Anne Arundel County Police Service Retirement Plan

Actuarial Valuation as of January 1, 2023
to Determine the County's Contribution for the
Fiscal Year Ending June 30, 2024

Bolton

Submitted by:

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Bolton
Benefits, Actuarial, Investment & Compensation Consulting

May 1, 2023

Anne Budowski
Personnel Director
Anne Arundel County
2660 Riva Road
Annapolis, MD 21401

Re: Anne Arundel County Police Service Retirement Plan Valuation

Dear Anne:

The following sets forth the actuarial valuation of the Anne Arundel County Police Service Retirement Plan as of January 1, 2023. The actuarial valuation was performed at the request of Anne Arundel County (the County). Section I of the report provides a summary, Section II sets forth our Actuarial Certification, and Section III contains the development of the County's contribution for the 2024 fiscal year. Section IV provides a discussion of risk metrics in accordance with ASOP 51, while sections V through VIII contain a summary of the census and asset data, a ten-year projection of benefit payments, plan provisions, assumptions and actuarial methods. The appendices of the report provide information on plan funding, a glossary of many of the terms used in this report, and a summary of major legislative changes.

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

Respectfully submitted,

Ann. M. Sturner, FSA, EA, FCA, MAAA

Jordan McClane, FSA, EA, FCA, MAAA

Section I. Executive Summary

Background

Bolton Partners, Inc. (Bolton) has prepared the following report that sets forth the actuarial valuation of the Anne Arundel County Police Service Retirement Plan as of January 1, 2023. This report provides the funded status of the plan as of January 1, 2023 as well as the Actuarially Determined Contribution (ADC) for the plan for the fiscal year ending June 30, 2024 (FY2024). Accounting results under Government Accounting Standards Board Statements 67 and 68 are provided in a separate report.

Actuarially Determined Contributions (ADC)

	FY2022	FY2023	FY2024
ADC	$ 33,071,012	$ 32,983,329	$ 38,594,760
Percent of Total Payroll	48.7%	48.4%	54.5%

The above amounts assume the County's contribution will be made monthly throughout the fiscal year. Details of the determination of the County's contribution for FY2024 are shown in Section III of this report.

Key Demographic Elements

	1/1/2022	1/1/2023	% Change
Participant Counts			
Active	680	680	0.0%
In Receipt	791	817	3.3%
DROP	89	78	(12.4%)
Total	1,560	1,575	1.0%

Funding Measures

		1/1/2022	1/1/2023	% Change
1.	Actuarial Accrued Liability	$ 865,499,619	$ 930,901,047	7.6%
2.	Actuarial Value of Assets	$ 657,356,435	$ 681,284,581	3.6%
3.	Plan Funded Ratio (2. / 1.)	76.0%	73.2%	(3.6%)
4.	Market Value of Assets	$ 690,827,184	$ 620,244,928	(10.2%)
5.	Funded Ratio based on Market Value of Assets (4. / 1.)	79.8%	66.6%	(16.5%)

Changes in Contribution Rate

The following table shows the sources of changes in the County's contribution rate.

Description	Contribution Rate
January 1, 2022 Valuation	48.4%
Investment Performance	2.0%
Pay Increases	0.1%
New Entrants/Change in Normal Cost	0.0%
COLA	0.5%
Change in Expenses	0.0%
Discount Rate Change	0.0%
Other Assumption/Method Changes	3.3%
Demographics and Other Changes	0.2%
January 1, 2023 Valuation	54.5%

Experience Analysis

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

- **Plan assets and investment performance** – the net return for the year ended December 31, 2022 after investment expenses was (9.8%) on a market value basis and 4.1% on an actuarial value basis. Investment returns during CY2022 were about $115.6 million lower than assumed. A portion of this loss is reflected in the actuarial value of assets (AVA) in this valuation, and the remaining portions will be reflected in future valuations. The AVA and the return on the AVA also reflect the continued recognition of outstanding net investment gains from prior valuations. As of January 1, 2023, there is a total of $61.0 million in net deferred investment losses that will be reflected in future valuations.
- **Cost of Living Adjustment** – Retiree COLAs effective July 1, 2022 (generally, 4.00% for pre-2/1/1997 accruals and 2.50% for post-1/31/1997 accruals) were greater than the assumed annual increases (3.00% for pre-2/1/1997 accruals and 1.80% for post-1/31/1997 accruals).
- **Payroll changes** – Pay for returning employees, excluding members in DROP, increased approximately 7.7% over the prior year; a larger increase than the 4.8% increase that was expected. Total participant payroll, including payroll for members in DROP, increased by 3.9%, over the prior year; higher than the assumption of 3.0% growth per year.
- **Assumption and method changes** – The funding method and actuarial assumptions were updated pursuant to the recommendations in the Experience Study Report dated November 14, 2022. These updates increased the actuarial accrued liability as of January 1, 2023 by approximately $15.8 million.

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 Section IV. Additional detailed or focused assessment of risks is outside the scope of the actuarial valuation but can be conducted as a separate assignment.

Changes in Methods, Assumptions, and Plan Provisions

There were no changes in plan provisions. However, pursuant to the 2022 Experience Study dated November 14, 2022 and approved by the Board of Trustees, there were several changes to assumptions and methods. These changes are described in detail in Section VIII.

Sources of Information

The January 1, 2023 participant data and market value of assets were provided by or at the direction of Anne Arundel County. While we have reviewed this data for consistency and completeness, we have not audited this data.

Impact of COVID-19

As discussed in the experience study, the assumptions used to determine pension plan costs are based on a long-term future outlook. Because the long-term net impact of COVID-19 is not possible to estimate at this time, the mortality tables used in this valuation are those recommended in the most recent experience study. The tables may be revised before the next experience study.

Section II. Actuarial Certification

This actuarial valuation sets forth our calculation of an estimate of the liabilities of the Anne Arundel County Police Service Retirement Plan (the plan), together with a comparison of these liabilities with the value of the plan assets, as submitted by Anne Arundel County (the County). This liability calculation and comparison with assets are applicable for the valuation date only. The future is uncertain, and the plan may become better funded or more poorly funded in the future. This valuation does not provide any guarantee that the plan will be able to provide the promised benefits in the future.

This report was prepared for the internal use of the County 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 2024 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 County. 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 County is solely responsible for the validity and completeness of this information.

The County 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 County is solely responsible for communicating to Bolton any changes required thereto.

The County 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 County.

