

# **The Employees' Retirement System for the City of Norfolk**

**Actuarial Valuation Report  
as of June 30, 2023**

**The Eightieth  
Actuarial Valuation**

**Produced by Cheiron**

**October 2023**

## **TABLE OF CONTENTS**

<b><u>Section</u></b>		<b><u>Page</u></b>
Letter of Transmittal .....		i
Foreword.....		ii
Section I    Board Summary .....		1
Section II    Risk Assessment and Disclosure .....		13
Section III    Assets .....		24
Section IV    Liabilities .....		31
Section V    Contributions.....		36
Section VI    Financial Statement Information.....		40

### **Appendices**

Appendix A Membership Information .....	44
Appendix B Actuarial Assumptions and Methods .....	49
Appendix C Summary of Plan Provisions.....	56

October 5, 2023

Board of Trustees  
Employees' Retirement System  
City of Norfolk  
Norfolk, Virginia 23510

***Re: The Employees' Retirement System for the City of Norfolk  
Actuarial Valuation as of June 30, 2023***

Dear Members of the Board:

At your request, we have conducted an annual actuarial valuation of the Employees' Retirement System for the City of Norfolk as of June 30, 2023. This report replaces the report sent on September 14, 2023 as it reflects new information from the System regarding the City's contribution for the one-time supplement awarded to eligible retirees. The results of the valuation are contained in this report. The purpose of the valuation is discussed in the Foreword.

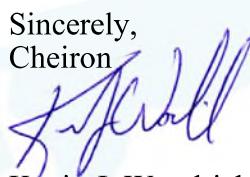
The actuarial assumptions used in performing this valuation have been recommended by the actuary and adopted by the Board of Trustees based on the actuary's most recent review of the System's experience completed in May 2022. We believe the assumptions used, in aggregate, reflect our best estimate of anticipated future experience of the System. The results of this report are only applicable to the contribution for the fiscal year ending June 30, 2025, and rely on future plan experience conforming to the underlying assumptions. Future valuation reports may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the assumptions; changes in assumptions; and changes in plan provisions or applicable law.

The purpose of this report is to present the annual actuarial valuation of the Employees' Retirement System for the City of Norfolk. The report also provides information regarding employer contribution levels.

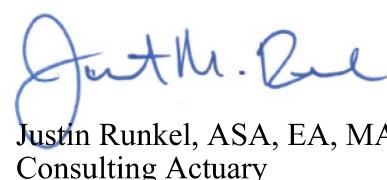
This report and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices and our understanding of the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board as well as applicable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

This actuarial report was prepared exclusively for the City of Norfolk for the purpose described herein. Other users of this valuation report are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to any such other users.

Sincerely,  
Cheiron



Kevin J. Woodrich, FSA, EA, MAAA  
Principal Consulting Actuary



Justin M. Runkel, ASA, EA, MAAA  
Consulting Actuary

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK  
ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**FOREWORD**

Cheiron has performed the actuarial valuation of the Employees' Retirement System for the City of Norfolk as of June 30, 2023. The purpose of this report is to:

- 1) **Measure and disclose**, as of the valuation date, the financial condition of the System;
- 2) **Indicate trends** in the financial progress of the System;
- 3) **Determine the contribution** to be paid by the City on or around July 1, 2024 for fiscal year June 30, 2025; and
- 4) **Provide specific information** used in preparing the System's financial statement. All other disclosure information required under Governmental Accounting Standards Board (GASB) Statements No. 67 and 68 will be sent under separate cover.

An actuarial valuation establishes and analyzes the System's 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.

**Section I** presents a summary containing our findings and discloses important trends experienced by the System in recent years.

**Section II** assesses and discloses various actuarial risk measures of the System.

**Section III** contains details on asset measures alongside relevant performance measurements.

**Section IV** shows similar information on System liabilities, measured for actuarial, accounting, and government reporting purposes.

**Section V** calculates the contribution amount to be paid by the City effective July 1, 2024.

**Section VI** includes certain required disclosures for financial statements.

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

In preparing our report, we relied without audit on information (some oral and some written) supplied by the System's staff. This information includes, but is not limited to, the plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23 Data Quality.

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK  
ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**SECTION I – BOARD SUMMARY**

**General Comments**

The City Code states that each year the Board must certify to the City Manager the amount of appropriation required for the ensuing year to meet the normal and accrued liability contributions payable by the City. The results of this valuation determine the City contribution amount to be paid for the fiscal year beginning July 1, 2024.

Starting in fiscal year ending June 30, 2025, contributions are depicted as a dollar amount rather than a percent of payroll. This change was made to address the declining active participation that is expected because of the City's decision to close the plan to new employees hired on or after January 1, 2022.

The Actuarially Determined Contribution (ADC) for fiscal year ending June 30, 2025 is \$34,375,000. Since the ADC exceeds the prior fiscal year's contribution of \$33,603,000, the Funding Policy Contribution is also \$34,375,000. As in prior years, it is anticipated that the City will make this contribution around July 1, 2024. The ADC and Funding Policy Contribution were determined without any consideration for the Section 115 Trust and the additional City contribution paid in fiscal year ending June 30, 2024 to fully cover the cost of the one-time supplement granted to eligible retirees.

Forecasts show that should all assumptions be realized, including the 6.75% assumed annual investment return, the System would reach 100% funding by 2035. Included in these projections are the following:

- Projected liabilities and contributions reflect the City's amendment to close the System effective January 1, 2022.
- Projected contributions reflect the City's pension funding policy to contribute the greater of the prior year's contributions (ignoring any amounts from the Section 115 Trust) and the current year's actuarially determined contribution. This contribution policy will continue until the System is fully funded. Upon being fully funded, we have assumed that contributions are equal to the actuarially determined contribution. Should the System approach fully funded status, the City may want to consider putting a minimum contribution equal to the value of the additional benefits being earned by actives for one more year of service.
- The projections also reflect the continued annual payments of \$8.7 million from the Section 115 Trust held outside the System's assets.

**Recent Experience**

The financial markets performed better than expected during the fiscal year ending June 30, 2023. The actual return on a market value basis was approximately 8.64%. However, the System experienced a loss on the actuarial value of assets due to continued recognition of net investment losses from prior years. On an actuarial value basis, the assets returned 5.09% compared with an assumed rate of return of 6.75%. The loss recognized for funding purposes was \$24.3 million.

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK  
ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**SECTION I – BOARD SUMMARY**

On the liability side, the System's experience resulted in an actuarial gain of \$14.1 million, which represents roughly 0.92% of the prior year's liabilities. This liability gain was primarily due to those members electing to port their service to VRS and higher than expected pensioner mortality. Additionally, the City amended the Plan to extend the maximum permissible DROP duration from four to five years which decreased liabilities by \$5.9 million. The City also awarded a one-time \$660 supplement to eligible retirees payable July 2023. The City will transfer funds to offset this additional liability of \$1.5 million during the fiscal year ending June 30, 2024. Combined, the aggregate impact of these two plan changes was a \$4.4 million reduction in liabilities.

The combination of asset losses and liability gains, along with the aforementioned plan changes, produced a slight increase in the System's funded ratio (actuarial value of assets over actuarial liability) from 84.2% as of June 30, 2022 to 84.5% as of June 30, 2023.

Effective fiscal year ending June 30, 2023, the City of Norfolk began making separate contributions to the System from the Section 115 Trust that was previously established upon the bond issuance from June 2021. The City contributed an additional \$8.7 million with its July 2022 contribution and anticipates making a similar contribution annually until the Section 115 Trust assets have been depleted. As of June 30, 2023, the Trust held \$74.0 million in assets. If the entire Trust balance had been contributed on June 30, 2023 and recognized as part of System's assets, the System would be 89.3% funded based on the Actuarial Value of Assets and 86.2% funded based on the Market Value of Assets.

THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK  
ACTUARIAL VALUATION AS OF JUNE 30, 2023

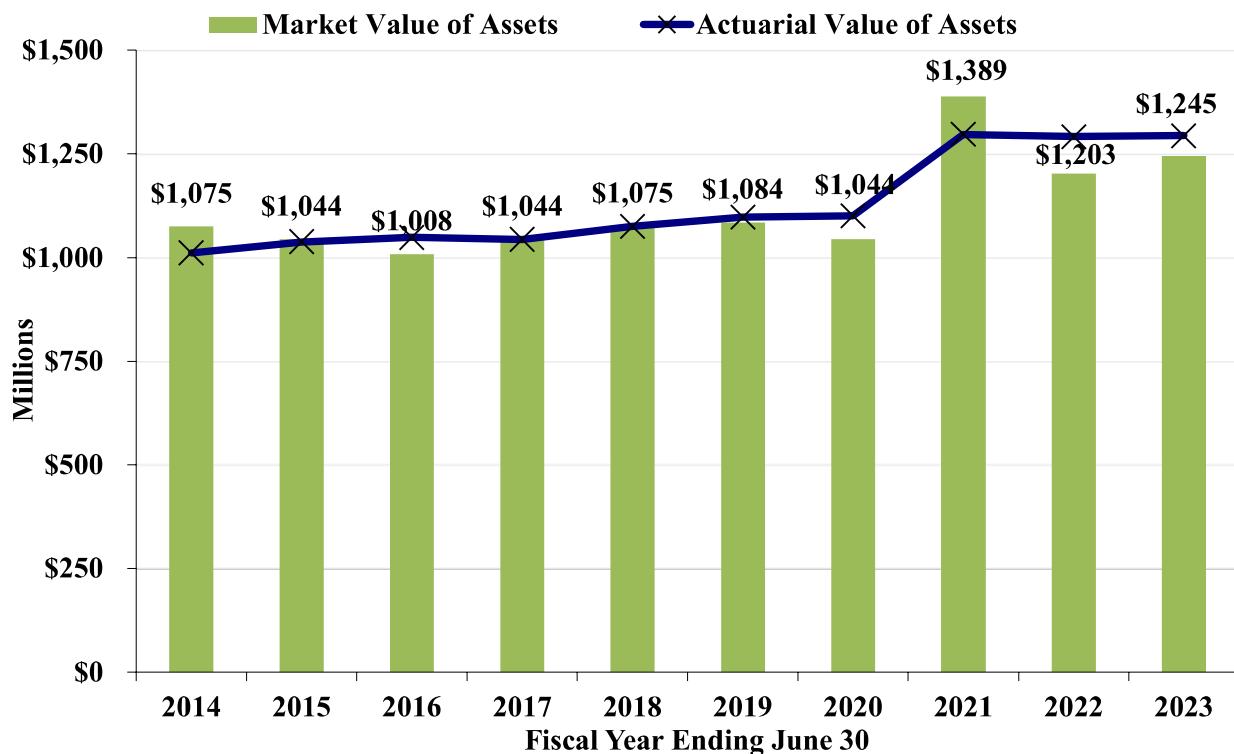
SECTION I – BOARD SUMMARY

**Trends**

It is important to take a step back from the latest results and view them in the context of the System's recent history. Here we present a series of graphs that display key factors in the valuations over the last ten years.

Growth in Assets

The following graph shows the progression of the Market Value of Assets (MVA) and Actuarial Value of Assets (AVA) over the most recent 10-year period.



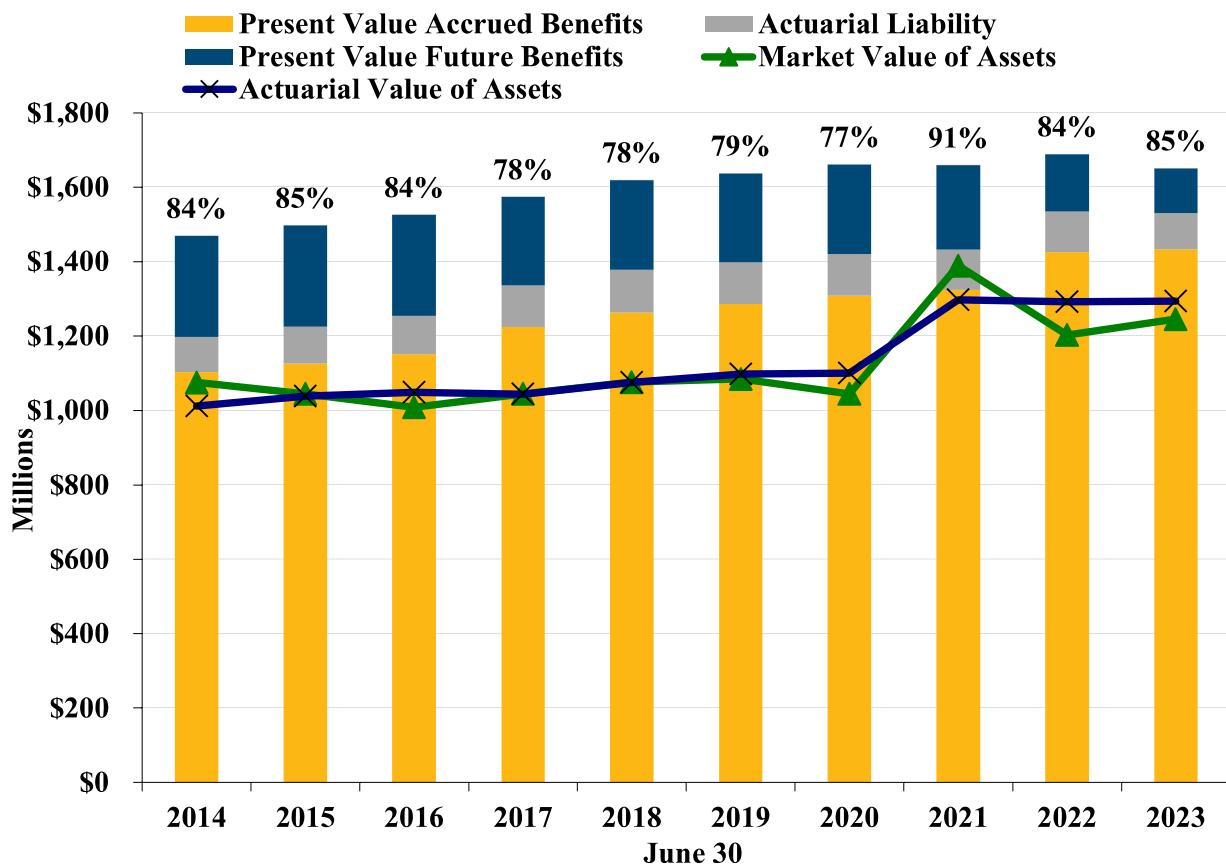
The MVA experienced a return of 8.64% this year. The AVA increased by a relatively smaller amount due to the smoothing method in place, which recognizes historical gains and losses that have been deferred. The return on the AVA was 5.09%, which is less than the 6.75% assumed rate of return from the prior year. Both the MVA and AVA amounts increased from last year due to favorable market conditions. The MVA is currently \$48.7 million less than the AVA. This amount represents the stored net investment loss that will be recognized in the near term and would offset the impact of future investment gains for the System.

THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK  
ACTUARIAL VALUATION AS OF JUNE 30, 2023

SECTION I – BOARD SUMMARY

Assets and Liabilities

The following graph shows a comparison of different asset and liability measurements over the most recent 10-year period.



The bars represent the three different measures of liability mentioned in this report. For funding purposes, the target amount is the Actuarial Liability, represented by the top of the gray bar. We compare the Actuarial Value of Assets to this measure of liability in developing the funded ratio. The funded ratio is represented by the percentages shown above each bar.

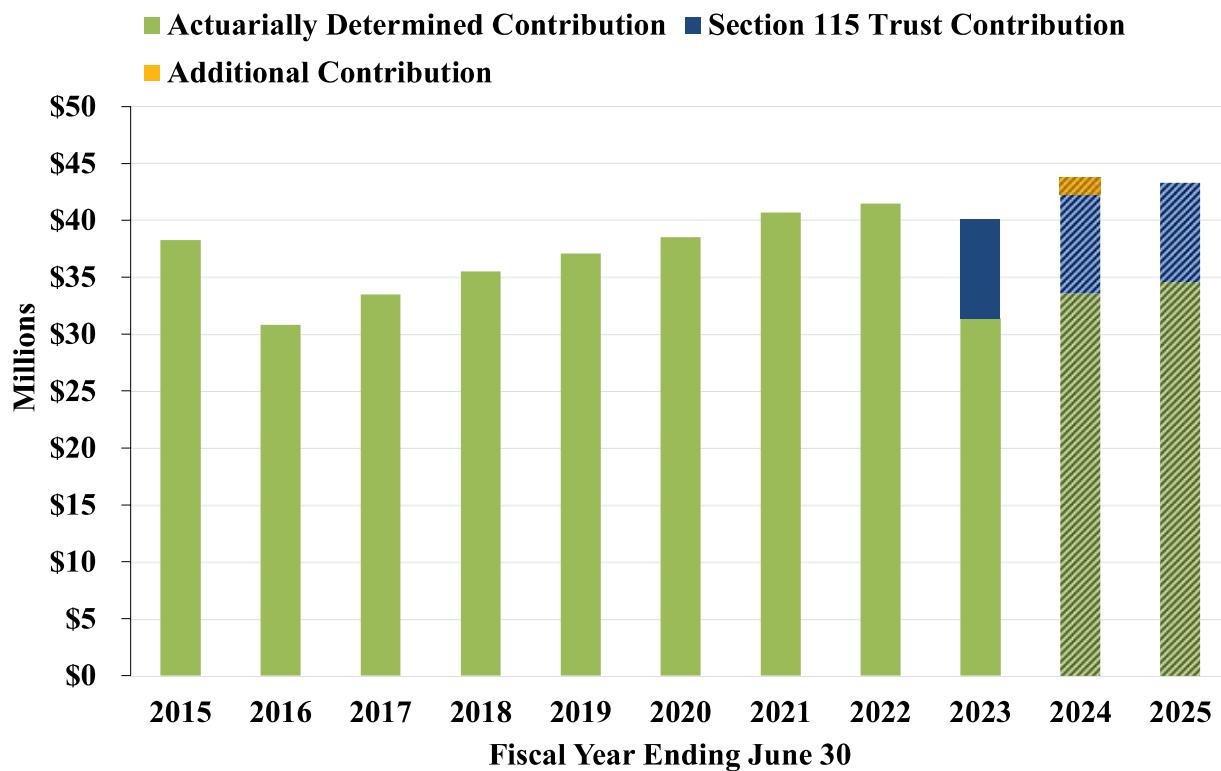
The amount represented by the top of the blue bars, the Present Value of Future Benefits, is the amount needed to provide all benefits for the current participants and their beneficiaries. The top of the gold bars measures the Present Value of Accrued Benefits, which is the liability attributable to benefits earned to date.

THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK  
ACTUARIAL VALUATION AS OF JUNE 30, 2023

**SECTION I – BOARD SUMMARY**

Contributions

The following graph shows the recent history of City contributions. With the System closing effective January 1, 2022, the actuarially determined contribution is now represented as a dollar amount instead of a rate.



The green bars in this graph show the City's actuarially determined contribution and depict the actual contribution amounts that have been paid. The textured bars shown for fiscal years ending June 30, 2024 and 2025 are expected amounts as determined by the June 30, 2022 and June 30, 2023 actuarial valuations, respectively. Beginning in fiscal year ending 2023, the blue bars depict Section 115 Trust contributions made to the System. Contributions paid from the Trust are assumed to be \$8.7 million annually until depletion of the Trust, which had a balance of \$74.0 million as of June 30, 2023. The gold bar reflects the City's anticipated \$1.5 million additional contribution to the System in July 2023 to fully cover the additional liability attributable to the one-time supplement paid to eligible retirees in July 2023.

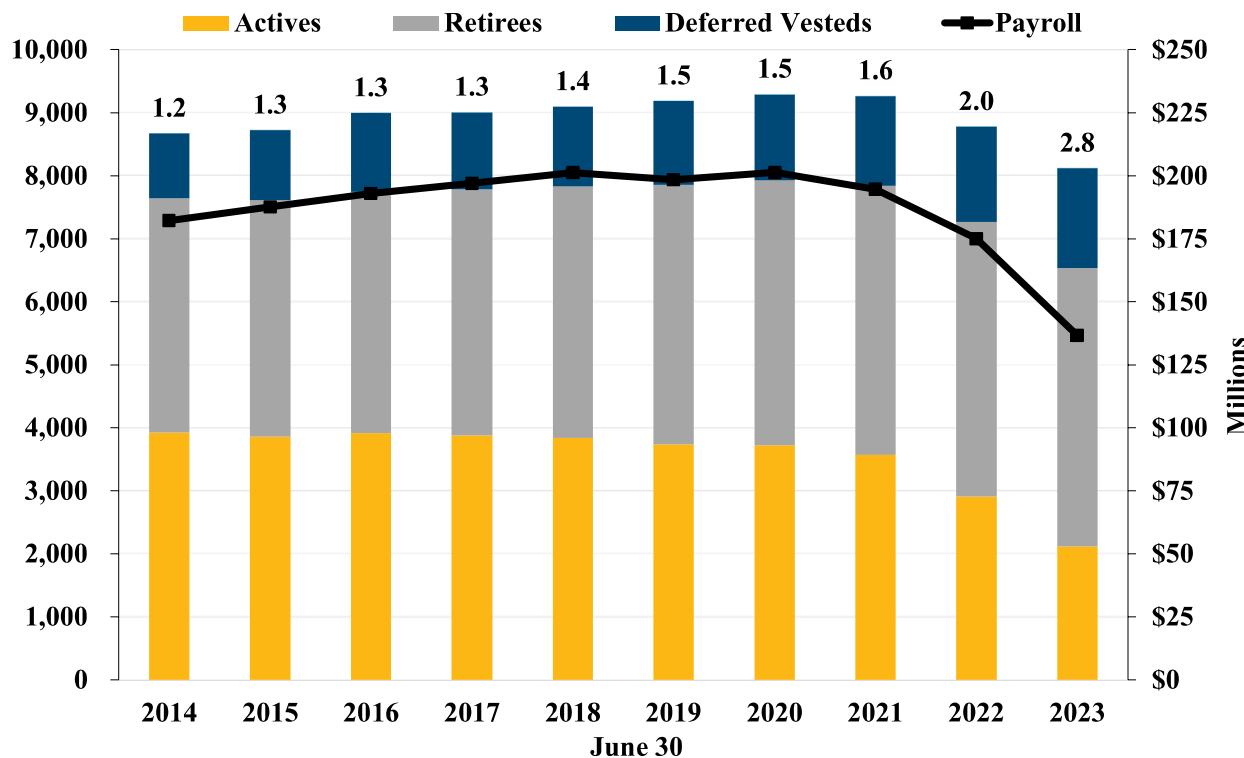
City contributions are determined by the actuarial process that features an implicit lag. For example, the June 30, 2023 valuation determined the annual required contribution for fiscal year ending 2025, which will be made on or around July 1, 2024. The increase in the City's actuarially determined contribution from FYE 2024 to FYE 2025 is attributable to the loss on assets and increase in the administrative expense assumption.

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
**ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**SECTION I – BOARD SUMMARY**

Participant Trends

The following graph shows participation in the System over the most recent 10-year period.



The black line shows total covered payroll of the System (right-hand scale). As with any maturing pension plan, the number of retirees has increased, whereas the number of actives has declined. This trend is expected to accelerate due to closing the plan to new hires effective January 1, 2022. In addition to closing the plan, the sharp decline in active membership and payroll in recent periods is also attributable to the departure of active members that elected to port to the Virginia Retirement System (VRS). Based on the information provided, a total of 394 active members elected to join VRS between July 1, 2022 and December 31, 2022.

The numbers above the bars on the graph indicate the “support ratio” – the ratio of inactive participants to active participants. When higher contributions are required to meet funding shortfalls caused by poor investment performance, the leveraging impact of a higher support ratio becomes significant. This is due to the imbalanced impact of investment shortfalls, which impacts total assets (i.e., impacting both participating actives and inactives), versus contributions that are only made on behalf of the System’s active participants. This support ratio has increased over the past ten years and is expected to increase in the future as the System continues to mature without replenishing the active population with new hires. In Section II of this report, we compare Norfolk’s support ratio to other public plans.

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK  
ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**SECTION I – BOARD SUMMARY**

## **Baseline Projections**

Our analysis of the projected financial trends for the System is an important part of this valuation. In this section we project future valuation results, focusing on the previously referenced funded ratio (actuarial value basis) and the expected City contributions. We present a baseline scenario based on all actuarial assumptions being met exactly as assumed during the projection period, including the 6.75% investment return assumption. In the risk section of the report (Section II), we demonstrate how sensitive future valuation results are to deviations in actual returns from the assumed investment returns by presenting similar results with investment returns deviating from those assumed.

Effective January 1, 2022, the System was closed to new hires. New City employees are required to join the Virginia Retirement System (VRS). In addition, current members had until December 31, 2022 to make an election as to whether or not they want to remain in NERS or port to VRS.

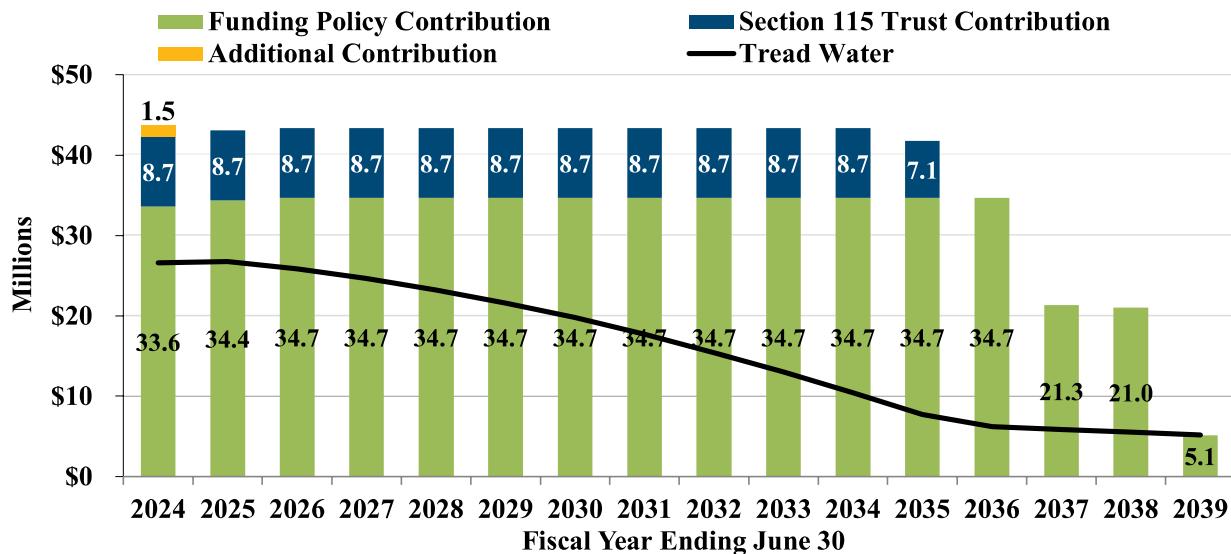
Finally, the projections assume the City's contributions will be made in accordance with the funding policy. Funding policy contributions are greater of the prior year's contributions and the current year's actuarially determined contribution amount. This policy will continue until the System is fully funded. Upon being fully funded, we have assumed that contributions are based on the projected actuarially determined contribution. As the System approaches fully funded status, the City may want to consider changing its funding policy to contribute no less than the amount to cover the normal cost, the value of additional benefits being earned by active members for a year of service and assumed administrative expenses.

In addition to the City's annual contribution to satisfy the funding policy, projected contributions include an assumed \$8.7 million annual contribution from the Section 115 Trust each July until those assets have been depleted.

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
**ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**SECTION I – BOARD SUMMARY**

The following two graphs below show the expected progress of the System over the next 15 years.



The preceding graph shows that the City's contribution amount (green bars) is projected to increase to \$34.7 million in fiscal year ending June 30, 2026 and remain at that level for several years in accordance with the funding policy. When the System is projected to reach fully funded, the minimum contribution requirement from the funding policy is lifted, and the City contribution is equal to the actuarially determined contribution. Full funding is expected in the June 30, 2035 valuation, which first impacts the fiscal year ending June 30, 2037 contribution. Future City contributions are assumed to be made at the beginning of each fiscal year, on or around July 1.

