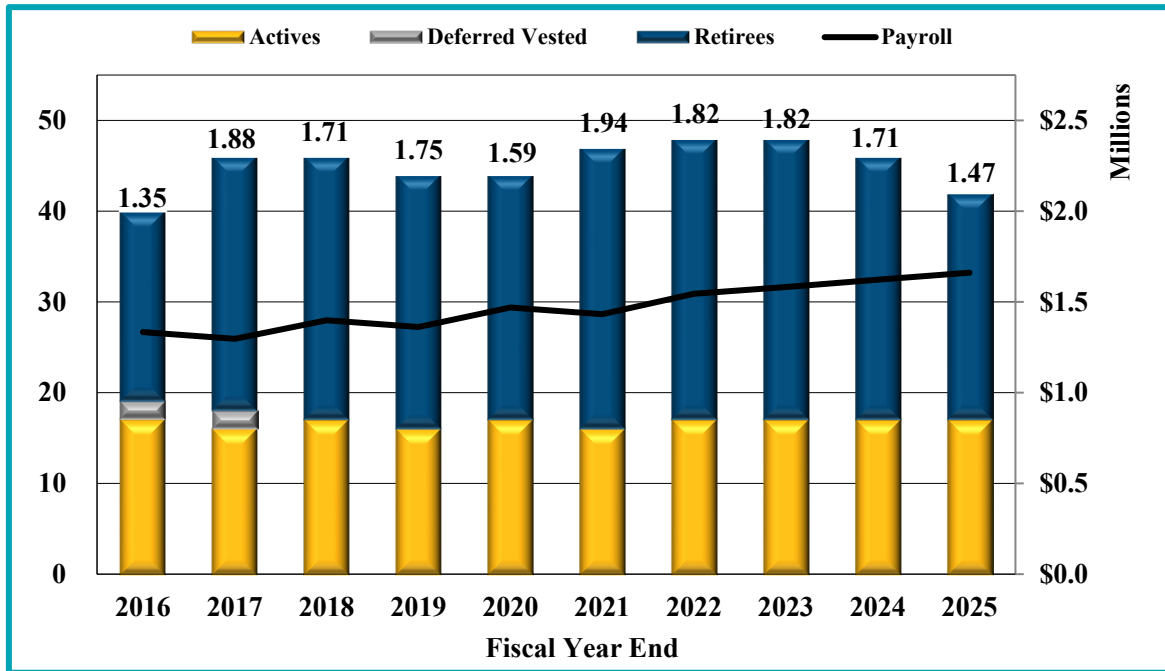
SECTION I – SUMMARY

Participant Trends

This chart shows the number of actives and non-actives covered by the Plan over the past 10-year period using the left hand scale. The numbers which appear above each bar represent the ratio of the number of inactive members to active members at each valuation date. In FYE 2025, the ratio decreased due to the net loss of four inactives. The implications of this ratio are related to the cost of the Plan as a percent of active participant payroll. If the Plan becomes underfunded, the future costs would be measured as a percent of active payroll, while asset losses attributable to all assets including those assets supporting retired lives. Therefore, an increase in cost as a percent of payroll can be more volatile as the ratio of inactive to active participants grows greater than 1 as shown in this graph.

The solid black line goes with the scale on the right and shows the total payroll of the active participants during this period.

SECTION I – SUMMARY

Future Outlook

Base Line Projections

The chart below shows the expected progress of the System's funded status over the next 20 years. The chart compares assets and liabilities and shows that if all actuarial assumptions are met, the System is expected to remain fully funded. The projections reflect expected investment returns of 6.75% each year. The funded ratio continues to increase fully covering the annual cost of benefits as they are projected to be earned. The funded ratio is based on the actuarial assets divided by the actuarial liabilities. These projections are highly dependent on future investment returns and salary increases. The graph also shows the present value of benefits, which is a measure of all the benefits, past and future, that are expected to be earned by the current participants.
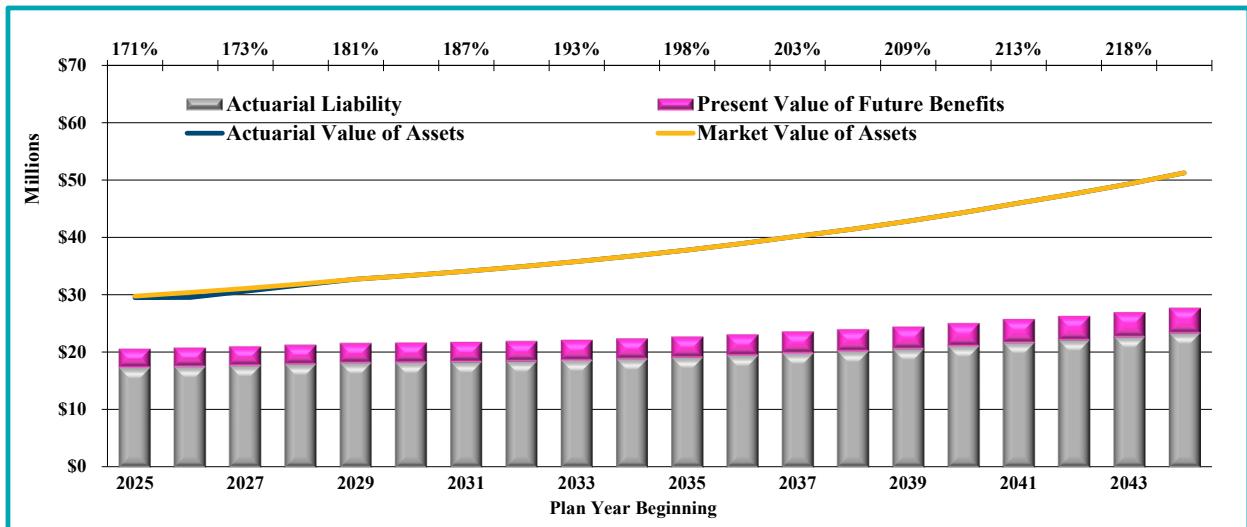
Given that the System is expected to continue to remain fully funded if all actuarial assumptions are met, the City's contribution rate will remain at 0% due to surplus (assets are greater than liabilities) throughout the projection period.