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 County 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 County. 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 County to make contributions at a future time rather than an earlier time. The County 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 County should notify Bolton promptly after receipt of this report if the County 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 County unless the County 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.

Ann. M. Sturner, FSA, EA, FCA, MAAA

Jordan McClane, FSA, EA, FCA, MAAA

Section III. Determination of Contributions

Derivation of Liabilities

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

Participants	1/1/2022	1/1/2023
1. Participants		
a. Active (excluding DROP)	680	680
b. Active Enrolled in DROP	89	78
c. Retirees	533	549
d. Beneficiaries	98	107
e. Disabled Participants	160	161
f. Inactive with Deferred	-	-
g. Total	1,560	1,575
2. Active Payroll	$ 68,149,222	$ 70,810,497

Actuarial Accrued Liability	1/1/2022	1/1/2023
1. Active Participants	$ 333,263,889	$ 373,596,945
2. In-Pay Participants		
a. Retirees	375,837,134	391,821,324
b. Beneficiaries	44,949,558	46,943,716
c. Disabled Participants	111,449,038	118,539,062
d. Total In-Pay Participants	$ 532,235,730	$ 557,304,102
3. Inactive with Deferred Benefits		
a. Terminated Vested	-	-
b. Refunds of Contributions Owed	-	-
c. Total Inactive with Deferred Benefits	$ -	$ -
4. Total Actuarial Accrued Liability (1. + 2.d. + 3.c)	$ 865,499,619	$ 930,901,047
5. Actuarial Value of Assets (AVA)	$ 657,356,435	$ 681,284,581
6. Unfunded Liability Based on AVA (4. - 5.)	$ 208,143,184	$ 249,616,466
7. Funded Ratio Based on AVA (5. / 4.)	76.0%	73.2%
8. Market Value of Assets (MVA)	$ 690,737,184	$ 620,244,928
9. Unfunded Liability Based on MVA (4. - 8.)	$ 174,762,435	$ 310,656,119
10. Funded Ratio Based on MVA (8. / 4.)	79.8%	66.6%

Normal Cost

The normal cost and the projected normal cost are shown below.

Normal Cost		1/1/2022		1/1/2023
1. Total Benefit Normal Cost	$	19,422,667	$	21,446,116
2. Employee Normal Cost		3,679,534		4,007,751
3. County Benefit Normal Cost (1. - 2.)	$	15,743,133	$	17,438,365
4. Estimated Expenses		493,000		540,000
5. County Benefit Normal Cost with Expenses	$	16,236,133	$	17,978,365
6. Projected Normal Cost with Expenses as of July 1 (5. x 1.03^0.5)	$	16,477,875	$	18,246,048

Projection of Unfunded Liability

The projection of the unfunded actuarial liability from January 1, 2023 to July 1, 2023 is shown below.

Projection of Unfunded Liability		1/1/2023
1. Unfunded Liability as of January 1, 2023	$	249,616,466
2. Expected Employer Contributions 01/01/2023-07/01/2023		16,491,665
3. Expected Employee Contributions 01/01/2023-07/01/2023		2,200,748
4. Expected Expenses 01/01/2023-07/01/2023		270,000
5. Total Normal Cost 01/01/2023-07/01/2023		10,723,058
6. Interest at 7.00%		8,643,514
7. Projected Unfunded Liability as of July 1, 2023 (1. - 2. - 3. + 4. + 5. + 6.)	$	250,560,625

Actuarially Determined Contribution

Below is the derivation of the actuarially determined contribution.

Actuarially Determined Contribution		FYE2024
1. Employer Normal Cost	$	18,246,048
2. Amortization Amount	$	19,064,915
3. Actuarially Determined Contribution (ADC) (1. + 2.)	$	37,310,963
4. Interest for Timing of Payment	$	1,283,797
5. ADC Adjusted for Timing of Payment (3. + 4.)	$	38,594,760
6. Participant Payroll as of January 1, 2023	$	70,810,497
7. Employer Contribution as a Percentage of Participant Payroll		54.5%

Actuarial Gain/Loss

Development of actuarial (gain)/loss for January 1, 2022 to January 1, 2023 is show below.

		Liability	Actuarial Value of Assets	UAAL
1.	Beginning of year total	$ 865,499,619	$ 657,356,435	$ 208,143,184
2.	Normal cost (net of admin exp)	19,422,667		19,422,667
3.	Administration expense		(523,105)	523,105
4.	Benefit payments	(44,445,786)	(44,445,786)	-
5.	Contributions		41,805,938	(41,805,938)
6.	Interest	60,388,958	45,904,247	14,484,711
7.	Expected end of year total	$ 900,865,458	$ 700,097,729	$ 200,767,729
8.	Impact of plan changes	-	-	-
9.	Impact of assumption changes	15,808,455	-	15,808,455
10.	Actual end of year	930,901,047	681,284,581	249,616,466
11.	(Gain)/Loss	$ 14,227,134	$ 18,813,148	$ 33,040,282

Schedule of Amortization Bases

Below is a Schedule of the Amortization Bases as of July 1, 2023.

Description	Date Established	Years Remaining	Outstanding Balance	Amortization Amount
Unfunded Accrued Liability	1/1/2004	11	$ 13,486,809	$ 1,472,658
Actuarial (Gain)/Loss	1/1/2005	12	(5,300,303)	(539,978)
Actuarial (Gain)/Loss	1/1/2006	13	7,172,055	686,397
Actuarial (Gain)/Loss	1/1/2007	14	(4,873,868)	(440,746)
Actuarial (Gain)/Loss	1/1/2008	15	4,178,039	358,789
Assumption Change	1/1/2008	15	432,893	37,175
Actuarial (Gain)/Loss	1/1/2009	16	41,052,846	3,362,365
Actuarial (Gain)/Loss	1/1/2010	17	(966,680)	(75,800)
Asset Method Change	1/1/2011	18	25,077,984	1,888,924
Actuarial (Gain)/Loss	1/1/2011	18	(14,488,888)	(1,091,332)
Actuarial (Gain)/Loss	1/1/2012	19	30,829,236	2,237,242
Assumption Change	1/1/2013	20	5,134,569	359,945
Actuarial (Gain)/Loss	1/1/2013	20	34,932,861	2,448,872
Assumption Change	1/1/2014	11	5,674,192	619,579
Actuarial (Gain)/Loss	1/1/2014	11	(16,028,851)	(1,750,230)
Actuarial (Gain)/Loss	1/1/2015	12	5,761,907	587,004
Actuarial (Gain)/Loss	1/1/2016	13	3,268,952	312,853
Actuarial (Gain)/Loss	1/1/2017	14	(1,465,981)	(132,569)
Actuarial (Gain)/Loss	1/1/2018	15	7,509,399	644,870
Actuarial (Gain)/Loss	1/1/2019	16	8,539,840	699,441
Assumption Changes	1/1/2019	16	1,293,156	105,914
Method Change	7/1/2019	16	329,001	26,946
Actuarial (Gain)/Loss	7/1/2020	17	2,565,453	201,163
Actuarial (Gain)/Loss	7/1/2021	18	12,049,069	907,560
Assumption Change	7/1/2021	18	45,714,143	3,443,281
Actuarial (Gain)/Loss	7/1/2022	19	(6,956,211)	(504,804)
Actuarial (Gain)/Loss	7/1/2023	20	28,665,861	2,009,541
Assumption Change	7/1/2023	20	16,973,142	1,189,855
Totals			$ 250,560,625	$ 19,064,915