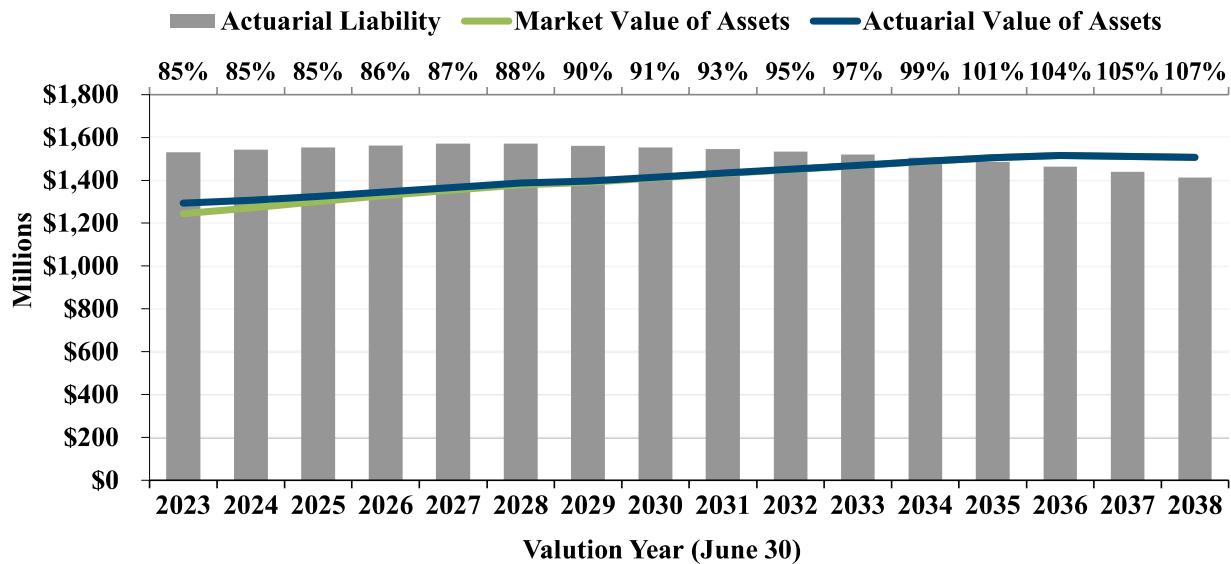
The System is projected to receive \$8.7 million annually (blue bars) from the Section 115 Trust until those assets are depleted in 2035. The System will receive an additional \$1.5 million from the City in fiscal year ending June 30, 2024 (gold bar) to fully cover the additional liability attributable to the one-time supplement paid to eligible retirees in July 2023.

The black line is the “tread water” line, which is the sum of the normal cost, administrative expenses, and interest on the unfunded actuarial liabilities (UAL). The tread water line shows the minimum contributions needed to avoid an increase in the UAL. With contributions anticipated to exceed the tread water amount, the unfunded liabilities quickly deteriorate and the plan reaches full funding in 2035.

THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK  
ACTUARIAL VALUATION AS OF JUNE 30, 2023

**SECTION I – BOARD SUMMARY**

The following graph shows the projected funding status over the next 15 years. The System's funded ratio is projected to improve to 107% by the end of the period shown as contributions pay down the existing unfunded liability.



**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
**ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**SECTION I – BOARD SUMMARY**

**Table I-1**  
**Summary of Principal Plan Results**  
**Combined**  
*(\$ in Thousands)*

	June 30, 2022	June 30, 2023	% Change
<b>Participant Counts</b>			
Actives	2,914	2,121	(27.2%)
Leave of Absence <sup>1</sup>	18	13	(27.8%)
Terminated Vested Members	1,515	1,583	4.5%
Participants Due Account Balance	572	386	(32.5%)
In Pay Status Participants	4,351	4,416	1.5%
DROP Participants	<u>52</u>	<u>108</u>	107.7%
Total	9,422	8,627	(8.4%)
Annual Salaries of Active Members <sup>2</sup>	\$ 175,102	\$ 136,645	(22.0%)
Annual Retirement Allowances <sup>3</sup>	98,986	102,356	3.4%
<b>Assets and Liabilities</b>			
Actuarial Liability (AL)	\$ 1,534,615	\$ 1,530,754	(0.3%)
Assets for Valuation Purposes (AVA)	<u>1,291,722</u>	<u>1,293,562</u>	0.1%
Unfunded Actuarial Liability [AL - AVA]	\$ 242,893	\$ 237,192	
Funding Ratio (AVA ÷ AL)	84.17%	84.50%	
Funding Ratio (MVA ÷ AL)	78.37%	81.33%	
Present Value of Accrued Benefits	\$ 1,425,629	\$ 1,433,359	0.5%
Market Value of Assets (MVA)	<u>1,202,663</u>	<u>1,244,910</u>	3.5%
Unfunded Accrued Benefit Liability	\$ 222,966	\$ 188,449	
Accrued Benefit Funding Ratio	84.36%	86.85%	
		<b>Fiscal Year 2024</b>	<b>Fiscal Year 2025</b>
		<b>% of Payroll</b>	<b>\$ Amount</b>
<b>City Contributions</b>			
Normal Cost Contribution	7.13%	\$ 9,718	
Unfunded Actuarial Liability Contribution	13.48%	23,524	
Administrative Expense Contribution	<u>0.35%</u>	<u>1,133</u>	
Total Contribution	20.96%	\$ 34,375	

<sup>1</sup> 18 and 13 participants on Leave of Absence as of June 30, 2022 and June 30, 2023, respectively, are entitled to a vested benefit.

<sup>2</sup> Excludes salaries earned by DROP participants.

<sup>3</sup> Includes the monthly benefit amounts for the DROP participants. For those in the DROP period, the amount shown is 70% of the full monthly benefit.

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
**ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**SECTION I – BOARD SUMMARY**

**Table I-2**  
**Summary of Principal Plan Results**  
**General Employees**  
*(\$ in Thousands)*

	<b>June 30, 2022</b>	<b>June 30, 2023</b>	<b>% Change</b>
<b>Participant Counts</b>			
Actives	2,022	1,417	(29.9%)
Leave of Absence <sup>1</sup>	10	7	(30.0%)
Terminated Vested Members	1,128	1,171	3.8%
Participants Due Account Balance	481	319	(33.7%)
In Pay Status Participants	2,956	2,981	0.8%
DROP Participants	0	63	0.0%
Total	6,597	5,958	(9.7%)
Annual Salaries of Active Members <sup>2</sup>	\$ 114,991	\$ 86,178	(25.1%)
Annual Retirement Allowances <sup>3</sup>	53,031	54,853	3.4%
<b>Assets and Liabilities</b>			
Actuarial Liability (AL)	\$ 786,958	\$ 779,424	(1.0%)
Assets for Valuation Purposes (AVA)	685,324	680,405	(0.7%)
Unfunded Actuarial Liability [AL - AVA]	\$ 101,634	\$ 99,019	
Funding Ratio (AVA ÷ AL)	87.09%	87.30%	
Funding Ratio (MVA ÷ AL)	81.08%	84.01%	
Present Value of Accrued Benefits	\$ 735,886	\$ 733,203	(0.4%)
Market Value of Assets (MVA)	638,074	654,815	2.6%
Unfunded Accrued Benefit Liability	\$ 97,812	\$ 78,388	
Accrued Benefit Funding Ratio	86.71%	89.31%	
		<b>Fiscal Year 2024</b>	<b>Fiscal Year 2025</b>
		<b>% of Payroll</b>	<b>\$ Amount</b>
<b>City Contributions</b>			
Normal Cost Contribution	4.25%	\$ 3,376	
Unfunded Actuarial Liability Contribution	8.58%	9,911	
Administrative Expense Contribution	0.35%	715	
Total Contribution	13.18%	\$ 14,002	

<sup>1</sup> 10 and 7 participants on Leave of Absence as of June 30, 2022 and June 30, 2023, respectively, are entitled to a vested benefit.

<sup>2</sup> Excludes salaries earned by DROP participants.

<sup>3</sup> Includes the monthly benefit amounts for the DROP participants. For those in the DROP period, the amount shown is 70% of the full monthly benefit.

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
**ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**SECTION I – BOARD SUMMARY**

**Table I-3**  
**Summary of Principal Plan Results**  
**Public Safety**  
*(\$ in Thousands)*

	<b>June 30, 2022</b>	<b>June 30, 2023</b>	<b>% Change</b>
<b>Participant Counts</b>			
Actives	892	704	(21.1%)
Leave of Absence <sup>1</sup>	8	6	(25.0%)
Terminated Vested Members	387	412	6.5%
Participants Due Account Balance	91	67	(26.4%)
In Pay Status Participants	1,395	1,435	2.9%
DROP Participants	<u>52</u>	<u>45</u>	(13.5%)
Total	2,825	2,669	(5.5%)
Annual Salaries of Active Members <sup>2</sup>	\$ 60,111	\$ 50,467	(16.0%)
Annual Retirement Allowances <sup>3</sup>	45,955	47,503	3.4%
<b>Assets and Liabilities</b>			
Actuarial Liability (AL)	\$ 747,657	\$ 751,330	0.5%
Assets for Valuation Purposes (AVA)	<u>606,398</u>	<u>613,157</u>	1.1%
Unfunded Actuarial Liability [AL - AVA]	\$ 141,259	\$ 138,173	
Funding Ratio (AVA ÷ AL)	81.11%	81.61%	
Funding Ratio (MVA ÷ AL)	75.51%	78.54%	
Present Value of Accrued Benefits	\$ 689,743	\$ 700,156	1.5%
Market Value of Assets (MVA)	<u>564,589</u>	<u>590,095</u>	4.5%
Unfunded Accrued Benefit Liability	\$ 125,154	\$ 110,061	
Accrued Benefit Funding Ratio	81.85%	84.28%	
		<b>Fiscal Year 2024</b>	<b>Fiscal Year 2025</b>
		<b>% of Payroll</b>	<b>\$ Amount</b>
<b>City Contributions</b>			
Normal Cost Contribution	12.65%	\$ 6,342	
Unfunded Actuarial Liability Contribution	22.86%	13,613	
Administrative Expense Contribution	<u>0.35%</u>	<u>418</u>	
Total Contribution	35.86%	\$ 20,373	

<sup>1</sup> 8 and 6 participants on Leave of Absence as of June 30, 2022 and June 30, 2023, respectively, are entitled to a vested benefit.

<sup>2</sup> Excludes salaries earned by DROP participants.

<sup>3</sup> Includes the monthly benefit amounts for the DROP participants. For those in the DROP period, the amount shown is 70% of the full monthly benefit.

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK  
ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**SECTION II – RISK ASSESSMENT AND DISCLOSURE**

## **Introduction**

Actuarial Standard of Practice (ASOP) No. 51 was published by the Actuarial Standards Board to provide guidance to actuaries on the assessment and disclosure of risks related to the possibility that future pension plan experience will deviate from assumptions. This standard does not introduce new concepts to actuarial work; it simply attempts to provide some codification of the practice. Our reports have routinely included stress testing of the valuation results showing the impact of future experience deviating from the underlying assumptions as well as other communications related to the risks that the actual condition of the System will deviate from our valuation results. However, this section of the report consolidates the information regarding assessment and disclosure of the System's risks as well as add several additional items helping to communicate and understand these risks.

The System's actuarial valuation results are dependent on assumptions about future economic and demographic experience. Based on actuarial standards of practice, the assumptions represent a reasonable estimate for future experience. However, actual future experience will never conform exactly to the assumptions and may differ significantly from the assumptions. This deviation is the risk that pension plan sponsors undertake in relying on a pension plan's actuarial valuation results.

This section of this report is intended to identify the primary drivers of these risks, provide background information and assessments about these identified risks, and communicate the significance of these risks to this Program.

## **Identification of Risks**

For this System, the three primary valuation results that can significantly differ from those expected are in the assets, liabilities, and employer contributions. While there are several factors that could lead to these results being different, we believe the primary risks for this System are:

- Investment risk,
- Longevity and other demographic risks,
- Assumption change risk, and
- Plan change risk.

Other risks that we have not identified may also turn out to be significant.

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK  
ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**SECTION II – RISK ASSESSMENT AND DISCLOSURE**

*Investment Risk* is the potential for investment returns to deviate from what is expected. When actual investment returns are lower than the investment assumption used in the actuarial valuation (currently assume 6.75% per year), the unfunded liability will increase 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. As seen in the historical section that follows, this has been a significant driver of deviations in the actual measurements for this System from those expected by the valuations.

*Longevity and Other Demographic Risk* is 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 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. The historical section shows that the System has experienced liability gains in nine of the last ten years. However, the amounts of these liability gains are small in many years, especially when compared to investment return experience. This year, the System experienced a liability gain of \$14.1 million and an actuarial investment loss of \$24.3 million.

*Assumption Change Risk* is the potential for the environment to change such that future valuation assumptions are adjusted to be different than 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 risks previously identified, but rather than capturing the risk as it is experienced, it captures the cost of recognizing a change in the environment when the current assumption is no longer reasonable. The historical review section illustrates that assumption change risk has had a measurable impact in 2022 when the underlying assumptions were changed as a result of an experience study. The reduction in the discount rate assumption from 7.00% to 6.75% was particularly impactful, increasing liabilities by 2.6%.