While this chart demonstrates that the projected future funded status remains above 100% and based on this the projected future cost is expected to be zero, as mentioned earlier, because the System covers a relatively small number of participants, these results could vary widely on a projected basis from year to year.

SECTION II – IDENTIFICATION AND ASSESMENT OF RISK

Introduction

In this section we consolidate the information regarding assessment and disclosure of the System's risks as well as add a number of additional items helping to communicate and understand these risks.

Actuarial valuations are based on a set of assumptions about future economic and demographic experience. These assumptions represent a reasonable estimate of future experience, but actual future experience will undoubtedly be different and may be significantly different. This section of the report is intended to identify the primary risks to the System, provide some background information about those risks, and provide an assessment of those risks.

Identification of Risks

Typically, the fundamental risk to any pension plan is that the contributions needed to pay the benefits become unaffordable. Given the overfunded status of the System, the risk of unaffordable contributions is not applicable. The primary risks for the System include the following:

- Investment risk,
- Interest rate risk,
- Longevity and other demographic risks; and
- Assumption change risk.

Investment Risk is the potential for investment returns to deviate from what is expected. When actual investment returns are lower than the investment return assumption used in the actuarial valuation, the unfunded actuarial liability will increase from what was expected and will require higher contributions than otherwise anticipated. But when actual returns exceed the assumption, the resulting unfunded liability measurements and actuarially determined contributions will be lower than anticipated. The potential volatility of future investment returns is determined by the System's asset allocation and the affordability of the investment risk is determined by the amount of assets invested relative to the size of the plan sponsor or other contribution base.

Interest Rate Risk is the potential for interest rates to be different than expected. For public plans, short-term fluctuations in interest rates have little or no effect as the system's liability is usually measured based on the expected return on assets. Longer-term trends in interest rates, however, can have a powerful effect. The chart below shows the yield on a 10-year Treasury security compared to the System's assumed rate of return. The difference is a simple measure of the amount of investment risk taken. As interest rates declined through 2020, plans faced a choice: maintain the same level of risk and reduce the expected rate of return; maintain the same expected rate of return and take on more investment risk; or some combination of the two strategies. The System has reduced its discount rate from 7.50% to 6.75% over the period shown.

SECTION II – IDENTIFICATION AND ASSESMENT OF RISK
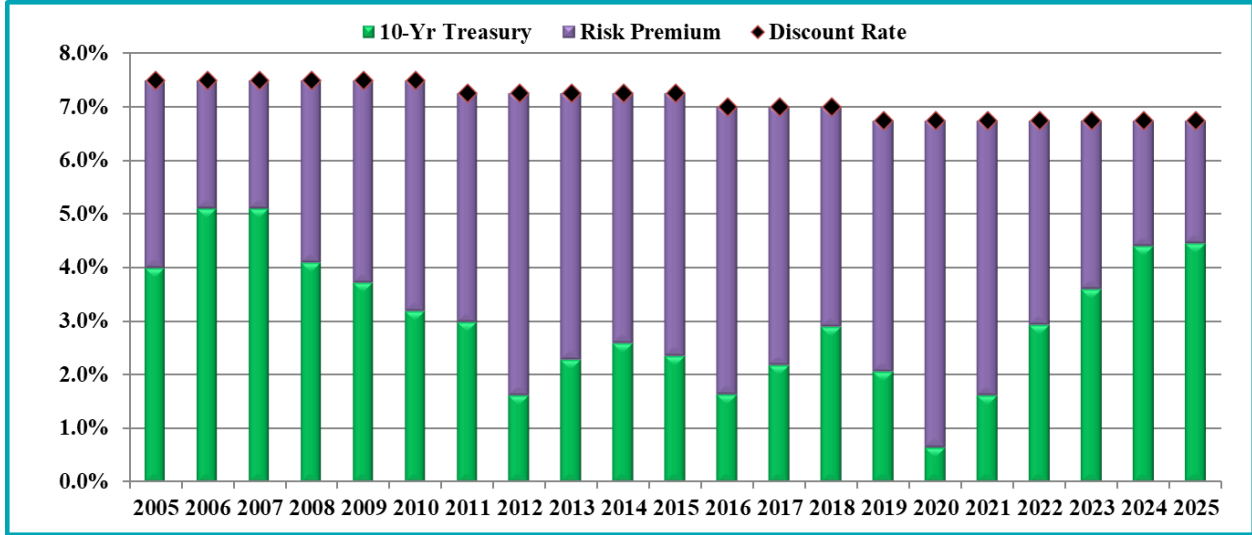
Longevity and Other Demographic Risks are the potential for mortality or other demographic experience to be different than expected. Generally, longevity and other demographic risks emerge slowly over time as the actual experience deviates from expected. In addition, the extensive number of assumptions related to longevity and other demographic experience often result in offsetting factors contributing to the System's overall liability experience. As such, these risks are often dwarfed by other risks, particularly those due to investment returns. However, due to the relatively small membership subject to elected terms, the valuation results are expected to exhibit material volatility from year to year due to changes in membership.