Bases are amortized as an equal percent of payroll each year with total payroll expected to increase 3.0% annually. The July 1, 2023 amortization payment of $19,064,915 is sufficient to cover the interest on the plan's unfunded liability. Based on the the total payment shown above, the total amount will be fully amortized in approximately 17.7 years.

Section IV. Risk Discussion

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.

Actuarial Standard of Practice No. 51 *Assessment and Disclosure of Risk Associated with Measuring Pension Obligations and Determining Pension Plan Contributions* requires actuaries to provide information so that users of the report can better understand the potential for future results to vary from the results presented in this report and identify risks on the plan's future financial condition. This standard does not require the assessment to be based on numerical calculations. In some cases, a more in-depth review of plan risk is warranted.

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. The Trustees are well aware of this risk. This valuation reflects the smoothing of asset returns, which reduces the risk of wide year-by-year contribution changes due to investment return fluctuations but does not ultimately reduce the risk inherent in a defined benefit plan.
- Contribution Risk: Most commonly this is associated with the potential that actual future contributions are not made in accordance with the plan's actuarially based funding policy. When this occurs, it can create negative long-term problems.
- 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 asset values are not matched by changes in the value of liabilities.
- Cash Flow Risks: The potential that contributions coming into the plan will not cover benefit payments. While common in well-funded plans, this still requires the use of interest, dividends or principal to cover benefit payments. When assets need to be sold (or more cash held) it can be an issue. Poorly funded plans with DROP lump sum payments can magnify the issue.

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.

There are several plan maturity measures that can be significant to understanding the risks associated with the plan. 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.

Risk Measure	January 1, 2021	January 1, 2022	January 1, 2023
Inactive Liability as a Percent of Total Liability	61%	61%	60%
Assets to Payroll	9.0	10.1	8.8
Liabilities to Payroll	12.1	12.7	13.1
Benefit Payments to Contributions	1.3	1.2	1.1

The Assets to Payroll ratio, also called 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 AVR of 8.8 indicates that a:

- 1% asset gain/loss can be related to about 8.8% of the annual payroll.
- The County's contribution changes by about 0.6% of payroll for each 1.0% gain or loss on the market assets (the plan currently amortizes asset gains/losses over a period of 20 years)

The Liabilities to Payroll ratio, also call 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 LVR of 13.1 indicates that a:

- 1% liability gain/loss can be related to about 13.1% of the annual payroll.
- The County's contribution changes by about 0.9% of payroll for each 1.0% gain or loss on the AAL (the plan currently amortizes liability gains/losses over a period of 20 years).

As the 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. The common evolution of a pension plan is to become more mature over time. 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. As a result, the change in the metrics over time can be as important as the nominal size of the metric itself.

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. 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.

Section V. Assets

Reconciliation of Assets

Below is a reconciliation of assets (unaudited) from January 1, 2021 through December 31, 2022.

		1/1/2021 to 12/31/2021	1/1/2022 to 12/31/2022
1.	Beginning of Year Assets		
	a. Before Adjustment	$ 611,188,943	$ 687,590,575
	b. Adjustment	-	(90,000)
	c. After Adjustment	611,188,943	687,500,575
2.	Receipts		
	a. Employer Contributions	$ 29,109,983	$ 37,529,282
	b. Employee Contributions	4,267,306	4,257,117
	c. Investment Income & Dividends	12,758,447	10,609,364
	d. Realized and Unrealized Gain/(Loss)	65,729,096	(80,095,482)
	e. Stock Loan Income	50,289	54,149
	f. Other	7,178,910	4,908,129
	g. Total Receipts	$ 119,094,031	$ (22,737,441)
3.	Deductions		
	a. Benefit Payments	$ 39,554,994	$ 44,445,786
	b. Administrative Expenses	509,359	523,105
	c. Investment Expenses	$ 2,628,047	$ 2,805,463
	d. Total Disbursements	$ 42,692,399	$ 47,774,354
4.	Net Increase (2.g. - 3.d.)	$ 76,401,632	$ (70,511,795)
5.	Preliminary Ending Value (1.c. + 4.)	$ 687,590,575	$ 616,988,780
6.	Contribution Receivable	$ 3,236,609	$ 3,256,148
7.	End of Year Assets	$ 690,827,184	$ 620,244,928
8.	Rate of Return Net of Investment Fees (2I / [A + B - I] Method)	13.6%	-9.8%

Determination of Investment Gain/(Loss) for Assets[1]

Market Value of Assets	
As of December 31, 2021	$ 690,737,184

Item (1)	Amount (2)	Weight for Timing (3)	Weighted Amount (2) × (3)
Contributions	$ 41,805,938	50%	$ 20,902,969
Benefits Paid	(44,445,786)	50%	(22,222,893)
Expenses	(523,105)	50%	(261,553)
Total			(1,581,477)
Market Value plus Total Weighted Amount			689,155,707
Assumed Rate of Return for the Year			7.00%
Expected Return			$ 48,240,900

Actual Return		
1.	Market Value as of December 31, 2021	$ 690,737,184
2.	Contributions	41,805,938
3.	Benefits and Administrative Expenses Paid	(44,968,891)
4.	Market Value as of December 31, 2022	620,244,928
5.	Actual Return [(4) - (1) - (2) - (3)]	$ (67,329,303)
6.	Calculation Base (1) + 50% × [(2) + (3)]	689,155,708
7.	Market Value Return as a Percentage [(5) / (6)]	-9.8%

Investment Gain/(Loss)	
Actual Return minus Expected Return	$ (115,570,203)

[1] The market value as of December 31, 2021 shown here already includes the $90,000 beginning-of-year adjustment, and thus, is $90,000 lower than the value displayed on the previous page.