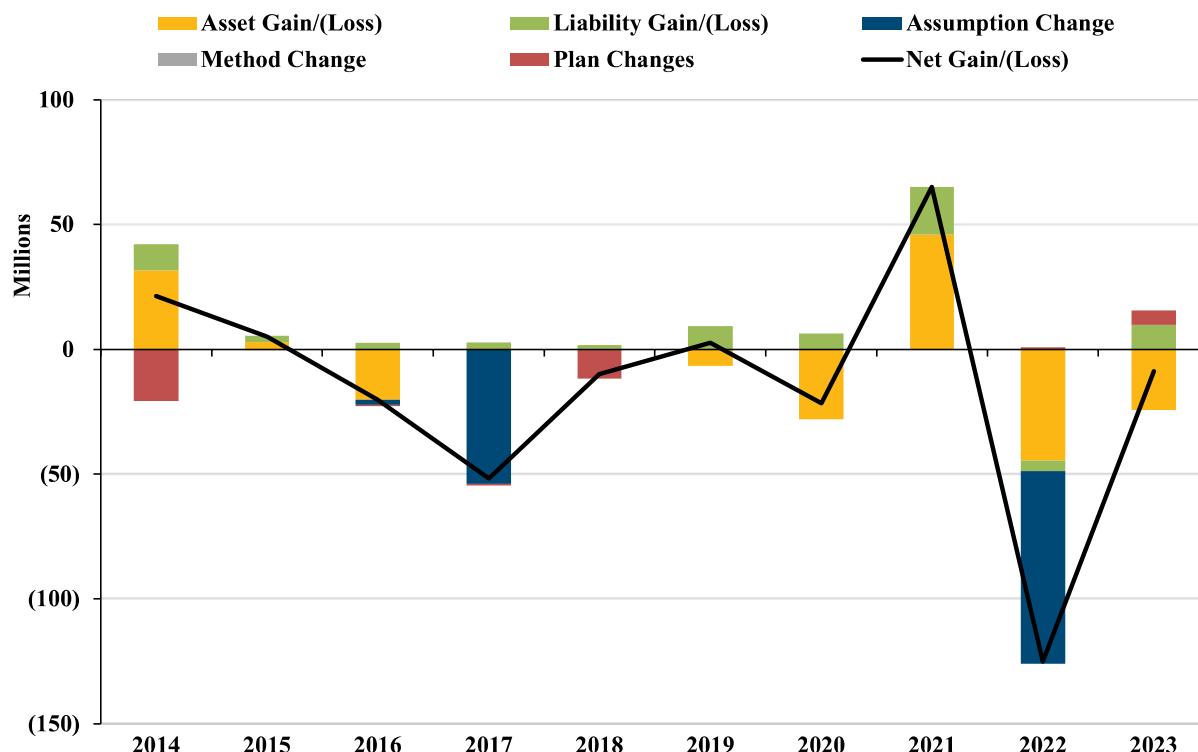
*Plan Change Risk* is the potential for the provisions of the System to be changed such that the funding or benefits are changed materially. In addition to the actual payments to and from the System being changed, future valuation measurements can also be impacted, with System changes leading to deviations between actual future measurements and those expected by the current valuation. A recent example was the System's closure to new hires effective January 1, 2022. While this change is particularly impactful on the System's long-term funding, the immediate impact of these plan changes on the City's contribution is relatively small and will be slowly realized over time. The historical review section will show that plan change risk has resulted in deviations in the actual measurements for this System from those expected by the valuations.

THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK  
ACTUARIAL VALUATION AS OF JUNE 30, 2023

SECTION II – RISK ASSESSMENT AND DISCLOSURE

### Historical Experience Deviations

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 following graph shows the gains/(losses) at each valuation date between the actual and expected experience broken down by cause. As described previously and is evident in this graph, assumption changes, asset gains/(losses) and liability gains/(losses) have been the most significant risks for the System.



**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK  
ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**SECTION II – RISK ASSESSMENT AND DISCLOSURE**

### **Plan Maturity Measures**

As pension plans become more mature, the primary risks of adverse investments, demographic deviations, plan changes, and assumption change experience become of more significant concern. As a result, it has become increasingly important to examine measures that indicate a pension plan's maturity level. With shrinking workforces, aging Baby Boomers, and retirees living longer, plans pay out more in benefits than they receive in contributions – leading to negative cash flows.

When plans with negative cash flows suffer investment losses, they need to liquidate enough assets to pay for benefits and expenses that exceed contributions. That means these plans will need to earn higher returns to rebuild their assets to the previous levels. Plans with negative cash flows exceeding five percent of assets are especially vulnerable to asset losses.

The balance of this section discloses and examines two maturity measures: the support ratio and the net cash flow ratio.

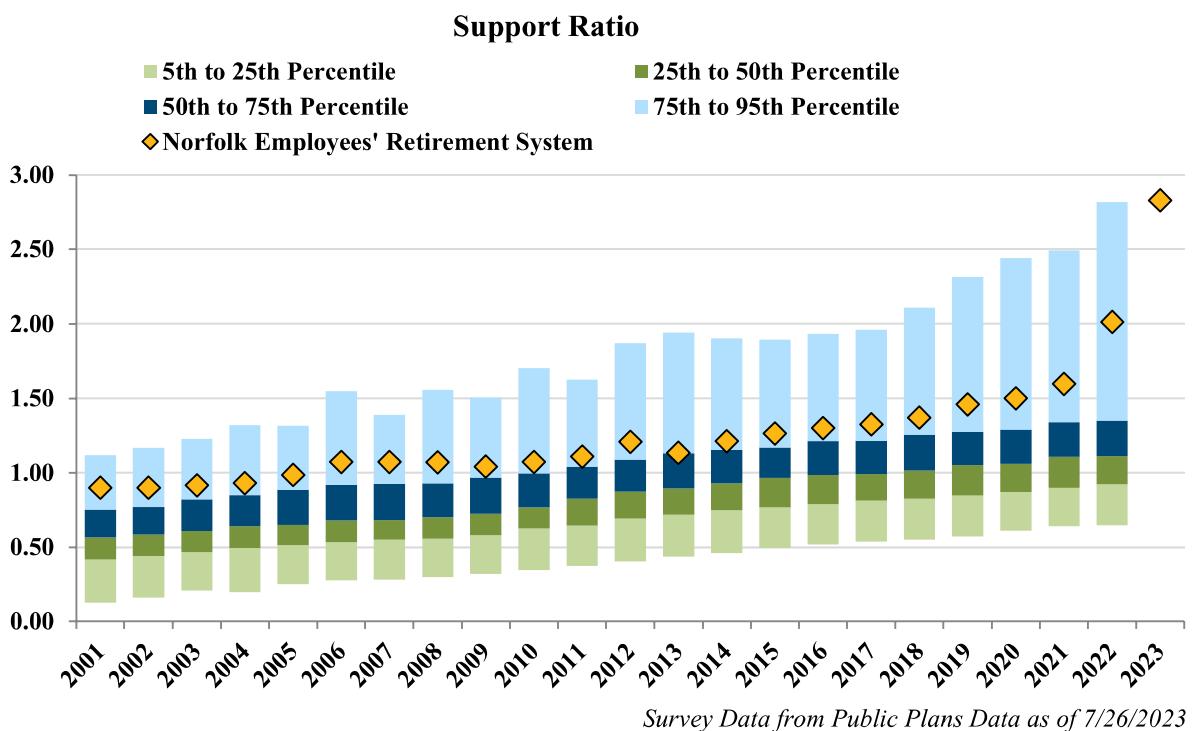
THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK  
ACTUARIAL VALUATION AS OF JUNE 30, 2023

SECTION II – RISK ASSESSMENT AND DISCLOSURE

Support Ratio

A commonly used measure of plan maturity is the support ratio, which is the ratio of inactive members (participants currently receiving benefits or entitled to a future benefit) to the number of active members. The greater this ratio, the more likely that the plan will have or develop negative cash flows.

The following graph shows the support ratio over time for the System compared to the Public Plan database.



The orange diamonds in this graph show that the System's support ratio for each year has generally increased over time and has remained above the 75<sup>th</sup> percentile level over the entire period. This trend indicates that the System is maturing, as have most plans in this database over the years. With the City closing the plan to new hires on or after January 1, 2022 and current active members electing to leave for VRS, the support ratio has increased more rapidly, reaching 2.8 in 2023.

THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK  
ACTUARIAL VALUATION AS OF JUNE 30, 2023

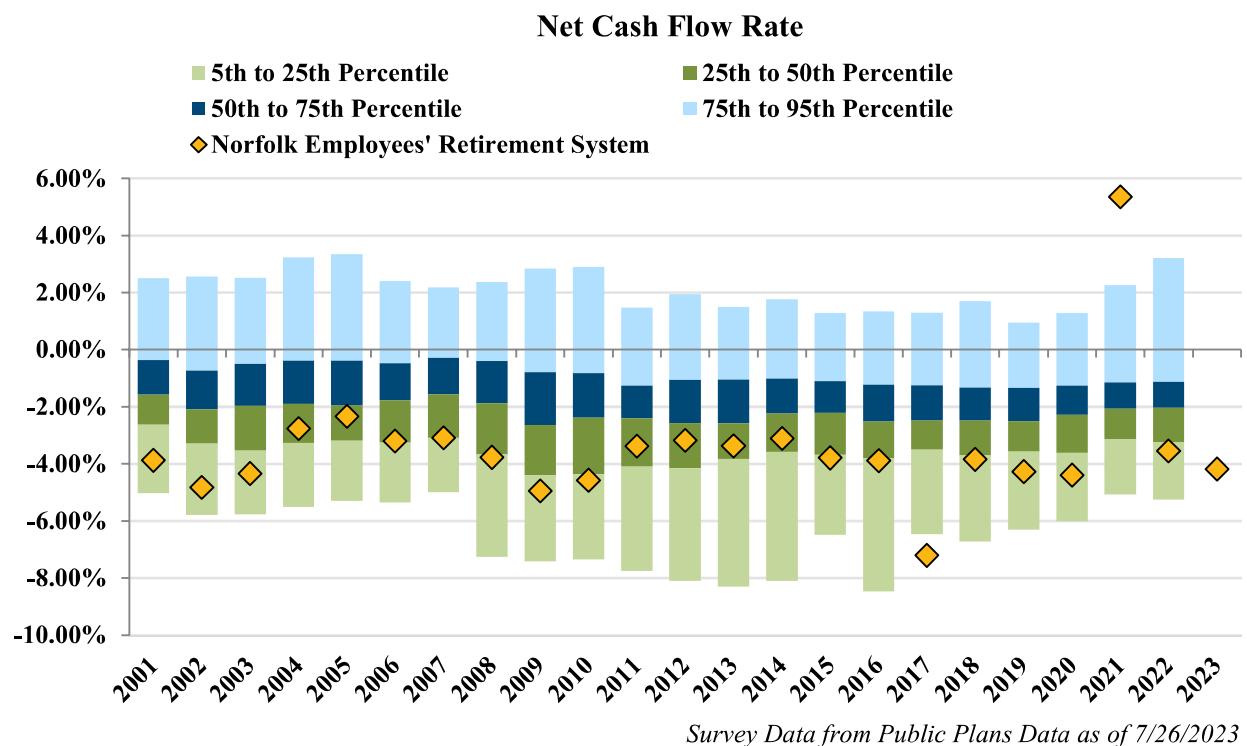
**SECTION II – RISK ASSESSMENT AND DISCLOSURE**

Net Cash Flow Rate

Another measure of plan maturity is the ratio of net cash flow – contributions less benefits and expenses – to the market value of plan assets. When this ratio is significantly negative, a plan is very vulnerable to market declines.

The following chart shows that the System's net cash flow rate has remained relatively stable over the last several years. The large negative percentage in 2017 was a result of the City changing how it reflects contributions in its financials. The large positive percentage in 2021 is attributable to the inclusion of the City's one-time \$119.6 million contribution from pension obligation bonds.

Disregarding these outlier years, the System has had consistently more negative cash flows than the median plan in the public plan database. This measure again provides some indication that this System is more mature than the typical public plan.



**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK  
ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**SECTION II – RISK ASSESSMENT AND DISCLOSURE**

**Assessing Future Risk**

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.

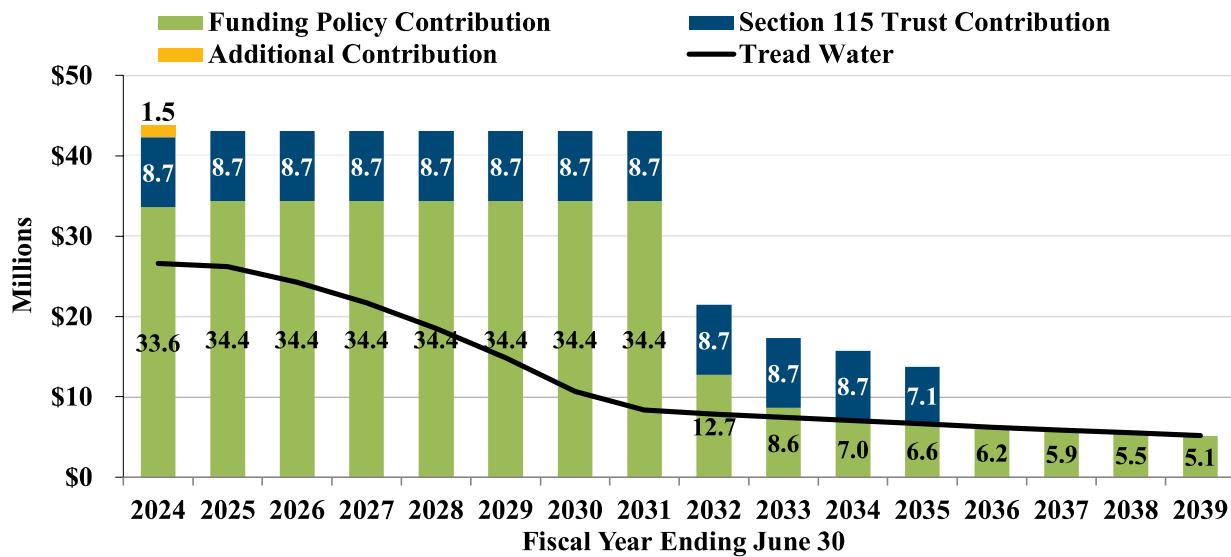
The Board Summary has additional detail on the baseline projection. It is important to note that baseline projections, while valid, **are not going to occur** as experience never conforms exactly to assumptions every year. On the following pages, we have included scenarios that illustrate what may happen if investment returns are consistently 2% higher or lower than assumed. We have also shown a scenario using historical market returns that averaged nearly 6.75% but with heavy volatility. As plans mature, it becomes more difficult to recover from market declines even when the average investment return over a long period is equal to the expected return.