Assumption Change Risk is the potential for the environment to change such that future valuation assumptions are different from the current assumptions. For example, declines in interest rates over time may result in a change in the assumed rates of return used in the valuation. A healthier workforce may result in changes in employee behavior such that retirement rates are adjusted to reflect employees working longer. Assumption change risk is an extension of the other risks identified, but rather than capturing the risk as it is experienced, it captures the cost of recognizing a change in environment when the current assumption is no longer reasonable.

In understanding the impact of some of these risks, it is useful to look at past experience deviations. These deviations are commonly referred to as actuarial gains and losses. The chart below shows the components of changes in the Unfunded Actuarial Liability (UAL) for the System over the last ten years, including investment gains and losses on the Actuarial Value of Assets, liability gains and losses, assumption and method changes, and the paying down of the UAL. Amounts below the horizontal axis are gains, or decreases to the UAL, while amounts above the axis are losses, or increases to the UAL. The net UAL change is shown by the dark blue line. On the next page, Table II-1 summarizes the changes in the UAL over the last ten years.

SECTION II – IDENTIFICATION AND ASSESMENT OF RISK

<u>Historical Changes in UAL 2016-2025</u>
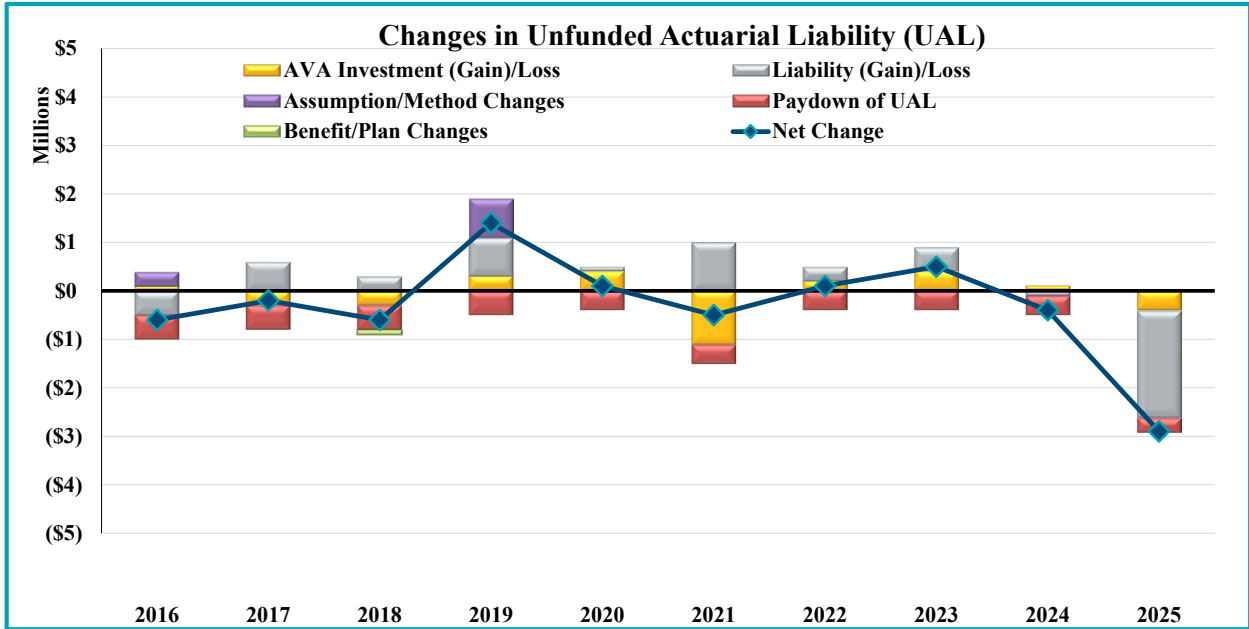
Table II-1
Changes in Unfunded Actuarial Liability (UAL)
($ millions)

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Discount Rate	**7.00%**	**7.00%**	**7.00%**	**6.75%**	**6.75%**	**6.75%**	**6.75%**	**6.75%**	**6.75%**	**6.75%**	
Source											
AVA Investment (G)/L	$ 0.1	$ (0.3)	$ (0.3)	$ 0.3	$ 0.4	$ (1.1)	$ 0.2	$ 0.4	$ 0.1	$ (0.4)	$ **(0.6)**
Liability (G)/L	(0.5)	0.6	0.3	0.8	0.1	1.0	0.3	0.5	(0.1)	(2.2)	**0.8**
Assumption/Method Changes	0.3	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	**1.1**
Benefit/Plan Changes	0.0	0.0	(0.1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**(0.1)**
Paydown of UAL[1]	(0.5)	(0.5)	(0.5)	(0.5)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.3)	**(4.3)**
Total UAL Change	**(0.6)**	**(0.2)**	**(0.6)**	**1.4**	**0.1**	**(0.5)**	**0.1**	**0.5**	**(0.4)**	**(2.9)**	$ **(3.1)**

[1] *UAL change due to benefit accruals and payments, contributions, timing, and interest.*

On a smoothed asset basis, the investment gains and losses (gold bars) from 2016 to 2025 show a combination of investment gains and losses. Over the ten-year period, investment gains and losses have reduced the UAL approximately $0.6 million.

On the liability side (gray bars), the System has experienced offsetting gains and losses, increasing the UAL by approximately $0.8 million over the ten-year period.

Assumption and method changes (purple bars) have increased the UAL by approximately $1.1 million over the ten-year period. There have been no method changes over the ten-year period. The significant assumption changes have included reductions in the discount rate from 7.25% to 7.00% (in 2016) to the current 6.75% (in 2019), and experience studies in 2019 and 2023. In 2023, the scale used to project mortality rates was updated and the disability rates were reduced but had a minimal impact on the Liability.