Development of Actuarial Value of Assets

The actuarial asset value as of January 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.

Market Value of Assets		
As of December 31, 2022	$	620,244,928

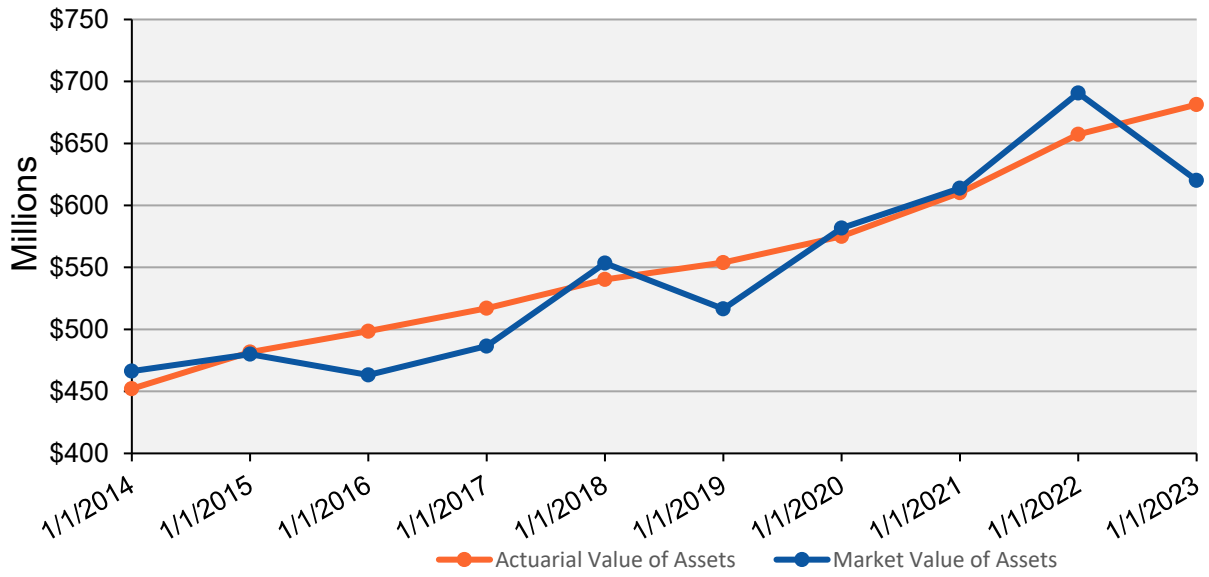
Plan Year End (1)	Investment Gain/(Loss) (2)	Percent Deferred (4)		Deferred Gain/(Loss) (2) × (4)
12/31/2022	(115,570,203)	80%	$	(92,456,162)
12/31/2021	40,332,793	60%		24,199,676
12/31/2020	(807,733)	40%		(323,093)
12/31/2019	37,699,630	20%		7,539,926
Total Deferred			$	(61,039,653)

Preliminary Actuarial Value of Assets		
As of January 1, 2023 (Market Value of Assets less total Deferred Gain/(Loss))	$	681,284,581

Final Actuarial Value of Assets		
Minimum Actuarial Value of Assets (50% of MVA)	$	310,122,464
Maximum Actuarial Value of Assets (150% of MVA)		930,367,392
As a Percentage of Market Value		109.8%
Actuarial Value of Assets as of January 1, 2023	$	681,284,581

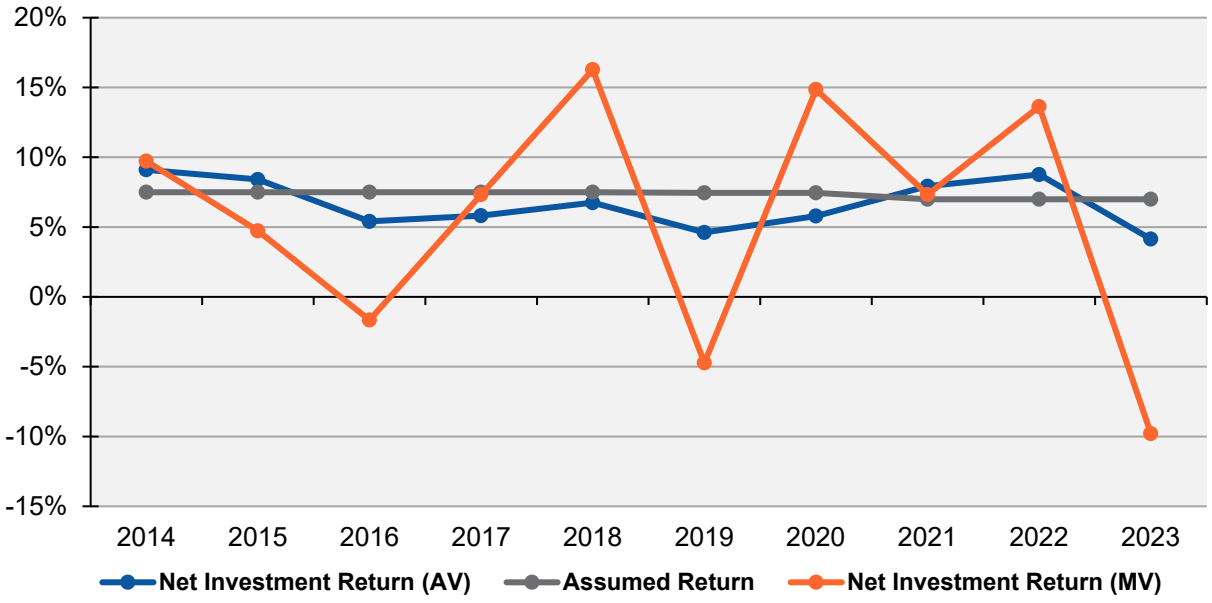
Calculation of Actuarial Return		
1. Actuarial Value as of January 1, 2022	$	657,356,435
2. Contributions		41,805,938
3. Benefits and Administrative Expenses Paid		(44,968,891)
4. Actuarial Value as of January 1, 2023		681,284,581
5. Actuarial Return [(4) - (1) - (2) - (3)]		27,091,099
6. Calculation Base (1) + 50% × [(2) + (3)]		655,774,958
7. Actuarial Return as a Percentage [(5) / (6)]		4.1%

10-Year: Market Value vs. Actuarial Value of Assets



10-Year: Market Value vs. Actuarial Value Rates of Return

The assumed long-term rate of return 7.00% considers past experience, the Trustees' asset allocation policy and future expectations.