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
**ACTUARIAL VALUATION AS OF JUNE 30, 2023**

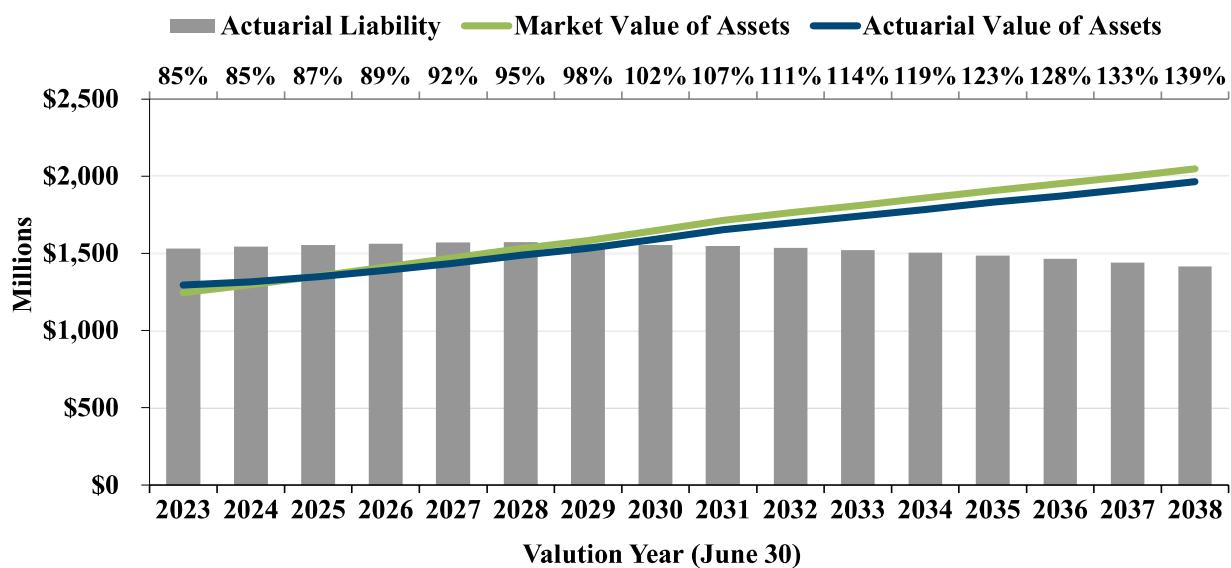
**SECTION II – RISK ASSESSMENT AND DISCLOSURE**

Projections with Asset Returns of 8.75%

The following charts show what the next 15 years would look like with an 8.75% annual return.



In this scenario, the funding policy contribution amount would decrease to the ADC five years earlier than the baseline scenario. Excess contributions from the Section 115 Trust and the funding policy push the System into a surplus position by June 30, 2030 as shown in the graph below. The amortization of this growing surplus eventually exceeds the cost of new accruals and expenses. If the System were to approach fully funded status, the City may want to look at contributing no less than the annual amount needed to cover the normal cost (new accruals) and administrative expenses. This is what was modeled above.

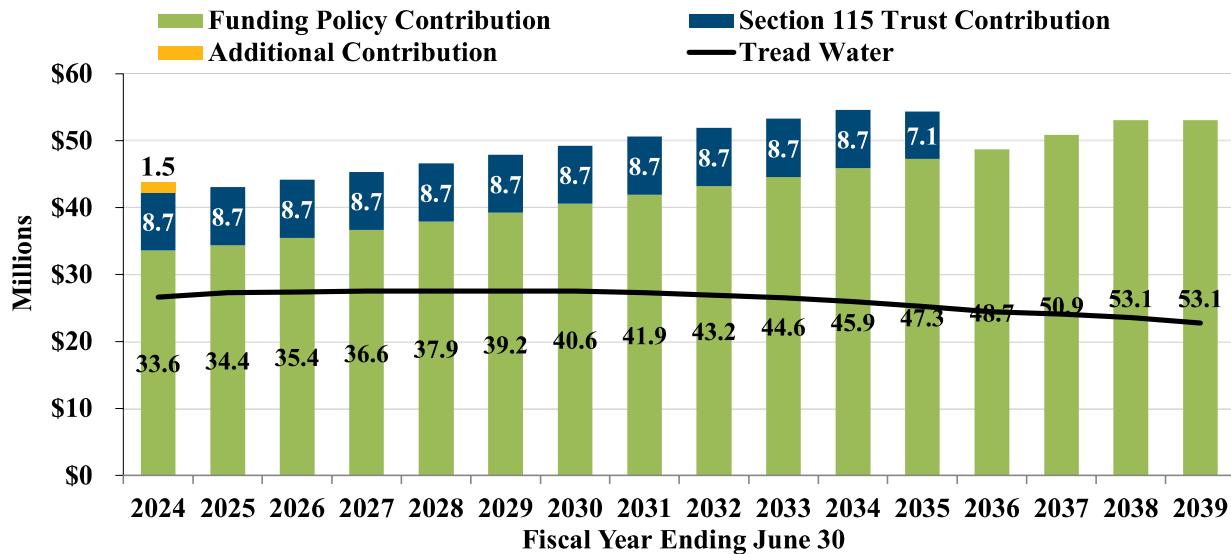


**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
**ACTUARIAL VALUATION AS OF JUNE 30, 2023**

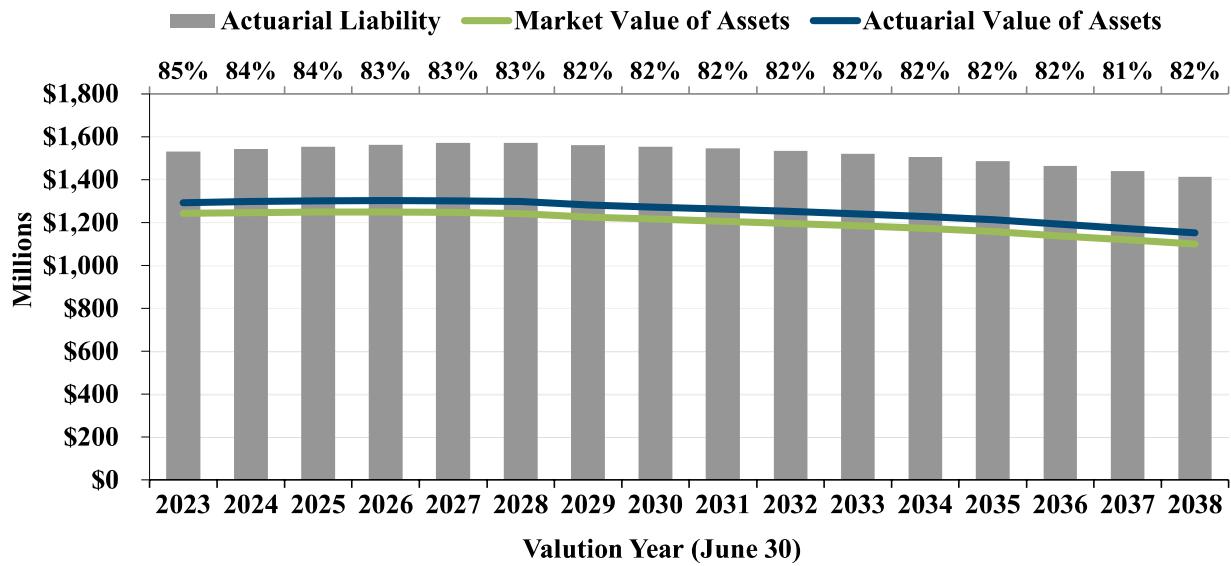
**SECTION II – RISK ASSESSMENT AND DISCLOSURE**

Projections with Asset Returns of 4.75%

The following charts show what the next 15 years would look like with a 4.75% annual return.



With assets projected to underperform the assumed 6.75% every year, the funding policy contribution would increase steadily through the 15-year period.



The System's funded level would ultimately decrease to 82%. While this is only a 3% decrease from the current 85% funded status, the City would be contributing at a much higher level over this period to make up for the lack of investment earnings. These projections are absent from any additional ad hoc COLAs.

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
**ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**SECTION II – RISK ASSESSMENT AND DISCLOSURE**

Projections with Volatile Asset Returns

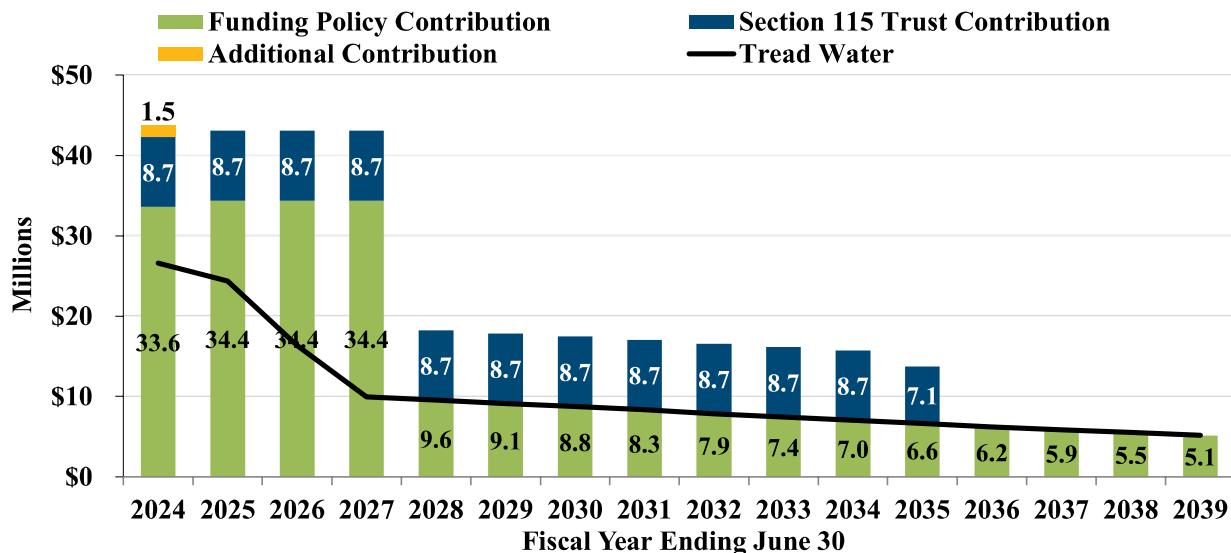
Like the baseline projection, the two projections in this section assumed a fixed return of 8.75% or 4.75% every year. While unlikely to occur, these scenarios provide perspective on the sensitivity of the funded status and City's contribution should asset returns routinely exceed or fall short of the assumed 6.75%.

The actual investment performance of the System is likely to be more volatile. The last projection shown below varies the returns for the next 15 years to mirror actual returns from calendar years 1996 to 2010 based on a portfolio invested in 60% equities and 40% fixed income, averaging 6.87% over the next 15 years, just above the current assumed return of 6.75%. The rates assumed for this scenario are shown in the following table.

FYE June 30,	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Return	15.30%	23.92%	20.64%	12.28%	(0.82%)	(3.78%)	(9.14%)	15.34%	8.26%	3.90%
FYE June 30,	2034	2035	2036	2037	2038					
Return	11.20%	6.10%	(20.12%)	18.26%	11.65%					

Despite averaging 6.87%, this scenario illustrates the impact of timing of returns. With double-digit returns in the first four years, the System reaches 100% funded in 2026, nine years earlier than the baseline. In doing so, the System develops a big enough surplus that the impact of lower returns in subsequent years is effectively mitigated.

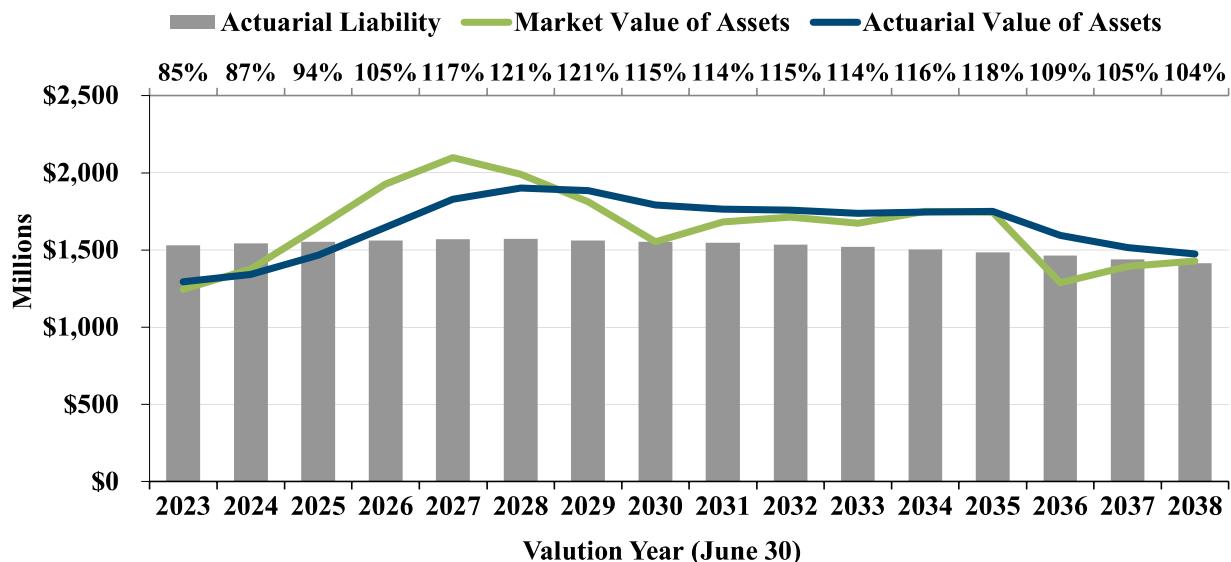
Note that this chart reflects an illustrative scenario and is not intended to reflect future expectations as the volatility of the contributions will vary with the volatility of the returns.



THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK  
ACTUARIAL VALUATION AS OF JUNE 30, 2023

SECTION II – RISK ASSESSMENT AND DISCLOSURE

The funded ratio of the System is also more volatile with varied returns as seen in the following graph from this one illustrative scenario.



Assessing a Low-Risk Investment Strategy

The System invests in a diversified portfolio with the objective of maximizing investment returns at a reasonable level of risk. The lowest risk portfolio for a pension plan would be composed entirely of low-default-risk fixed income securities whose cash flows match the benefit cash flows of the System. Such a portfolio, however, would have a lower expected rate of return than a diversified portfolio. The Low-Default-Risk Obligation Measure (LDROM) represents what the funding liability would be if the System invested its assets in such a portfolio.

As of June 30, 2023, we estimate that such a portfolio would have an effective expected return of 4.90% compared to the Plan's discount rate of 6.75%, and the resulting LDROM would be \$2.08 billion<sup>1</sup> compared to the Actuarial Liability of \$1.53 billion. This \$0.55 billion difference represents the value of bearing the risk of investing in the diversified portfolio. Alternatively, it can be seen as the cost of eliminating the investment risk.

Benefit security for members of the System relies on a combination of the assets in the System, the investment returns generated on those assets, and the promise of future contributions. If the System were to invest in the LDROM portfolio, the reported funded status would decrease. However, it would not change the amount of assets currently in the System but would reduce expected future returns on assets. Such an investment strategy would also reduce the expected volatility of future returns.

<sup>1</sup> Based on a discount rate equal to the June 30, 2023 FTSE Pension Liability Index of 4.90% and all other assumptions and methods as used to calculate the Actuarial Liability

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK  
ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**SECTION III – ASSETS**

Pension plan assets play a key role in the financial operation of the System and in the decisions the Trustees may make with respect to future deployment of those assets. The level of assets, the allocation of assets among asset classes, and the methodology used to measure assets will likely impact upon benefit levels, City contributions, and the ultimate security of participants' benefits.