A plan change (green bars) in 2018 decreased the UAL by approximately $0.1 million.

SECTION II – IDENTIFICATION AND ASSESMENT OF RISK

Typically, each year the UAL is expected to decrease as the System contributes towards paying the UAL down, assuming no future investment and liability gains and losses. However, the System has been fully funded starting in 2011, resulting in a negative UAL and no contributions have been required by the City since 2016. Net changes to the UAL (red bars), which reflects benefit accruals and payments, contributions, and interest due to timing, have decreased the UAL by approximately $4.3 million over the last ten years.

Deterministic Scenarios/Stress Testing

Assessing the future risk that the expected measurements produced by the actuarial valuations will deviate from the actual values over time is complex and can never be exactly known.

In the Summary section of this report, we show a baseline projection of funded status and projected costs assuming a 6.75% investment return assumption per year. It is important to note that baseline projections, while valid, are not going to occur as experience never conforms exactly to assumptions every year. Therefore, we have developed hypothetical scenarios to illustrate the impact deviations from assumed investment returns may have on future funded status and contribution rates. The scenarios are balanced between positive and negative scenarios and are intended to illustrate the importance of both the return itself as well as the timing of such returns.

The graphs on the following page show the projections under two theoretical scenarios: optimistic returns of 8.75% per year and pessimistic returns of 4.75% per year.

For each scenario, the projection chart compares the market value of assets (MVA) (gold line) and the actuarial or smoothed value of assets (AVA) (blue line) to the System's actuarial liabilities (AL) (gray bars). In addition, at the top of each chart, we show the System's AVA funded ratio (ratio of AVA to AL). The years shown in the chart signify the valuation date as of June 30 of the labeled year.

SECTION II – IDENTIFICATION AND ASSESMENT OF RISK

Optimistic Returns of 8.75%

If the System earns 2.00% greater than the assumed rate of return in each year of the projection, the AVA funded ratio is projected to increase to 240% by the 2035 valuation compared to 198% in the baseline projection. Given the System is expected to be in a surplus position, no employer contributions would be required for the projection period under this scenario.
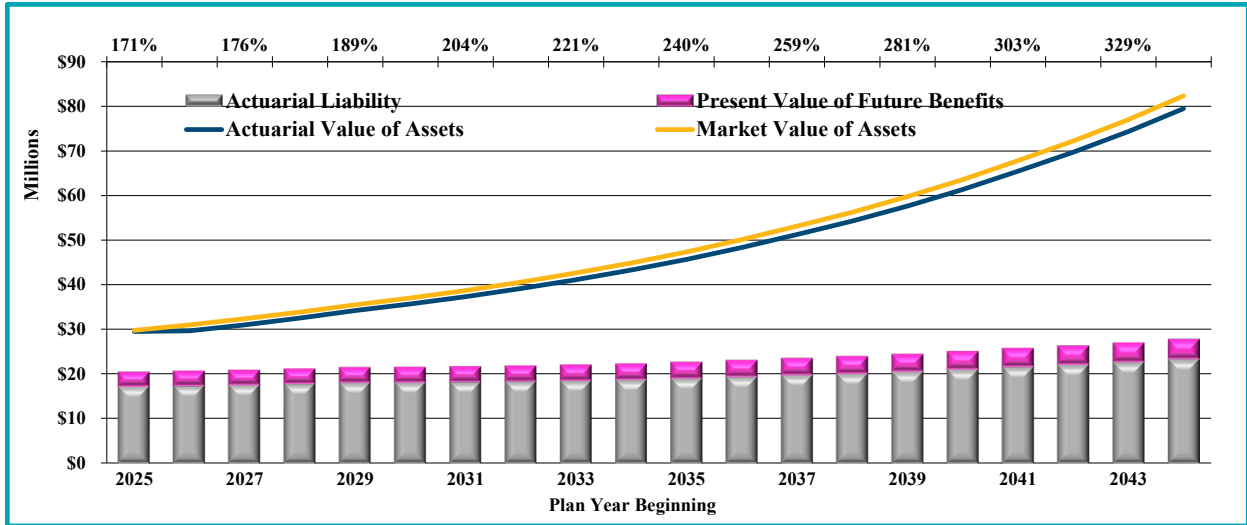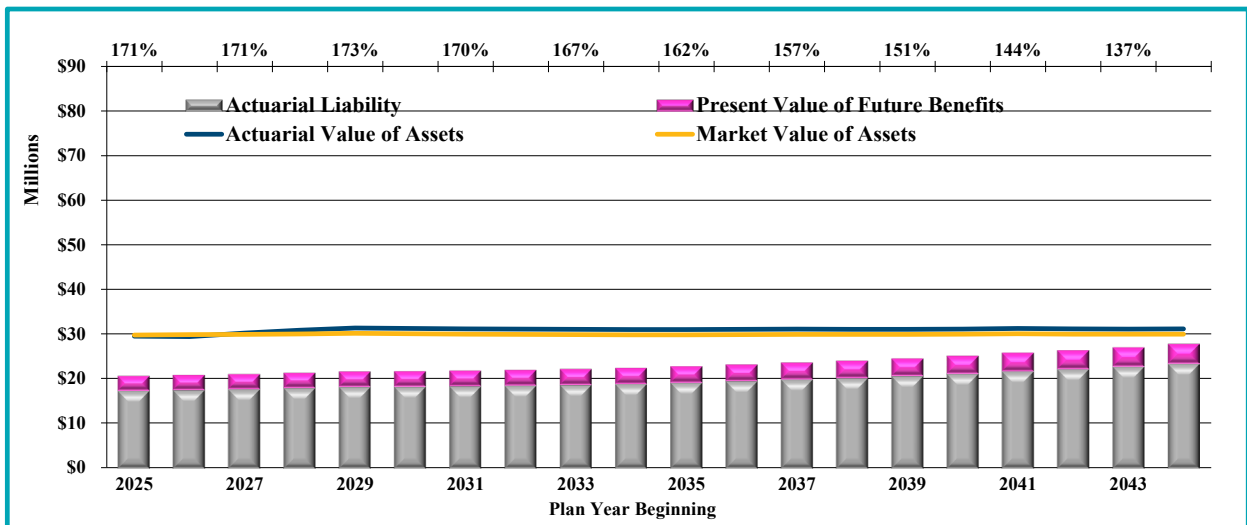