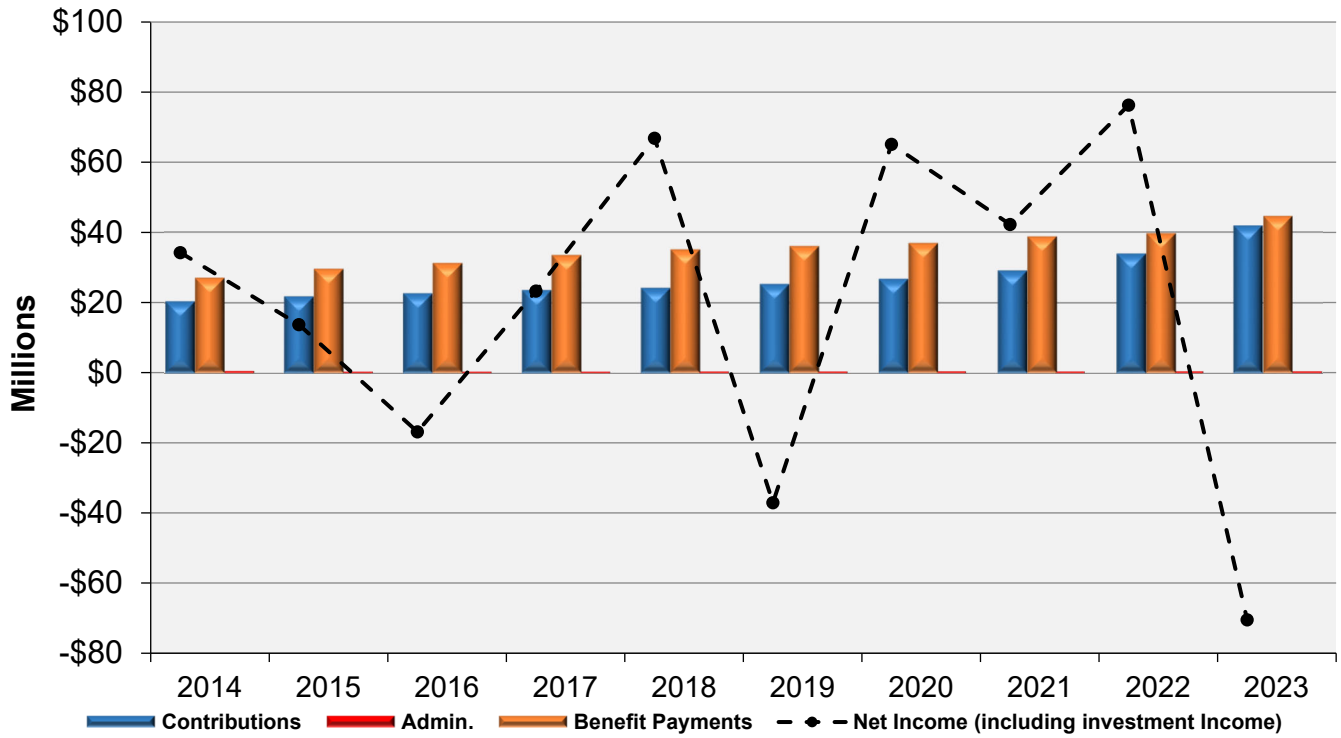


Average Rates of Return	Market Value	Actuarial Value
Most recent year return	(9.8%)	4.1%
Most recent five-year average return	3.8%	6.2%
Most recent ten-year average return	5.4%	6.7%

Summary of Investment Returns & Historical Cash Flows

Plan Year Ending	Market Value Net Investment Return Amount	Market Value Net Investment Return Percent	Total Contributions	Benefit Payments	Admin. Expenses	Net Income
2014	$ 41,350,228	9.7%	$ 20,425,629	$ 26,941,861	583,020	$ 34,250,976
2015	21,798,814	4.7%	21,819,525	29,507,190	417,781	13,693,367
2016	(8,001,369)	(1.7%)	22,664,290	31,134,325	423,135	(16,894,539)
2017	33,473,596	7.3%	23,569,347	33,357,089	417,385	23,268,469
2018	78,083,595	16.3%	24,181,140	34,950,315	445,097	66,869,323
2019	(25,971,068)	(4.7%)	25,305,731	35,937,699	464,176	(37,067,212)
2020	75,656,166	14.9%	26,763,091	36,790,519	530,188	65,098,549
2021	52,277,044	7.3%	29,081,501	38,637,477	476,545	42,244,523
2022	82,521,893	13.6%	33,854,092	39,554,994	509,359	76,311,632
2023	(67,329,303)	(9.8%)	41,805,938	44,445,786	523,105	(70,492,256)
Total	$ 283,859,595		$ 269,470,283	$ 351,257,256	$ 4,789,791	$ 197,282,831

Comparison of Net Income versus Historical Cash Flows



Benefit Payment Projection

The following table shows the estimated benefit payments, including DROP lump sum payments and DROP annuity payments after DROP exit, from January 1, 2023 through December 31, 2032 based on existing members of the plan.

Calendar Year	Benefits
2023	$ 53,038,787
2024	52,547,930
2025	57,220,443
2026	53,303,332
2027	58,288,508
2028	60,329,202
2029	65,054,777
2030	66,538,344
2031	68,920,797
2032	71,460,697

Section VI. Participant Information

Participant Summary

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

			1/1/2022		1/1/2023	% Change
1.	Actives, not in DROP					
	a. Number		680		680	0.0%
	b. Average Age		36.1		36.8	1.8%
	c. Average Service		9.7		10.2	5.7%
	d. Total Compensation	$	57,129,262	$	60,710,400	6.3%
	e. Average Salary	$	84,014	$	89,280	6.3%
2.	Actives, in DROP					
	a. Number		89		78	(12.4%)
	b. Average Age		53.8		54.0	0.4%
	c. Average Service		27.5		27.7	0.7%
	d. Total Compensation	$	11,019,959	$	10,100,195	(8.3%)
	e. Average Salary	$	123,820	$	129,490	4.6%
3.	Service Retirements, Disabled, and Beneficiaries					
	a. Number		791		817	3.3%
	b. Average Age		63.9		64.6	1.1%
	c. Total Annual Benefit	$	37,555,441	$	40,295,938	7.3%
	d. Average Annual Benefits	$	47,478	$	49,322	3.9%

B

Active Age/Service Distribution Including Compensation

Shown below is the distribution of active participants, excluding those currently enrolled in DROP, based on age and service. The compensation shown is the average rate of pay as of January 1, 2023.