In this section, we present detailed information on System assets including:

- **Disclosure** of system assets at June 30, 2022 and June 30, 2023;
- Statement of the **changes** in market values during the year;
- Development of the **actuarial value of assets**;
- An assessment of **investment performance**; and
- A projection of the System's expected **cash flows** for the next ten years.

**Disclosure**

The market value of assets represents “snap-shot” or “cash-out” values which provide the principal basis for measuring financial performance from one year to the next. Market values, however, can fluctuate widely with corresponding swings in the marketplace. As a result, market values are usually not suitable for long-range planning.

The actuarial value, or “carrying value,” is the market value that has been smoothed based on actuarial methods used to estimate the long-term asset value. It is used for evaluating the System's ongoing liability to meet its obligations.

Current methods employed by this System determine the actuarial value of assets by first calculating the expected actuarial value of assets based on last year's valuation interest rate, last year's actuarial value of assets, and the net cash flow (contributions less benefit payments and assumed administrative expenses) of the System over the year prior to the valuation. One-third of the difference between the market value of assets and the expected actuarial value of assets is then added to the expected actuarial value of assets to determine the valuation assets.

The actuarial value of assets is then allocated between the General Employees' portion of the System and that covering Public Safety. The allocation is performed annually based on the actual contribution and benefit payments made on behalf of each type of employee. The investment returns for the year are allocated based on the starting balance and the cash flow of each portion of the fund.

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
**ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**SECTION III – ASSETS**

**Table III-1**  
**Statement of Assets at Market Value**  
*(*\$ in Thousands*)*

	<b>June 30, 2022</b>	<b>June 30, 2023</b>
<b><u>Assets</u></b>		
Cash and Short-Term Investments	\$ 38,812	\$ 4,369
Receivables		
Accrued Investment Income	\$ 884	\$ 584
Accounts Receivable	2	3
Due from Broker for Securities Sold	<u>60,237</u>	<u>0</u>
Total Receivables	\$ 61,123	\$ 587
Investments, at Fair Value		
United States Treasury Securities	\$ 53,733	\$ 0
Fixed Income Securities	101,929	0
Derivative Securities	(1,097)	0
Equity Securities	114,671	0
Commingled Funds	944,700	
Equity	N/A	739,240
Fixed Income	N/A	350,878
Real Estate	N/A	90,644
Hedge Funds	N/A	<u>64,443</u>
Total Investments	\$ 1,213,936	\$ 1,245,205
Total Assets	\$ 1,313,871	\$ 1,250,161
<b><u>Liabilities</u></b>		
Accounts Payable	\$ 3,927	\$ 5,251
Due to Broker for Securities Purchased	<u>107,281</u>	<u>0</u>
Total Liabilities	\$ 111,208	\$ 5,251
<b>Net Assets Available for Benefits</b>	<b>\$ 1,202,663</b>	<b>\$ 1,244,910</b>

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
**ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**SECTION III – ASSETS**

**Table III-2**  
**Changes in Market Value of Assets**  
*(\$ in Thousands)*

<b>Value of Assets at June 30, 2022</b>	<b>\$</b>	<b>1,202,663</b>
<b><u>Additions</u></b>		
Contributions		
Employer Contributions <sup>1</sup>	\$	40,134
Employee Contributions / Purchased Service		8,096
Total Contributions	\$	48,230
Investment Income		
Net Appreciation (Depreciation)	\$	108,129
Interest		4,142
Dividends		6,917
Other		1,235
Total Investment Income	\$	120,423
Investment Expenses		(3,121)
Other Expenses (Transfers In/Out)		(14,319)
Net Income from Investing Activities	\$	102,983
Total Additions	\$	151,213
<b><u>Deductions</u></b>		
Benefits Paid directly to Participants	\$	(96,992)
Return of Contributions		(4,410)
Beneficiary Payments		(6,559)
Administrative Fees		(1,005)
Total Deductions	\$	(108,966)
<b><u>Total</u></b>		
Net Increase/(Decrease)	\$	42,247
<b>Value of Assets at June 30, 2023</b>	<b>\$</b>	<b>1,244,910</b>

<sup>1</sup> Includes \$8.7 million contribution from Section 115 Trust.

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
**ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**SECTION III – ASSETS**

**Actuarial Value of Assets**

The actuarial value of assets represents a “smoothed” value developed by the actuary to reduce, or eliminate, erratic results which could develop from short-term fluctuations in the market value of assets. For this System, the actuarial value has been calculated by first calculating the expected actuarial value of assets based on last year’s valuation interest rate, last year’s actuarial value of assets, and the net cash flow (contributions less benefit payments and assumed administrative expenses) of the System over the year prior to the valuation. One-third of the market value of assets less the expected actuarial value of assets is then added to the expected actuarial value of assets to determine the valuation assets.

**Table III-3**  
**Development of the Actuarial Value of Assets**  
*( $\$$  in Thousands)*

1. Actuarial Value of Assets at June 30, 2022	$\$$	1,291,722
Employer Contributions		40,134
Employee Contributions / Purchased Service		8,096
Benefit Payments		(107,961)
Assumed Administrative Expenses		(612)
Expected Return at 6.75%		86,509
2. Expected Value at June 30, 2023 (EV)	$\$$	1,317,888
3. Actual Market Value at June 30, 2023 (AV)	$\$$	1,244,910
4. One-Third of AV less EV	$\$$	(24,326)
<b>5. Actuarial Value of Assets at June 30, 2023 [2. + 4.]</b>	<b><math>\\$</math></b>	<b>1,293,562</b>

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
**ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**SECTION III – ASSETS**

**Table III-4**  
**Allocation of Actuarial Value of Assets as of June 30, 2023**  
*(**\$ in Thousands**)*

	<b>General</b>	<b>Employees</b>	<b>Public Safety</b>	<b>Total</b>
1. Actuarial Value of Assets at June 30, 2022	\$ 685,324	\$ 606,398	\$ 1,291,722	
2. Contributions				
Employer Contributions	\$ 17,388	\$ 22,746	\$ 40,134	
Employee Contributions / Purchased Service	<u>4,998</u>	<u>3,098</u>	<u>8,096</u>	
Total Contributions	\$ 22,386	\$ 25,844	\$ 48,230	
3. Benefit Payments <sup>1</sup>	\$ (59,828)	\$ (48,133)	\$ (107,961)	
4. Assumed Administrative Expenses	\$ (402)	\$ (210)	\$ (612)	
5. Investment Earnings, based on 5.09% return	\$ 32,925	\$ 29,258	\$ 62,183	
6. Actuarial Value of Assets at June 30, 2023	\$ 680,405	\$ 613,157	\$ 1,293,562	
7. Market Value of Assets at June 30, 2023 <sup>2</sup>	\$ 654,815	\$ 590,095	\$ 1,244,910	

<sup>1</sup> *Projected Benefit Payments are allocated on the basis of FY 2023 expected payments.*

<sup>2</sup> *The allocation of Market Value of Assets is used only for comparison to the Present Value of Accrued Benefits.*

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
**ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**SECTION III – ASSETS**

**Investment Performance**

The market value of assets (MVA) returned 8.64% during the fiscal year ending June 30, 2023, which is greater than the expected 6.75% return (assumption in prior year's valuation) by 1.89%.

A return of 5.09% on the actuarial value of assets (AVA) is primarily the result of the asset smoothing method being utilized for the calculation of the actuarial value of assets. Since only a portion of the gain or loss from the System's investment performance is recognized in a given year, the AVA can lag significantly behind the MVA in periods of very good performance. In a period of negative returns, the AVA does not decline as rapidly as the MVA.

**Table III-5**  
**Annual Rates of Return**

<b>Year Ending June 30</b>	<b>Market Value</b>	<b>Actuarial Value</b>
1999	9.9%	14.7%
2000	8.8%	11.9%
2001	(2.3%)	5.4%
2002	(7.6%)	(0.9%)
2003	5.4%	(2.5%)
2004	11.1%	9.5%
2005	6.7%	7.2%
2006	4.7%	6.2%
2007	15.1%	8.7%
2008	(5.2%)	4.9%
2009	(15.3%)	(2.1%)
2010	13.1%	(4.6%)
2011	20.2%	4.6%
2012	0.4%	11.2%
2013	11.8%	7.0%
2014	17.1%	10.5%
2015	1.2%	7.3%
2016	0.3%	5.0%
2017	11.4%	7.0%
2018	7.0%	7.1%
2019	5.1%	6.7%
2020	0.5%	4.7%
2021	25.9%	11.8%
2022	(9.7%)	3.7%
2023	8.6%	5.1%

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
**ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**SECTION III – ASSETS**

**Table III-6**  
**Projection of System's Benefit Payments and Contributions**  
*(**\$ in Thousands**)*

<b>Fiscal Year Ending</b>	<b>Expected Benefit Payments and Admin Expenses</b>	<b>Expected City Contributions</b>	<b>Expected Employee Contributions</b>
2024	\$ 107,252	\$ 43,762	\$ 6,832
2025	106,345	43,075	6,199
2026	108,753	43,376	5,744
2027	110,920	43,376	5,355
2028	115,335	43,376	5,001
2029	127,406	43,376	4,663
2030	120,763	43,376	4,364
2031	122,054	43,376	4,059
2032	123,414	43,376	3,743
2033	124,745	43,376	3,470

Expected benefit payments are projected for the closed group valued at June 30, 2023. Expected City contributions are shown on a cash basis and include anticipated annual contributions of \$8.7 million from the Section 115 Trust. Included with the fiscal year ending 2024 City contribution is an additional \$1.5 million to fully cover the cost of the one-time supplement granted to eligible retirees. City contributions are assumed to be made on or around July 1 of each fiscal year in accordance with the pension funding policy stating that the City shall contribute the greater of the prior year's contribution – excluding additional contributions from the Section 115 Trust or otherwise – and the current year's actuarially determined contribution. Upon attaining fully funded status, City contributions are assumed to be based on the actuarially determined contribution as described in Section V of this report.

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK  
ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**SECTION IV – LIABILITIES**

In this section, we present detailed information on System liabilities including:

- **Disclosure** of System liabilities at June 30, 2022 and June 30, 2023; and
- Statement of **changes** in these liabilities during the year.

**Disclosure**

Several types of liabilities are calculated and presented in this report. Each type is distinguished by the people ultimately using the figures and the purpose for which they are using them.

- **Present Value of Future Benefits:** Used for analyzing the financial outlook of the System, this represents the amount of money needed today to fund all future benefits and expenses of the System, assuming participants continue to accrue benefits.
- **Actuarial Liability:** Used for funding calculations, this liability is calculated taking the Present Value of Benefits above and subtracting the present value of future Employer Normal Costs under an acceptable actuarial funding method. This method is referred to as the **Entry Age Normal** funding method.
- **Present Value of Accrued Benefits:** Used for communicating the current level of liabilities, this liability reflects the total amount of money needed today to fully fund the current accrued obligations of the System, assuming no future accruals of benefits, assets continue to earn 6.75% per year and no ad hoc COLAs are awarded. These liabilities are also used to assess whether the System can meet its current benefit commitments.

None of the liabilities disclosed in this report is appropriate for use in settling the liabilities of the System.

The tables on the next pages disclose each of these liabilities for the current and prior valuations. With respect to each disclosure, a subtraction of the appropriate value of System assets yields, for each respective type, a **net surplus or unfunded liability**.

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
**ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**SECTION IV – LIABILITIES**

**Table IV-1**  
**Liabilities & Net (Surplus)/Unfunded**  
**Combined**  
**(*\$ in Thousands*)**

	<b>June 30, 2022</b>	<b>June 30, 2023</b>
<b>Present Value of Future Benefits</b>		
Active Participant Benefits	\$ 594,050	\$ 516,614
Retiree Benefits	978,800	998,730
DROP Participants	34,141	48,359
Terminated Vested and Inactive Members	<u>81,922</u>	<u>87,637</u>
<b>Present Value of Future Benefits (PVFB)</b>	<b>\$ 1,688,913</b>	<b>\$ 1,651,340</b>
 City Normal Cost <sup>1</sup>	 \$ 12,491	 10,284
 Actuarial Liability		
Active Participant Benefits	\$ 439,752	\$ 396,028
Retiree Benefits	978,800	998,730
DROP Participants	34,141	48,359
Terminated Vested and Inactive Members	<u>81,922</u>	<u>87,637</u>
<b>Actuarial Liability (AL)</b>	<b>\$ 1,534,615</b>	<b>\$ 1,530,754</b>
Actuarial Value of Assets (AVA)	1,291,722	1,293,562
<b>Net (Surplus)/Unfunded (AL – AVA)</b>	<b>\$ 242,893</b>	<b>\$ 237,192</b>
 Present Value of Accrued Benefits		
<b>Present Value of Accrued Benefits (PVAB)</b>	<b>\$ 1,425,629</b>	<b>\$ 1,433,359</b>
Market Value of Assets (MVA)	<u>1,202,663</u>	<u>1,244,910</u>
<b>Net (Surplus)/Unfunded (PVAB – MVA)</b>	<b>\$ 222,966</b>	<b>\$ 188,449</b>

<sup>1</sup> Net of employee contributions

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
**ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**SECTION IV – LIABILITIES**

**Table IV-2**  
**Liabilities & Net (Surplus)/Unfunded**  
**General Employees**  
*( $\$$  in Thousands)*

	<b>June 30, 2022</b>	<b>June 30, 2023</b>
<b>Present Value of Future Benefits</b>		
Active Participant Benefits	\$ 287,046	\$ 243,997
Retiree Benefits	509,777	510,353
DROP Participants	0	18,526
Terminated Vested and Inactive Members	<u>51,451</u>	<u>53,520</u>
<b>Present Value of Future Benefits (PVFB)</b>	<b>\$ 848,274</b>	<b>\$ 826,396</b>
 City Normal Cost <sup>1</sup>	 \$ 4,887	 3,895
 Actuarial Liability		
Active Participant Benefits	\$ 225,730	\$ 197,025
Retiree Benefits	509,777	510,353
DROP Participants	0	18,526
Terminated Vested and Inactive Members	<u>51,451</u>	<u>53,520</u>
<b>Actuarial Liability (AL)</b>	<b>\$ 786,958</b>	<b>\$ 779,424</b>
Actuarial Value of Assets (AVA)	685,324	680,405
<b>Net (Surplus)/Unfunded (AL – AVA)</b>	<b>\$ 101,634</b>	<b>\$ 99,019</b>
 <b>Present Value of Accrued Benefits (PVAB)</b>	 <b>\$ 735,886</b>	 <b>\$ 733,203</b>