Pessimistic Returns of 4.75%

If the System earns 2.00% less than the assumed rate of return in each year of the projection, the AVA funded ratio is expected to decline over the next 20 years but remain in a surplus position. Under this scenario, no employer contributions would be required for the projection period.

SECTION II – IDENTIFICATION AND ASSESMENT OF RISK

Low-Default-Risk Obligation Measure (LDROM)

The System invests in a diversified portfolio to achieve the best possible return at an acceptable level of risk. The lowest investment risk portfolio for a pension plan would be composed entirely of low-default-risk fixed income securities whose cash flows match the cash flows needs of the System. Effective February 15, 2023, the Actuarial Standards of Practice No. 4 (ASOP 4) requires the disclosure of this liability called the Low-Default-Risk Obligation Measure (LDROM). However, such a portfolio would have a lower expected rate of return (5.58% as of June 30, 2025) than the diversified portfolio (6.75%). As of June 30, 2025, the LDROM is $19.4 million[1] compared to the Actuarial Liability of $17.3 million for the System. The $2.1 million difference can be viewed as the expected savings from taking on the investment risk of the diversified portfolio. Alternatively, it can be viewed as the potential cost of eliminating the investment risk of the non-fixed income allocations of the diversified portfolio. Currently, the assets are greater than the LDROM actuarial liability.

If the System were to invest in the LDROM portfolio, the funded ratios would decrease, and assets could fall below the LDROM actuarial liability. The security of the System's pension benefits relies on the current assets, future investment earnings, and the ability and willingness of the City to make future contributions. If the System were to invest in the LDROM portfolio, it would reduce future investment earnings and potentially increase future City contributions.

---

[1] Assumes a 5.58% discount rate, which is based on the June 30, 2025 FTSE Pension Liability Index using plan benefit projections and all other assumptions and methods as used to calculate the Actuarial Liability.

SECTION III – ASSETS

The statement of assets below is based on unaudited financial data furnished by the Retirement System's Office. The change in market value of assets during the valuation year ending June 30, 2025 is summarized below.

Table III-1 Market Value of Assets as of June 30, 2025		
		Market Value
Fund Balance on June 30, 2024	$	**28,153,015**
Contributions		
Member	$	70,214
City/State		0
Total Contributions	$	**70,214**
Investment Income		
Interest, Dividends, and Realized Capital Gains	$	526,726
Unrealized Gains (Losses)		2,498,198
Investment Expenses		(51,116)
Administrative Expenses		(37,130)
Net Investment Income	$	**2,936,678**
Payments of Benefits & Refunds		**(1,421,448)**
Fund Balance on June 30, 2025	$	**29,738,459**

SECTION III – ASSETS

The table below shows the calculation of investment gains and losses and application of the asset smoothing method to determine the actuarial asset value. The System's investment experience was greater than expected, with a 10.69% return, which resulted in an investment gain of $1,081,209 during FYE 2024-2025. This gain is spread over a five-year period and recognized in the actuarial value of assets each year until it is fully recognized. The absolute value of the total unrecognized gain/loss is limited by a corridor of not more or less than 10% of the market value of assets. This corridor does not apply for the 2025 Plan Year.

Table III-2 Development of Actuarial Value of Assets				
				June 30, 2025
Investment Gain (Loss)				
1. Beginning of year market value of assets				$ 28,153,015
2. Net cash flow				(1,351,234)
3. Actual investment earnings during FY				2,936,678
4. Anticipated earnings at 6.75% per annum during FY				1,855,469
5. Investment Gain/(Loss) (3. - 4.)				$ 1,081,209
Recognized and Unrecognized Gain/(Loss)				
Valuation Year	**Investment Gain/(Loss)**	**Percent Recognized**	**Recognized as of June 30, 2025**	**Unrecognized as of June 30, 2025**
2021	$ 5,382,186	100%	$ 5,382,186	$ 0
2022	(5,034,305)	80%	(4,027,444)	(1,006,861)
2023	239,015	60%	143,409	95,606
2024	513,726	40%	205,490	308,236
2025	1,081,209	20%	216,242	864,967
				$ 261,948
		Maximum of 10% of assets at June 30, 2025		$ 2,973,846
Actuarial Value of Assets				**June 30, 2025**
1. Market value as of June 30, 2025				$ 29,738,459
2. Investment (Gain)/Loss not yet recognized				(261,948)
3. Actuarial value of assets				$ 29,476,511
4. Ratio of actuarial asset value to market asset value				99.12%

SECTION IV – LIABILITIES AND CONTRIBUTIONS

The table below discloses the actuarial liabilities by membership status and compares them to the actuarial value of assets to define the unfunded actuarial liability. The liabilities are for funding purposes and are not appropriate for measuring the cost of settling System's liabilities by purchasing annuities or paying lump sums. The overfunded amount is amortized over a two-year period and that amount is then subtracted from the Normal Cost (cost to cover the upcoming year's expected accruals less member contributions) to produce the recommended employer contributions. Because of the size of this year's surplus, this amount fully offsets the normal cost.