Age	Years of Service as of 01/01/2023										
	Under 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Up	Total
Under 25	8	27	-	-	-	-	-	-	-	-	35
	58,368	62,714	-	-	-	-	-	-	-	-	61,721
25 to 29	13	96	29	-	-	-	-	-	-	-	138
	61,302	65,635	76,535	-	-	-	-	-	-	-	67,518
30 to 34	4	47	72	26	-	-	-	-	-	-	149
	60,232	67,373	82,363	90,395	-	-	-	-	-	-	78,442
35 to 39	2	20	28	49	44	-	-	-	-	-	143
	62,686	66,918	83,320	96,391	110,157	-	-	-	-	-	93,474
40 to 44	1	10	9	14	45	12	-	-	-	-	91
	57,778	66,895	84,068	105,854	116,499	124,905	-	-	-	-	106,666
45 to 49	-	6	4	4	16	32	3	-	-	-	65
	-	75,563	84,564	94,502	119,091	127,454	124,258	-	-	-	115,791
50 to 54	1	2	1	3	7	14	13	2	-	-	43
	70,298	73,026	91,173	106,669	117,932	127,076	126,377	129,786	-	-	119,409
55 to 59	1	2	-	2	1	2	3	2	-	-	13
	70,298	72,955	-	101,500	112,659	114,912	124,258	136,795	-	-	108,312
60 to 64	-	-	-	1	1	-	-	-	-	-	2
	-	-	-	114,912	114,912	-	-	-	-	-	114,912
65 to 69	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
70 & up	-	-	-	-	-	-	-	-	-	1	1
	-	-	-	-	-	-	-	-	-	172,515	172,515
Total	30	210	143	99	114	60	19	4	-	1	680
	60,951	66,255	81,599	96,680	114,456	126,438	125,708	133,291	-	172,515	89,280

Averages	
Age	36.8
Service	10.2

Participant Reconciliation

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

	Active Participants	DROP	Inactive Participants		Total
			With Deferred Benefits	Receiving Benefits	
Participants in Last Valuation	680	89	0	791	1,560
Retired	(6)	(14)	0	20	0
Disabled	(3)	0	0	3	0
Vested Termination	0	0	0	0	0
Nonvested Termination/ Lump Sum Paid	(20)	0	0	0	(20)
Deceased/Payment Expired	0	0	0	(14)	(14)
Beneficiary	0	0	0	13	13
New QDRO	0	0	0	2	2
Transfer In From:					
Fire Plan	0	0	0	0	0
Employee Plan	0	0	0	0	0
Detention Plan	0	0	0	0	0
Transfer Out To:					
Fire Plan	0	0	0	0	0
Employee Plan	0	0	0	0	0
Detention Plan	0	0	0	0	0
Rehired	1	0	0	0	1
New Participants	31	0	0	0	31
Entered DROP	(4)	4	0	0	0
Adjustments	1	(1)	0	2	2
Participants in This Valuation	680	78	0	817	1,575

Section VII. Summary of Plan Provisions

Plan Year
January 1 – December 31.

Compensation
Regular annual rate of pay, exclusive of extra compensation of any kind such as overtime pay, bonuses, and commissions.

Final Average Basic Pay
The average of the highest 3 years of annual basic pay.

Employee Contributions
7.25% of compensation for all employees.

Employee Contributions Benefit
The sum of the employee contributions made by the Participant and interest, including contributions made to other plans and transferred to this plan, as allowed by plan provisions.

Years of Service
Total number of years and nearest months.

Normal Retirement
Eligibility
For those hired prior to February 25, 2002: 20 years of service or age 50. For those hired on or after February 25, 2002: 20 years of service, or age 50 with 5 years of service.

Benefit
2 ½% of final average basic pay for each year of service up to 20 years plus 2% of final average basic pay for each year of service after 20 years (maximum 70% plus 2% times unused disability credit and pre-employment military service credit).

DROP
Allows accumulation of pension after 20 years of County service. DROP period must be between three and six years (with the sixth year requiring approval for certain job classifications). Interest shall be credited to the DROP account on a monthly basis at an interest rate of 0.34745%, which provides an effective annual yield of 4.25%. Employee contributions cease upon entry into DROP.

Termination Prior to Retirement
At less than 20 years of service, return of employee contributions with 3% interest.

Disability Benefit
Must be totally and permanently disabled (except as the result of activities specified in the County code) regardless of length of service.

Line of Duty Disability
The greater of the accrued benefit or 66 2/3% of final average basic pay, payable immediately, unreduced.

Non-Line of Duty Disability
The greater of the accrued benefit or 20% of final average basic pay, payable immediately, unreduced.

Pre-Retirement Death Benefits
Pre-Retirement Death Benefit (Line of duty)
Married
Greater of accrued benefit or 66 2/3% of final average basic pay, payable immediately, unreduced.

Not Married
Other Pre-Retirement Death Benefit

Pre-Retirement Death Benefit (Non-line of duty)
Married
Accrued benefit, payable immediately, unreduced.

Not Married
Other Pre-Retirement Death Benefit

Other Pre-Retirement Death Benefits
Return of employee contributions with 3% interest, plus, if the member has one or more years of credited service, a lump sum equal to 50% of final average basic pay.

Normal Form of Benefit
For single participants, monthly life annuity with payments guaranteed for 5 years.

For married participants, unreduced 100% Joint & Survivor Annuity with payments guaranteed for 5 years.

The marital status of a participant at the date of death dictates the form of benefit payable.

Post-Retirement Cost of Living Increases

For Benefits Accrued as of 1/31/1997
Retiree benefits are adjusted each year. The revised benefit amount is the lesser of:

- Base benefit multiplied by ratio of current 12 month average CPI to 12 month average CPI at retirement.
- Prior year benefit increased by 4%.