<sup>1</sup> *Net of employee contributions*

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
**ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**SECTION IV – LIABILITIES**

**Table IV-3**  
**Liabilities & Net (Surplus)/Unfunded**  
**Public Safety**  
*( $\$$  in Thousands)*

	<b>June 30, 2022</b>	<b>June 30, 2023</b>
<b>Present Value of Future Benefits</b>		
Active Participant Benefits	\$ 307,004	\$ 272,617
Retiree Benefits	469,023	488,377
DROP Participants	34,141	29,833
Terminated Vested and Inactive Members	<u>30,471</u>	<u>34,117</u>
<b>Present Value of Future Benefits (PVFB)</b>	<b>\$ 840,639</b>	<b>\$ 824,944</b>
 City Normal Cost <sup>1</sup>	 \$ 7,604	 6,389
 Actuarial Liability		
Active Participant Benefits	\$ 214,022	\$ 199,003
Retiree Benefits	469,023	488,377
DROP Participants	34,141	29,833
Terminated Vested and Inactive Members	<u>30,471</u>	<u>34,117</u>
<b>Actuarial Liability (AL)</b>	<b>\$ 747,657</b>	<b>\$ 751,330</b>
Actuarial Value of Assets (AVA)	606,398	613,157
<b>Net (Surplus)/Unfunded (AL – AVA)</b>	<b>\$ 141,259</b>	<b>\$ 138,173</b>
 <b>Present Value of Accrued Benefits (PVAB)</b>	 <b>\$ 689,743</b>	 <b>\$ 700,156</b>

<sup>1</sup> Net of employee contributions

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
**ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**SECTION IV – LIABILITIES**

### **Changes in Liabilities**

Each of the liabilities disclosed in the prior tables is expected to change at each valuation. The components of that change, depending upon which liability is analyzed, can include:

- New hires since the last valuation
- Benefits accrued since the last valuation
- Plan amendments increasing benefits
- Passage of time which adds interest to the prior liability
- Benefits paid to retirees since the last valuation
- Participants retiring, terminating, or dying at rates different than expected
- A change in actuarial or investment assumptions
- A change in the actuarial funding method

Unfunded liabilities will change because of all of the above, and also due to changes in System assets resulting from:

- Employer contributions different than expected
- Investment earnings different than expected
- A change in the method used to measure plan assets

In each valuation, we report on those elements of change that are of particular significance, potentially affecting the long-term financial outlook of the System. Below we present key changes in liabilities since the last valuation.

**Table IV-4**  
**Changes in Liabilities**  
*(**\$ in Thousands**)*

	<b>Actuarial Liability</b>	<b>Present Value of Accrued Benefits</b>
Liabilities as of June 30, 2022	\$ 1,534,615	\$ 1,425,629
Liabilities as of June 30, 2023	\$ 1,530,754	\$ 1,433,359
Liability Increase/(Decrease)	\$ (3,861)	\$ 7,730
Change Due to:		
Plan Amendments	\$ (4,451)	\$ (3,192)
Assumption and Method Change	0	0
Actuarial (Gain)/Loss	(14,071)	NC
Benefits Accumulated and Other Sources	14,661	10,922

NC = not calculated

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK  
ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**SECTION V – CONTRIBUTIONS**

In the process of evaluating the financial condition of any pension plan, the actuary analyzes the assets and liabilities to determine what level (if any) of contributions is needed to properly maintain the funding status of the System. Typically, the actuarial process will use an actuarial funding method that will result in a pattern of contributions that are both stable and predictable.

For this System, the actuarial funding method employed is the **Entry Age Actuarial Cost Method**. Under this method, there are three components to the total Actuarially Determined Contribution (ADC): the **normal cost**, the **unfunded actuarial liability amortization**, and the **expected administrative expenses**.

The normal cost is determined by taking the portion of current year earnings attributable to the value, as of entry age into the System, of each member's projected future benefits divided by the value, also at entry age, of the member's expected future salary. Since the City contributes the Actuarially Determined Contribution one year later, the expected normal cost amount for the fiscal year in which the City contributes is used when determining the ADC.

The second part is an amortization payment to pay off the unfunded actuarial liability (UAL). The unfunded actuarial liability is the difference between the actuarial assets of the System at the valuation date and the assets the System should hold as determined by the actuarial cost method. The UAL is adjusted for one year, by increasing it at the assumed interest rate and reducing it by the portion of the City's scheduled contribution not attributable to the value of additional benefits earned (i.e., normal cost) or administrative expenses. The resulting projected UAL is then amortized over a 20-year period. The initial UAL established concurrent with the June 30, 2017 valuation is being amortized over a closed 20-year period. Subsequent changes to the UAL due to plan changes, assumption changes, gains, and losses, including those established as a result of this valuation, will be amortized over their own closed 20-year period. All amounts are developed using a level-dollar amortization method. Please see Table V-3 for details.

The third piece of the contribution amount accounts for anticipated administrative expenses in the fiscal year in which the City actually makes the contribution. Expenses were first incorporated with the June 30, 2019 valuation to better align with new accounting standards under GASB No. 67 and 68. Effective June 30, 2023, the administrative expense assumption is now reflected as a dollar amount as opposed to a rate to better align with a similar change in the actuarially determined contribution. Administrative expenses are assumed to be \$1.1 million for the fiscal year ending June 30, 2024, increasing with 3% inflation annually thereafter.

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK  
ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**SECTION V – CONTRIBUTIONS**

**Actuarially Determined Contribution**

The table below shows the development of the actuarially determined contribution (ADC) for fiscal year ending 2025. The funding policy contribution must be no less than the prior fiscal year's contribution. All amounts shown below exclude Section 115 Trust contributions that were made or are expected to be made as well as any additional one-time City contributions.

<b>Table V-1</b> <b>Actuarially Determined Contribution for Fiscal Year 2025</b> <i>(\$ in Thousands)</i>				
	<b>General</b>	<b>Public Safety</b>	<b>Total</b>	
City Normal Cost <sup>1</sup>	\$ 3,376	\$ 6,342	\$ 9,718	
Unfunded Actuarial Liability Amortization	9,911	13,613	23,524	
Expected Administrative Expenses <sup>1</sup>	<u>715</u>	<u>418</u>	<u>1,133</u>	
Actuarial Determined Contribution (ADC)	\$ 14,002	\$ 20,373	\$ 34,375	
City Contribution during Fiscal Year 2024 (excluding Section 115 Trust contribution)			\$ 33,603	
<b>Funding Policy Contribution (greater of ADC, Fiscal Year 2024 contribution)</b>			<b>\$ 34,375</b>	

<sup>1</sup> *Normal Cost and Administrative Expenses are projected to July 1, 2024 to align with City contribution timing.*

The ADC in Table V-1 above 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 contributions stability. The selection of the actuarial methods has considered 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. The actuarial methods and assumptions are shown in Appendix B of this report.

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
**ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**SECTION V – CONTRIBUTIONS**

**Table V – 2**  
**Development of UAL Amortization Layer for FYE 2025**  
*(**\$ in Thousands**)*

	<b>General</b>	<b>Public Safety</b>	<b>Total</b>
a. June 30, 2023 Unfunded Actuarial Liability (UAL)	\$ 99,019	\$ 138,173	\$ 237,192
b. Expected City Contribution on July 1, 2023 <sup>1</sup>	\$ 17,873	\$ 25,888	\$ 43,761
c. City Normal Cost and Expenses	(4,589)	(6,795)	(11,384)
d. Interest on b. and c. to June 30, 2024	1,004	1,505	2,509
e. Net Contribution to apply to UAL	\$ 14,288	\$ 20,598	\$ 34,886
f. Interest on UAL to June 30, 2024	\$ 6,684	\$ 9,327	\$ 16,011
g. June 30, 2024 Expected Unfunded Actuarial Liability (a. – e. + f.)	\$ 91,415	\$ 126,902	\$ 218,317
h. Outstanding Balances for Amortization Bases as of June 30, 2024	\$ 88,958	\$ 126,081	\$ 215,039
i. June 30, 2024 Experience UAL Layer [g. – h.]	\$ 2,457	\$ 821	\$ 3,278
j. FYE 2025 Amortization Payment <sup>2</sup>	\$ 213	\$ 71	\$ 284

<sup>1</sup> Includes \$8.7 million contribution from the Section 115 Trust and \$1.5 million from the City to cover the cost of the one-time supplement paid July 2023.

<sup>2</sup> Since contributions are payable a year after they are developed, the UAL is amortized over 20 years on July 1, 2024.

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
**ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**SECTION V – CONTRIBUTIONS**

**Table V-3**  
**Schedule of Amortization Bases**

Type of Base	Date Established	June 30, 2023 Initial Amount	FYE 2024 Amortization Payment	June 30, 2024 Outstanding Balance	Remaining Amortization Years	FYE 2025 Amortization Payment
<b>GENERAL EMPLOYEES</b>						
1. 2017 Initial Unfunded Base	7/1/2017	\$ 120,690	\$ 12,218	\$ 115,794	14	\$ 12,218
2. 2018 Plan Change	7/1/2018	6,617	645	6,375	15	645
3. 2018 Experience Base	7/1/2018	(4,904)	(478)	(4,724)	15	(478)
4. 2019 Experience Base	7/1/2019	865	82	836	16	82
5. 2020 Experience Base	7/1/2020	12,187	1,115	11,820	17	1,115
6. 2021 Experience Base	7/1/2021	(94,564)	(8,411)	(91,969)	18	(8,411)
7. 2022 Assumption Change	7/1/2022	33,433	2,899	32,595	19	2,899
8. 2022 Plan Change	7/1/2022	(916)	(79)	(892)	19	(79)
9. 2022 Experience Base	7/1/2022	22,498	1,950	21,933	19	1,950
10. 2023 One-Time Supplement	7/1/2023	871	871	0	1	0
11. 2023 Plan Change	7/1/2023	(2,632)	N/A	(2,810)	20	(244)
12. 2023 Experience Base	7/1/2023	4,874	N/A	2,457	20	213
General Employees Total		\$ 99,019	\$ 10,812	\$ 91,415		\$ 9,910
<b>PUBLIC SAFETY</b>						
1. 2017 Initial Unfunded Base	7/1/2017	\$ 152,759	\$ 15,464	\$ 146,561	14	\$ 15,464
2. 2018 Plan Change	7/1/2018	5,275	514	5,082	15	514
3. 2018 Experience Base	7/1/2018	3,013	294	2,902	15	294
4. 2019 Experience Base	7/1/2019	(2,749)	(259)	(2,658)	16	(259)
5. 2020 Experience Base	7/1/2020	10,603	970	10,284	17	970
6. 2021 Experience Base	7/1/2021	(97,758)	(8,695)	(95,075)	18	(8,695)
7. 2022 Assumption Change	7/1/2022	48,989	4,248	47,761	19	4,248
8. 2022 Plan Change	7/1/2022	(25)	(2)	(24)	19	(2)
9. 2022 Experience Base	7/1/2022	15,125	1,312	14,747	19	1,312
10. 2023 One-Time Supplement	7/1/2023	588	588	0	1	0
11. 2023 Plan Change	7/1/2023	(3,278)	N/A	(3,499)	20	(303)
12. 2023 Experience Base	7/1/2023	5,631	N/A	821	20	71
Public Safety Total		\$ 138,173	\$ 14,434	\$ 126,902		\$ 13,614
<b>Combined Total</b>				<b>\$ 218,317</b>		<b>\$ 23,524</b>

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK  
ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**SECTION VI – FINANCIAL STATEMENT INFORMATION**

Accounting Standard Codification Topic No. 960 of the Financial Accounting Standards Board specifies certain information for a plan to disclose regarding its funded status. FASB ASC Topic No. 960 disclosures provide a quasi “snapshot” view of how the System’s assets compared to its liabilities if contributions stopped and accrued benefit claims had to be satisfied. However, due to potential legal requirements and the possibility that alternative interest rates would have to be used to determine the liabilities, these values may not be a good indication of the amount of money it would take to buy the benefits for all members if the System were to terminate.

The present value of accrued benefits (FASB ASC Topic No. 960) is determined assuming that the System is ongoing, and participants continue to terminate employment, retire, etc., in accordance with the actuarial assumptions. Liabilities are discounted at the assumed valuation interest rate of 6.75% per annum.

FASB ASC Topic No. 960 specifies that a comparison of the present value of accrued (accumulated) benefits with the market value of the assets as of the valuation date must be provided. Table VI-1 shows the FASB liabilities as of June 30, 2022 and June 30, 2023. Table VI-2 then reconciles the FASB ASC Topic No. 960 liabilities determined as of the prior valuation, June 30, 2022, to the liabilities as of June 30, 2023.

Table VI-3 is the Schedule of Funded Liabilities by Type which shows the portion of Accrued Liability covered by Assets. This exhibit can be used with the City’s Annual Comprehensive Financial Report.