Table IV-1 Valuation Summary				
	As of June 30, 2024		**As of June 30, 2025**	
Number of Participants				
Active		17		17
Terminated vested		0		0
Retired		29		25
Total Participants		46		42
Annual compensation of active participants	$	1,622,112	$	1,660,657
Average compensation of active participants	$	95,418	$	97,686
Average Age		45.33		43.90
Average Service (not including service to be purchased)		8.34		7.64
Development of Unfunded Actuarial Liability				
1. Actuarial Liability				
Active	$	3,938,097	$	3,490,477
Terminated vested		0		0
Retirees and dependents		15,333,639		13,796,556
Total	$	19,271,736	$	17,287,033
2. Actuarial value of assets		28,535,910		29,476,511
3. Unfunded actuarial liability (1. - 2.)	$	(9,264,174)	$	(12,189,478)
4. 3-year amortization payment at 6.75% for 2024	$	(3,291,819)		
2-year amortization payment at 6.75% for 2025			$	(6,293,721)
5. Normal Cost (excluding expenses)		332,107		322,994
6. Interest on (4.) and (5.) to beginning of next FY		(199,781)		(403,024)
7. Total City Contribution if paid at beginning of next FY (4. + 5. + 6.), but not less than zero	$	0	$	0

SECTION IV – LIABILITIES AND CONTRIBUTIONS

The table below presents the change in actuarial liabilities during the plan year. In general, the actuarial liability of any retirement system is expected to change at each subsequent valuation for a variety of reasons including:

- New hires since the last valuation

- Benefits accrued since the last valuation

- Plan amendments

- Interest on liabilities

- Benefits paid to retirees

- Participants leaving employment at rates different than expected

- Changes in actuarial assumptions

- Changes in actuarial methods

- Corrections to participant data records

The table below summarizes how these various elements have impacted the value of liabilities from last year to this year.

Table IV-2 Changes in Liabilities		
Actuarial Liability at June 30, 2024	$	19,271,736
Actuarial Liability at June 30, 2025	$	17,287,033
Liability Increase/(Decrease)		(1,984,703)
Change due to:		
Accrual of Benefits	$	332,107
Benefit Payments		(1,421,448)
Passage of Time (Interest)		1,276,069
Plan Amendment		0
Actuarial Assumption Change		0
Actuarial (Gain)/Loss		(2,171,431)
Total Change	$	(1,984,703)

SECTION IV – LIABILITIES AND CONTRIBUTIONS

The table below provides the components of the liability loss developed in the previous table.

Table IV-3 Elements of Actuarial Liability - (Gain)/Loss		
1. Age and Service Retirements - Gain/(Loss)	$	0
2. Disability Retirements - Gain/(Loss)		(4,163)
3. Death in Service Benefits - Gain/(Loss)		0
4. Withdrawal from Employment - Gain/(Loss)		(834,905)
5. Pay/COLA Increases - Gain/(Loss)		62,801
6. Death after Retirement - Gain/(Loss)		(1,110,441)
7. New Entrants - Gain/(Loss)		0
8. Other - Gain/(Loss)		(284,723)
9. Actuarial Liability - Gain/(Loss) (sum 1-8)	$	(2,171,431)
10. Assumption Changes - Gain/(Loss)		0

APPENDIX A – PLAN MEMBERSHIP

The data for this valuation was provided electronically by the Retirement System Office. Cheiron did not audit the data. However, the data was reviewed to ensure that it complies with generally accepted actuarial standards. The data for active and inactive participants is as of June 30, 2025.

The tables below contain a summary of the data provided as of June 30, 2025 and a reconciliation of the data from the prior to current year.

Member Statistics		
	June 30, 2024	**June 30, 2025**
Actives		
Count	17	17
Average Age	45.3	43.9
Average Service	8.3	7.6
Average Payroll	$ 95,418	$ 97,686
Deferred Vested		
Count	0	0
Average Age	0	0
Average Annual Benefit	$ 0	$ 0
Inactive		
Count	29	25
Average Age	74.0	73.1
Average Annual Benefit	$ 51,954	$ 52,824

APPENDIX A – PLAN MEMBERSHIP

Reconciliation of all EOS Members					
	Active	**TV**	**Retired**	**Disabled**	**Total**
1. Membership as of June 30, 2024	**17**	**0**	**28**	**1**	**46**
2. New Entrants	3	0	0	0	3
3. Retired	0	0	0	0	0
4. Disabled	0	0	0	0	0
5. Terminated Vested	0	0	0	0	0
6. Terminated Non-Vested	(3)	0	0	0	(3)
7. Transfer to ERS	0	0	0	0	0
8. Stopped Payment	0	0	0	0	0
9. Died	0	0	(4)	(1)	(5)
10. Beneficiary	0	0	1	0	1
11. Rehired	0	0	0	0	0
12. Data Correction	0	0	0	0	0
13. Membership as of June 30, 2025	**17**	**0**	**25**	**0**	**42**
Current Annual Payroll	$ 1,660,657				
Expected Annual Benefit Payments	$ 1,304,491				

APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

1. **Actuarial Cost Method**

Method of Funding: Entry Age Normal Cost Method was approved by the Board of Trustees effective date of 7/1/2013.

                                        The actuarially determined contribution (ADC) in Table IV-1 is a reasonable actuarially determined contribution in accordance with Actuarial Standard of Practice (ASOP) No. 4. The actuarial methods have been selected to balance benefit security, intergenerational equity, and stability of actuarially determined contributions. The selection of the actuarial methods has taken into account the demographics of plan members, the funding goals and objectives of the Board, and the need to accumulate assets to make benefit payments when due.