For Benefits Accrued After 1/31/1997
Retiree benefits are adjusted each year. The revised benefit amount is the lesser of:

- Prior year benefit multiplied by 60% of the increase in the current March CPI from March CPI for prior year, or
- Prior year benefit increased by 2.5%.

Changes Since Prior Valuation
None.

Section VIII. Actuarial Methods and Assumptions

Funding Method

Entry Age Normal Funding Method. A method under which the actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis over the earnings of the individual between entry age and assumed exit (or DROP entry, if applicable and earlier).

Amortization Policy

The unfunded actuarial accrued liability (UAAL) is amortized as a level percentage of payroll over the following closed periods:

- Gains and losses over 20 years
- Assumption changes over 20 years
- Active plan amendments over the lesser of 15 years and the average expected future service period for participants impacted by the plan amendment
- Inactive plan amendments over the lesser of 10 years and the average life expectancy for participants impacted by the plan amendment
- Early retirement incentives over 5 years or less
- Surplus, when reached, over 30 years (open)

Different amortization periods were utilized prior to 1/1/2014.

Amortization payments increase 3.0% per year.

Asset Method

Asset smoothing method which spreads the investment gains or losses in excess of the assumed return over a five-year period. The Actuarial Value of Assets can be no less than 50% of market value of assets and no more than 150% of market value of assets.

Discount Rate and Investment Rate of Return

7.00% compounded annually, net of investment expenses.

Inflation

3.0%, compounded annually.

Post-Retirement COLA Increases

Benefits accrued before Bill 88-96 are assumed to increase by 3.0% of the original benefit each year from retirement.

Benefits accrued after Bill 88-96 are assumed to increase by 1.8% of the current benefit each year from retirement.

Salary Increases

Samples rates are:

Years of Service	Rate
0	7.25%
5	7.00%
10	6.50%
15	6.00%
20	5.00%
>=25	4.00%

Payroll Growth

3.0%, compounded annually.

Mortality

Healthy Actives, Terminated Vested Participants, and Retirees

Pub-2010 Safety Employee and Healthy Retiree Amount-Weighted Mortality Tables, with 2010 base rates set forward 2 years, and projected generationally from the 2010 base year with improvement scale MP-2021.

Disabled Retirees

Pub-2010 Safety Disabled Retiree Amount-Weighted Mortality Tables, with 2010 base rates set forward 2 years, and projected generationally from the 2010 base year with improvement scale MP-2021.

Contingent/Beneficiaries

Pub-2010 Contingent Survivor Amount-Weighted Mortality Tables, with 2010 base rates set forward 2 years, and projected generationally from the 2010 base year with improvement scale MP-2021.

100% of pre-retirement deaths are assumed to be non-duty related.

The mortality improvement scale is the scale most recently published by the Society of Actuaries as of the valuation date and may change in future actuarial valuations.

Retirement (Reflects DROP Entry)

	Years of Service						
Age	5-20	20	21-22	23-24	25	26-31	32+
<50	N/A	35%	10%	25%	35%	30%	100%
51-59	10%	35%	10%	25%	35%	30%	100%
60+	100%	100%	100%	100%	100%	100%	100%

Members Participating in DROP on the Valuation Date

Members are assumed to exit DROP upon the later of (1) four years from their DROP entry date and (2) the valuation date.

DROP Election Rate

75% of eligible participants who are under age 57 and have less than 30 years of service are assumed to elect to enter DROP.

Termination of Employment

Service	Rate	Service	Rate
0	10.00%	8	2.00%
1	6.00%	9	1.00%
2	6.00%	10	1.00%
3	6.00%	11	0.50%
4	6.00%	12	0.50%
5	4.00%	13	0.50%
6	4.00%	14	0.50%
7	3.00%	15+	0.00%

Disability

Sample rates are:

Age	Rate
30	0.3366%
35	0.4979%
40	1.0274%
45	1.7181%
50	2.5281%
55	0.0000%

75% of disablements are assumed to be duty-related.

Marriage

It is assumed that 70% of employees and 70% of current retired and disabled members are married. Husbands are assumed to be 4 years older than wives.

Special service credit assumptions

Disability Leave

Active liabilities (which depend on credited service) are loaded by 1.75% to account for future crediting of disability service.

Military Service

Active liabilities (which depend on credited service) are loaded by 3.25% to account for future crediting of military service.

Transferred Service

Transferred service is included in the calculation of a participant's benefit starting at the time the service is originally transferred to the County.

Administrative Expenses

A load for estimated administrative expenses is included in the Actuarially Determined Contribution. Expenses are assumed to be the average of the administrative expenses for the prior two years increased with the assumed payroll growth, with the resulting average rounded to the nearest $1,000.

CIGNA Benefit

Our calculations and the data exhibits reflect that some benefits have already been purchased.

Rationale for Assumptions

The following assumptions are deemed to have a significant effect on the calculations and were selected by the County based on the most recent Experience Study dated November 14, 2022.

- Inflation
- Salary increases
- Payroll growth
- Mortality
- Retirement
- Disability
- Termination of employment
- Marriage

The discount rate/investment rate of return is reviewed at least once annually following the same procedures as outlined in the Experience Study.

Anything not specifically noted is deemed to be not significant.

The various actuarial assumptions and methods which have been used are, in our opinion, appropriate for the purposes of this report.

Changes Since Prior Valuation

Pursuant to the most recent Experience Study dated November 14, 2022, the following methods were changed:

- Funding method: The funding method was changed from Projected Unit Credit to Entry Age Normal.
- Amortization method: Active plan amendments are amortized over the lesser of average future service and 15 years. Previously, they were amortized over the average future service. Inactive plan amendments are now amortized over the lesser of average life expectancy and 10 years. Previously, this was not defined.