Amortization Period: The unfunded actuarial liability, including actuarial gains and losses, is amortized as a level dollar over 16 years beginning June 30, 2011. The 16-year period is decreased each year. As of June 30, 2025, the unfunded liability is amortized over 2 years.

Asset Valuation: The actuarial value of assets is equal to market value plus accrued contributions minus/plus the unrecognized gain/loss as of the valuation date. Each year's gain/loss is recognized over five years. Investment gains/losses are defined as earnings in excess of expected earnings (6.75%) of the market asset value at the beginning of the year.

                                        The absolute value of the total unrecognized gain/loss is limited to not more or less than 10% of the market value of assets.

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

2. **Actuarial Assumptions**

All actuarial assumptions are subject to Board of Trustees' approval, with changes typically addressed following each five-year experience study and following the recommendation of the actuary. An experience study was performed in 2023 based on 2018 through 2022 experience analysis. The rationale for the actuarial assumptions is provided within the experience study report.

APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

Investment Return: 6.75% compounded annually, net of all expenses. This assumption is defined by City Code based on the definition of *Regular Interest*, which has been amended from time to time based on the advice of the actuary and investment consultant and recommendation of the Board of Trustees in the form of an amendment to the City Code from time to time.

Low-Default-Risk
Obligation Measure
Interest Rate: 5.58%

Salary Increases: 2.5% compounded annually based on our understanding of the compensation capped growth rate for Elected Officials.

Post-Retirement
Increase:

1. First became a member on or before December 5, 2016:
   2.5% compounded annually, with a one year wait period for retirements on or after March 1, 2017.

2. First became a member on or after December 6, 2016:
   1.5% until age 65 and 2.0% thereafter, compounded annually, with a one year wait period.

Pre-Retirement
Mortality: None - given the small, covered population and the nature of the pre-retirement death benefits providing a return of most or more than the benefit value at death, the best assumption to fit these circumstances is to assume no discount of benefits for pre-retirement mortality.

Post-Retirement
Mortality:

1. Retirees and Beneficiaries:
   Pub-2010 General Retiree Below-Median Weighted mortality tables adjusted by 130% for males and 129% for females with future mortality improvement through 2026 using SOA's Scale MP-2021.

2. Disabled members:
   Pub-2010 General Disabled Annuitant mortality tables adjusted by 183% for males and 120% for females with future mortality improvement through 2026 using SOA's Scale MP-2021.

APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

	Retirees and Beneficiaries		Disabled Members	
AGE	Male	Female	Male	Female
55	0.010932	0.005773	0.036107	0.019903
60	0.013989	0.006878	0.045513	0.023482
65	0.016696	0.008340	0.054696	0.025184
70	0.024587	0.013126	0.064725	0.029392
75	0.039131	0.022760	0.082231	0.040785
80	0.066602	0.041584	0.116626	0.063524

Disability:

AGE	Non-Line-of-Duty Disability	Line-of-Duty Disability
25	0.001305	0.000145
30	0.001980	0.000220
35	0.003038	0.000338
40	0.004905	0.000545
45	0.001125	0.000125
50	0.001328	0.000148
55	0.000675	0.000075
60	0.000675	0.000075
65	0.000675	0.000075
69	0.000675	0.000075

Withdrawal: None, since future service credit may be purchased.

Retirement Age:

1. Members hired before December 6, 2016:
   The later of (i) completion of current term or, (ii) end of term when first eligible for retirement (16 years of service or age 50 with 12 years of service).

2. Members hired on or after December 6, 2016:
   The later of (i) completion of current term or, (ii) end of term when first eligible for retirement (age 55 with 12 years of service).

Percentage Married: Males: 80%; Females: 80%

Age Difference: A husband is assumed to be four years older than his wife.

Expenses: Administration and investment expenses are assumed to be covered by the investment earnings. It is assumed that the Fund will have sufficient earnings to pay these expenses and meet the interest assumption.

APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

Benefit Offsets:	None
Election Year:	The next election year is assumed to occur in 2028. Elections are then assumed to be held every four years thereafter.
Employee Contributions:	Employee contributions are assumed to completely cover the cost of the active service retirement annuity and are therefore not included as an offset to the normal cost of the service retirement pension.
Data Assumptions:	There were no data assumptions applied in the preparation of this valuation, as all data for active and nonactive participants was supplied by the Retirement System Office.
Justification for Assumptions:	The actuarial assumptions were adopted by the Retirement Board, based upon the alternatives presented in the 2023 experience study report conducted on the System's experience from the 2018-2022 valuations. The results of this study were presented in 2023 and are incorporated into this report by reference.
Projection Basis:	This report includes projections of future assets, liabilities, funded status and contributions for the purpose of assisting the Board of Trustees with the management of the System. We have used Cheiron's P-Scan model to develop these projections. The model is also used to stress test the impact of volatile asset returns over the projection period. We have not identified any material inconsistencies in assumptions or output of our P-scan modeling software.
Changes Since Last Valuation:	None.

APPENDIX C – SUMMARY OF PLAN PROVISIONS

In this section, the basis of the valuation is presented and described. This information – the provisions of the Plan and the census of participants – is the foundation of the valuation, because these are the present facts upon which benefit payments will depend.

The valuation is based upon the premise that the Plan will continue to be in existence, so future events must also be considered. These future events are assumed to occur in accordance with the actuarial assumptions and concern such events as the earnings of the Fund, the number of participants who will remain to retirement, their ages at retirement, and expected benefits.

Effective Date

The Plan was established by City Ordinance 1105 effective December 5, 1983 and has been amended periodically.

Membership

Any elected official who is not a class A, B, C, or D member of the Employees' Retirement System of Baltimore City, upon taking the oath of office, shall automatically become a member of this system.