Pursuant to the most recent Experience Study dated November 14, 2022, the following assumptions were changed:

- Salary increases
- Base mortality and mortality improvement
- Retirement rates, termination rates, and disability rates
- Percentage of married employees

Appendix 1

Summary of Funding Progress

Valuation Date	(1) Actuarial Value of Assets	(2) Actuarial Accrued Liability	(3) Percentage Funded (1) / (2)	(4) Unfunded Actuarial Accrued Liability (2) - (1)	(5) Annual Covered Payroll	(6) Unfunded Actuarial Accrued Liability as a Percentage of Covered Payroll (4) / (5)
1/1/2013	$420,675,703	$555,292,097	75.8%	$134,616,394	$40,521,944	332.2%
1/1/2014	$452,075,806	$576,387,838	78.4%	$124,312,032	$41,714,302	298.0%
1/1/2015	$481,633,710	$613,617,013	78.5%	$131,983,303	$48,261,635	273.5%
1/1/2016	$498,491,072	$635,017,447	78.5%	$136,526,375	$48,116,765	283.7%
1/1/2017	$517,010,262	$652,697,719	79.2%	$135,687,457	$50,560,385	268.4%
1/1/2018	$540,292,184	$684,386,917	78.9%	$144,094,733	$51,758,654	278.4%
1/1/2019	$553,866,524	$708,370,001	78.2%	$154,503,477	$55,101,812	280.4%
1/1/2020	$575,083,049	$731,651,009	78.6%	$156,567,960	$61,345,095	255.2%
1/1/2021	$610,249,155	$823,096,352	74.1%	$212,847,197	$67,888,039	313.5%
1/1/2022	$657,356,435	$865,499,619	76.0%	$208,143,184	$68,149,222	305.4%
1/1/2023	$681,284,581	$930,901,047	73.2%	$249,616,466	$70,810,497	352.5%

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 Anne Arundel County's progress made in accumulating sufficient assets to pay benefits when due. Generally, the smaller this percentage, the stronger the plan.

Appendix 2 – 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.

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).

Appendix 3 – Summary of Major Legislative Changes

County Council Bill No. 48-89
Effective 9/13/1989.

The previously combined Police and Fire plan was separated into distinct plans for each group. The reduction for retirement prior to age 50 was changed to 0.2% per month from 0.3% per month.

County Council Bill No. 34-92
Effective 6/1/1992 through 8/31/1992.

Participants age 50 or with at least 20 years of service could elect to retire with an additional pension equal to 1/12 of 2.5% of final earnings for the first 20 years of service, plus 1/12 of 2% of final earnings for each additional year of service. The additional amount could be taken as a pension increase, a lump sum, or as a temporary supplement to age 62. Appropriate actuarial adjustments apply.

County Council Bill No. 66-92
Effective 7/2/1992.

The plan was amended to allow normal, unreduced retirement after 20 years of service. Employee contributions were increased to 6% from 5%. Participants under age 50 were not allowed to retire and receive retirement incentives (under Bill No. 34-92) in addition to unreduced retirement. They could either retire early with the incentives, or normally without the incentives.

State House Bill No. 687
Effective 7/1/1990.

County employees were given the opportunity to apply for credit under the County's plan for previous service with the State of Maryland (or a political subdivision of the State).

County Council Bill 88-96
Effective 12/4/1996.

The previous method of calculating cost of living increases will only apply to benefits accrued as of 1/31/1997. The cost of living increase for future benefits is a compound increase equal to 60% of the annual change in the CPI, not to exceed 2.5%. Employees hired, or rehired, on or after 12/4/1996 will be Tier Two employees and will have different benefits than current employees.

County Council Bill No. 80-00/ Recodification
Effective 2/25/2002.

Allows a benefit based on disability leave service and pre-plan military service to be paid over the 70% cap. Normal Retirement was changed to the earlier of 20 years of service or age 50 with 5 years of service. Elimination of Tier 2 benefits implemented a Deferred Retirement Option Program (DROP), a voluntary program that provides an alternative way to earn and receive retirement benefits.

County Council Bill 66-05
Effective 10/10/2005.

Reduced the contribution percentage for Category II participants from 6% to 5%.

County Council Bill 58-07
Effective 10/11/2007.

Reduced the contribution percentage for Category I participants from 6% to 5%.

County Council Bill 74-09
Effective 12/11/2009.

For non-represented members, FY2010 annual pay shall be determined by increasing FY2009 annual pay by an assumed 3% for determining the average basic pay. Clarified the limits on those entering DROP. The effective annual interest rate for the DROP account changed from 8% to 4.25% for those entering DROP on or after July 1, 2009.

County Council Bill 6-10
Effective 4/18/2010.

Provides for a disability benefit for those participants who are totally and permanently disabled as a result of qualified military service.

County Council Bill 41-10
Effective 7/1/2010.

Increased the contribution rate for Police Officers, Police Officer First Class, Police Corporals, and Police Sergeants to 7.25%.

County Council Bill No. 30-12
Effective 2/1/2013.

All participants except for those in the Police Lieutenant classification shall contribute 7.25% of his or her annual basic pay in each calendar year or portion of a calendar year while an active participant is in the plan.

County Council Bill No. 67-12
Effective 2/1/2013.

Participants in the Police Lieutenant classification shall contribute 7.25% of his or her annual basic pay in each calendar year or portion of a calendar year while an active participant in the plan.

County Council Bill No. 56-16
Effective 7/1/2016.

Allows for interest to be credited to a DROP member's account in the sixth year of DROP participation. Requires Appointing Authority approval for DROP participation in 6th year for the following classifications: Police Sergeant, Police Lieutenant, Police Captain, Police Major, Deputy Chief or Police Chief.

County Council Bill No. 78-17
Effective 7/1/2017.

Eliminates the reduction in benefit for DROP retirees if they are reemployed in any capacity that meets the exceptions set forth in 5-1-203(c)(1). Also adds an exception under 5-1-203(c) for any retirees (including DROP participants) who are reemployed into a grant funded contractual position under 802(a)(17) of the Charter.

County Council Bill No. 55-20
Effective 11/09/2020.

The legislation permits Police Lieutenants and Sergeants to participate in the sixth year of DROP without requiring Appointing Authority approval.

County Council Bill No. 70-20
Effective 11/22/2020.

Each of the pension plans provide pension benefits for an employee who is or becomes totally and permanently disabled and meets certain criteria. To be eligible for a disability pension, the plan requires that the disability prevent the participant from performing the duties of the participant's regular duties. The purpose of the bill is to eliminate the participant's ability to perform any other assignment within their Department as a disqualifying factor for a service connected disability.

County Council Bill No. 100-21
Effective 02/05/2022.

Clarified that the exception to the reduction in pension benefit for rehired classified employees who are reemployed in a contractual position pursuant to § 802(a)(14) of the County Charter is limited to the first 1500 hours per calendar year.

County Council Bill No. 27-22
Effective 05/29/2022.

Allows modification of an election of contingent annuitant for participants who designated same sex partner prior to 01/01/2013 and subsequently married the contingent annuitant after change in Maryland law regarding same sex marriage.