Any elected official who is a class A, B, C, or D member of the Employees' Retirement System shall have the option, within 120 days of taking the oath of office, to become a member of this retirement system.

Current Annual Earnable Compensation

The current annual Compensation authorized for an elected position, including any future increases occurring after the retirement of the official, which shall, after retirement, index benefits paid under this system subject to applicable reduction for any optional retirement allowance selection.

Retirement Date

1. Service Retirement – Members hired before December 6, 2016 are eligible to retire after the earlier of (1) acquiring at least 16 years of service credit or (2) attaining age 50 with at least 12 years of service credit. Members hired on or after December 6, 2016 are eligible to retire after attaining age 55 with at least 12 years of service credit.

2. Non-Line-of-Duty Disability – A member may retire with a Non-Line-of-Duty Disability pension if the member has five years of service and is determined to be mentally or physically incapacitated for the further performance of the duties as an elected official and such incapacity is likely to be permanent.

3. Line-of-Duty Disability – A member may retire with a Line-of-Duty Disability pension if the member is totally and permanently incapacitated for the further performance of his / her duties as the result of an accident occurring while in the actual performance of such duties without willful negligence on his / her part.

APPENDIX C – SUMMARY OF PLAN PROVISIONS

Service Retirement Benefit

Upon retirement from service, a member shall be entitled to receive a maximum service retirement allowance which shall consist of:

- An annuity which shall be the actuarial equivalent of accumulated contributions at the time of retirement; and

- A pension, in addition to the annuity, which together shall be equal to 2.5% of the current annual earnable compensation applicable to that office multiplied by the number of years of membership credit; and

For members hired on or after December 6, 2016, the maximum allowance shall not exceed 60% of the member's annual compensation at retirement. The maximum allowance shall be payable in the form of a life annuity with 40% continuing to the unmarried spouse or minor children upon a member's death. There is no reduction in benefit for this annuity form.

Non-Line-of-Duty Disability Retirement Benefit

The greater of:

1. An annuity, which shall be the actuarial equivalent of accumulated contributions at the time of retirement and a pension, which, together with this annuity, shall be equal to the annual amount of accrued service retirement allowance; or

2. A total retirement allowance consisting of 25% of the current annual earnable compensation applicable to that office.

This benefit will be offset by workers' compensation received on account of the same disability.

Line-of-Duty Disability Benefit

1. An annuity which shall be the actuarial equivalent of accumulated contributions at the time of retirement; and

2. A pension, in addition to the annuity, of 66-2/3% of the current annual compensation applicable to that office.

This benefit will be offset by workers' compensation received on account of the same disability.

Non-Line-of-Duty Death Benefit

The beneficiary of a member who dies while serving as an elected official or retires and dies within 30 days of service will receive either:

1. A lump sum equal to 50% of his/her current annual earnable compensation at the time of death plus return of the member's contributions; or

2. If the member was eligible to retire, the beneficiary will receive the 100% Joint and Survivor benefit described in Option 2 (see Optional Retirement Allowances). To receive this death benefit, the beneficiary must be designated to be the spouse who has been married to the participant for at least one year immediately prior to death or a parent.

APPENDIX C – SUMMARY OF PLAN PROVISIONS

This benefit will be offset by workers' compensation benefits and benefits paid by the System before the date of death.

Line-of-Duty Death Benefit

A pension shall be paid if a hearing examiner determines that a member's death occurred in the actual performance of duty and without willful negligence. The benefit equals a refund of accumulated contributions and interest plus a pension of 100% of the current annual earnable compensation applicable to that office as of the date of death.

This benefit will be offset by workers' compensation benefits.

Optional Retirement Allowances

The benefit will be reduced if a member elects to receive the benefit in one of the following forms:

1. A cash refund annuity providing the lump-sum balance of the reserve at retirement to beneficiary;

2. Joint and Survivor: life annuity with 100% or 50% continuing to beneficiary upon death of the member;

3. Pop-up Joint and Survivor: life annuity with 100% or 50% continuing to beneficiary upon death of the member. If the beneficiary predeceases the member, the member's benefit increases to the pre-reduction amount; or

4. Specific Benefit Option: upon the member's death, the beneficiary will receive either a specific lump sum amount or a specific periodic allowance for life.

Termination of Employment

Members with 12 years of service are vested. For members hired before December 6, 2016 a benefit equal to the Service Retirement Benefit is payable at age 50 if a member does not withdraw his/her contributions. For members hired on or after December 6, 2016 a benefit equal to the Service Retirement Benefit is payable at age 55 if a member does not withdraw his/her contributions.

A member terminating employment may withdraw his/her contributions from the System.

Continued Membership

An elected official, who is a member of this Retirement System, shall have the right at his/her option to continue membership in this Retirement System provided that he/she contributes both City and member contributions.

Member Contributions

Members are required to contribute 5% of salary. However, no contributions shall be made by the member after the member has attained age 60 and has acquired 35 years of service credit in this System.

Member contributions are accumulated at 3.0% interest, per annum effective January 1, 2017.

If a member transfers prior City service (such as ERS service), he/she must pay back the equivalent of such past member contributions.

APPENDIX C – SUMMARY OF PLAN PROVISIONS

<u>Retirement Benefit Increases</u>

For members who joined on or before December 5, 2016, benefits are indexed to the current salaries of elected officials. For members who joined on or after December 6, 2017, increases are the greater of 1.5% and the rates in effect for the Fire & Police Retirement System, with a one year wait period.

Members who retire on or after March 1, 2017 will receive the benefit increase beginning in January of the year following the first June 30 as of which the retiree has received benefit payments for at least 12 consecutive months.

Note: The above is only a summary. The provisions of the law will govern the System.