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
**ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**SECTION VI – FINANCIAL STATEMENT INFORMATION**

**Table VI-1**  
**Accounting Statement Information**  
*(*\$ in Thousands*)*

	June 30, 2022	June 30, 2023
1. Present Value of Benefits Accrued and Vested to Date		
a. Members Currently Receiving Payments	\$ 978,800	\$ 1,017,257
b. Vested Terminated Members	116,063	117,469
c. Active Members	<u>314,922</u>	<u>284,648</u>
d. Total PVVB	<u><u>\$ 1,409,785</u></u>	<u><u>\$ 1,419,374</u></u>
2. Present Value of Non-Vested Accrued Benefits for Active Members	\$ 15,844	\$ 13,985
3. Total Present Value of Accrued Benefits	<u><u>\$ 1,425,629</u></u>	<u><u>\$ 1,433,359</u></u>
4. Assets at Market Value	\$ 1,202,663	\$ 1,244,910
5. Unfunded Present Value of Accrued Benefits [3. - 4., not less than 0]	\$ 222,966	\$ 188,449
6. Ratio of Assets to Value of Benefits [4. ÷ 3.]	84.4%	86.9%

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
**ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**SECTION VI – FINANCIAL STATEMENT INFORMATION**

**Table VI-2**  
**Statement of Changes in Total Actuarial Present Value of Accrued Benefits**  
*(**\$ in Thousands**)*

FASB ASC Topic No. 960	<b>Accumulated Benefit Obligation</b>
Actuarial Present Value of Accrued Benefits as of June 30, 2022	\$ 1,425,629
Increase/(Decrease) During Years Attributable to:	
Passage of Time	\$ 92,586
Benefits Paid during FYE 2023	(107,961)
Change in Assumptions	0
Plan Changes	(3,192)
Benefits Accrued, Other Gains/Losses	26,297
Net Increase/(Decrease)	\$ 7,730
Actuarial Present Value of Accrued Benefits as of June 30, 2023	\$ 1,433,359

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
**ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**SECTION VI – FINANCIAL STATEMENT INFORMATION**

**Table VI-3**  
**Schedule of Funded Liabilities by Type**  
**Aggregate Accrued Liabilities**  
*( $\$$  in Thousands)*

Valuation Date July 1	(1)			(2)			(3)			Portion of Accrued Liabilities Covered by Reported Assets
	Active Member Contributions	Retirees, Vested Terms, Beneficiaries	Employer Financed Portion	Reported Assets <sup>1</sup>	(1)	(2)	(3)			
2002	N/A	\$ 372,748	\$ 411,905	\$ 798,071	100%	100%	100%	87%	87%	100%
2003	N/A	\$ 397,311	\$ 415,926	\$ 760,503	100%	100%	100%	93%	93%	100%
2004	\$ 215	421,471	423,984	816,120	100%	100%	100%	88%	88%	100%
2005	198	469,436	414,296	854,146	100%	100%	100%	93%	93%	100%
2006	84	566,233	372,780	881,036	100%	100%	100%	84%	84%	100%
2007	83	585,584	386,564	925,821	100%	100%	100%	88%	88%	100%
2008	79	605,567	403,409	937,767	100%	100%	100%	82%	82%	100%
2009	72	617,813	411,732	885,609	100%	100%	100%	65%	65%	100%
2010	55	637,489	409,218	817,698	100%	100%	100%	44%	44%	100%
2011	197	658,832	404,945	831,975	100%	100%	100%	43%	43%	100%
2012	770	768,508	375,129	923,199	100%	100%	100%	41%	41%	100%
2013	1,780	782,860	375,074	954,499	100%	100%	100%	45%	45%	100%
2014	3,451	816,288	377,728	1,011,523	100%	100%	100%	51%	51%	100%
2015	8,425	850,742	365,456	1,038,059	100%	100%	100%	49%	49%	100%
2016	15,493	877,143	361,774	1,048,346	100%	100%	100%	43%	43%	100%
2017	21,937	921,087	392,802	1,043,620	100%	100%	100%	26%	26%	100%
2018	29,427	950,489	397,973	1,074,892	100%	100%	100%	24%	24%	100%
2019	34,844	979,721	383,423	1,097,451	100%	100%	100%	22%	22%	100%
2020	40,701	1,001,938	378,389	1,100,046	100%	100%	100%	15%	15%	100%
2021	45,445	1,024,402	361,668	1,297,114	100%	100%	100%	63%	63%	100%
2022	45,687	1,094,861	394,066	1,291,722	100%	100%	100%	38%	38%	100%
2023	43,443	1,134,727	352,586	1,293,562	100%	100%	100%	33%	33%	100%

<sup>1</sup> Reported assets are actuarial value of assets. If assets were the market value of assets, results would differ.

THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK  
 ACTUARIAL VALUATION AS OF JUNE 30, 2023

**APPENDIX A – MEMBERSHIP INFORMATION**

Table A-1 Summary of Active Membership as of June 30, 2023 <sup>1</sup>					
Plan	Count	Average Age	Average Service	Average Salary	
General	1,417	51.2	13.1	\$ 60,817	
Public Safety	704	42.8	14.9	71,686	
<b>Total System</b>	<b>2,121</b>	<b>48.4</b>	<b>13.7</b>	<b>64,425</b>	

<sup>1</sup> Excludes those on Leave of Absence

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
**ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**APPENDIX A – MEMBERSHIP INFORMATION**

**Table A-2**  
**Summary of Inactive Membership as of June 30, 2023**  
*(**\$ in Thousands**)*

	<b>Count</b>	<b>Annual Benefit</b>	<b>Average Annual Benefit</b>
<b>Service Retirements</b>			
General	2,431	\$ 47,136	\$ 19.4
Public Safety	1,063	38,492	36.2
<b>Total</b>	<b>3,494</b>	<b>\$ 85,628</b>	<b>24.5</b>
<b>DROP Participants<sup>1</sup></b>			
General	63	\$ 1,301	\$ 20.7
Public Safety	45	1,686	37.5
<b>Total</b>	<b>108</b>	<b>\$ 2,987</b>	<b>27.7</b>
<b>Contingent Annuitants</b>			
General	378	\$ 3,756	\$ 9.9
Public Safety	239	3,654	15.3
<b>Total</b>	<b>617</b>	<b>\$ 7,410</b>	<b>12.0</b>
<b>Disableds</b>			
General	172	\$ 2,660	\$ 15.5
Public Safety	133	3,671	27.6
<b>Total</b>	<b>305</b>	<b>\$ 6,331</b>	<b>20.8</b>
<b>Vested Former Members<sup>2</sup></b>			
General	1,178	\$ 8,608	\$ 7.3
Public Safety	418	6,374	15.2
<b>Total</b>	<b>1,596</b>	<b>\$ 14,982</b>	<b>9.4</b>

<sup>1</sup> For those in the DROP period, the amount shown is 70% of the full monthly benefit.

<sup>2</sup> Benefits are assumed payable at Normal Retirement Age. Includes 13 participants on leave of absence that are currently vested.

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
**ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**APPENDIX A – MEMBERSHIP INFORMATION**

**Table A-3**  
**Data Reconciliation<sup>1</sup>**

	<b>Vested Former Members<sup>2</sup></b>	<b>Service Retirements</b>	<b>DROP Participants</b>	<b>Contingent Annuitants</b>	<b>Disableds</b>	<b>Total</b>
Count as of June 30, 2022	2,914	1,533	3,434	52	616	301
						8,850
Additions						
Return from Leave of Absence	3	0	0	0	0	3
New Beneficiaries & QDROs	0	0	0	0	6	6
Data Corrections	0	11	3	0	1	15
Removals						
Non-Vested Terminations	(86)	0	0	0	0	(86)
Transfer to VRS	(394)	(2)	0	0	0	(396)
Death without Beneficiary	(7)	(7)	(82)	0	(45)	(147)
Data Corrections	0	(2)	0	0	0	(4)
Status Transitions						
Return to Work	6	(6)	0	0	0	0
Vested Terminations	(129)	129	0	0	0	0
DROP Entrants	(81)	0	0	81	0	0
Retirements	(97)	(55)	177	(25)	0	0
Disabilities	(6)	(5)	0	0	11	0
Death with Beneficiary	(2)	0	(36)	40	(2)	0
Count as of June 30, 2023	2,121	1,596	3,494	108	617	305
						8,241

<sup>1</sup> Reconciliation excludes participants due an account balance and non-vested participants on Leave of Absence.

<sup>2</sup> 18 and 13 participants on Leave of Absence as of June 30, 2022 and June 30, 2023, respectively, are entitled to a vested benefit and thus included as Vested Former Members.

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
**ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**APPENDIX A – MEMBERSHIP INFORMATION**

**Table A-4**  
**Distribution of Active Participants - General Employees**  
*(*\$* in Thousands)*

<b>COUNTS BY AGE/SERVICE</b>											
Age	Service										Total
Under 25	0	5	0	0	0	0	0	0	0	0	5
25 to 29	0	20	9	0	0	0	0	0	0	0	29
30 to 34	0	28	38	12	0	0	0	0	0	0	78
35 to 39	0	37	66	29	21	0	0	0	0	0	153
40 to 44	0	35	68	31	32	8	0	0	0	0	174
45 to 49	0	29	39	24	40	25	5	0	0	0	162
50 to 54	0	31	45	34	49	52	20	6	0	0	237
55 to 59	0	29	49	41	42	39	30	14	7	0	251
60 to 64	1	23	38	19	38	30	21	11	7	3	191
65 to 69	0	5	11	21	23	12	12	6	4	5	99
70 & up	0	4	7	6	1	2	1	4	7	7	38
Total	1	246	370	217	251	167	90	38	22	15	1,417
<b>TOTAL SALARY BY AGE/SERVICE</b>											
Age	Service										Total
Under 25	\$ 0	\$ 210	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 210
25 to 29	0	842	446	0	0	0	0	0	0	0	1,287
30 to 34	0	1,219	2,051	558	0	0	0	0	0	0	3,828
35 to 39	0	1,746	3,693	1,607	1,098	0	0	0	0	0	8,145
40 to 44	0	1,826	4,002	1,823	2,087	486	0	0	0	0	10,225
45 to 49	0	1,283	2,528	1,654	2,405	1,424	409	0	0	0	9,703
50 to 54	0	1,524	2,883	2,329	3,246	3,445	1,592	478	0	0	15,498
55 to 59	0	1,540	3,093	2,482	2,470	2,196	1,981	1,076	489	0	15,328
60 to 64	349	1,392	2,475	1,276	2,363	1,772	1,377	753	459	182	12,398
65 to 69	0	330	812	1,421	1,556	719	650	517	345	429	6,778
70 & up	0	241	787	409	347	53	117	41	262	524	2,780
Total	\$ 349	\$ 12,153	\$ 22,771	\$ 13,559	\$ 15,572	\$ 10,094	\$ 6,127	\$ 2,864	\$ 1,555	\$ 1,134	\$ 86,178

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
**ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**APPENDIX A – MEMBERSHIP INFORMATION**

**Table A-5**  
**Distribution of Active Participants - Public Safety**  
*(*\$ in Thousands*)*

<b>COUNTS BY AGE/SERVICE</b>											
<b>Age</b>	<b>Service</b>										<b>Total</b>
Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up		
Under 25	0	10	0	0	0	0	0	0	0	10	10
25 to 29	0	30	25	0	0	0	0	0	0	55	55
30 to 34	0	18	38	25	1	0	0	0	0	82	82
35 to 39	0	9	18	65	38	0	0	0	0	130	130
40 to 44	0	2	12	26	75	19	0	0	0	134	134
45 to 49	0	2	4	11	40	54	9	0	0	120	120
50 to 54	0	3	1	15	27	39	15	4	0	104	104
55 to 59	0	0	3	15	13	14	10	2	1	61	61
60 to 64	0	0	0	0	2	3	0	1	1	8	8
65 to 69	0	0	0	0	0	0	0	0	0	0	0
70 & up	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>74</b>	<b>101</b>	<b>145</b>	<b>198</b>	<b>128</b>	<b>38</b>	<b>15</b>	<b>3</b>	<b>704</b>	
<b>TOTAL SALARY BY AGE/SERVICE</b>											
<b>Age</b>	<b>Service</b>										<b>Total</b>
Under 25	\$ 0	\$ 532	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 532	
25 to 29	0	1,582	1,436	0	0	0	0	0	0	3,018	
30 to 34	0	914	2,284	1,662	59	0	0	0	0	4,918	
35 to 39	0	478	1,065	4,364	2,901	0	0	0	0	8,808	
40 to 44	0	98	683	1,760	5,704	1,534	0	0	0	9,778	
45 to 49	0	97	252	753	3,003	4,658	749	0	0	9,512	
50 to 54	0	154	25	982	2,005	3,231	1,390	399	0	8,186	
55 to 59	0	0	77	185	1,087	1,052	1,206	1,072	249	5,033	
60 to 64	0	0	0	0	151	249	0	81	102	104	
65 to 69	0	0	0	0	0	0	0	0	0	683	
70 & up	0	0	0	0	0	0	0	0	0	0	
<b>Total</b>	<b>\$ 0</b>	<b>\$ 3,855</b>	<b>\$ 5,822</b>	<b>\$ 9,705</b>	<b>\$ 14,909</b>	<b>\$ 10,723</b>	<b>\$ 3,345</b>	<b>\$ 1,552</b>	<b>\$ 351</b>	<b>\$ 50,467</b>	

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK  
ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS**

## **A. Actuarial Assumptions**

### **Interest Rate**

6.75% per annum, compounded annually (originally adopted as of June 30, 2022).

An effective interest rate of 4.90% was used when calculating the LDROM to meet the new requirements under Actuarial Standard of Practice No. 4. This was based on the FTSE Pension Liability Index published as of June 30, 2023.

### **Mortality**

#### Pre-Retirement

General: Pub-2010(B) General Employee Below-Median Table with fully generational improvements using Scale MP-2021, with 5% of deaths assumed accidental

Public Safety: Pub-2010 Safety Employee Table with fully generational improvements using Scale MP-2021, with 60% of deaths assumed accidental

#### Healthy Annuitant

General: Pub-2010(B) General Healthy Annuitant Below-Median Table with fully generational improvements using Scale MP-2021

Public Safety: Pub-2010 Safety Healthy Annuitant Table with fully generational improvements using Scale MP-2021

#### Disabled

General: Pub-2010 General Disabled Annuitant Table with fully generational improvements using Scale MP-2021

Public Safety: Pub-2010 Safety Disabled Annuitant Table with fully generational improvements using Scale MP-2021

### **Salary Increase**

Annual rates of salary increases are as follows:

Service	General	Public Safety
0	6.09 %	9.18 %
1	5.94	5.58
2	5.78	5.32
3	5.63	5.32
4	5.47	5.32
5	5.32	5.32
10	4.55	5.32
15	4.03	5.32
20	4.03	4.65
25	4.03	4.03
30	3.71	4.03

*The table above includes an annual inflation rate of 3.00%.*

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK  
ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS**

**Withdrawal**

Service	General	Public Safety
0	23.00 %	12.50 %
1	20.00	12.00
2	18.00	11.00
3	16.00	10.00
4	15.00	9.00
5	14.00	8.00
10	8.00	3.00
15	3.00	1.00
20	3.00	1.00
25	3.00	1.00

**Disability**

Age	General*		Public Safety**
	Male	Female	Unisex
20	0.02%	0.02%	0.02%
25	0.03	0.02	0.02
30	0.03	0.02	0.04
35	0.05	0.03	0.05
40	0.06	0.05	0.09
45	0.09	0.07	0.18
50	0.16	0.12	0.30
54	0.21	0.16	0.41
55	0.25	0.19	0.43
59	0.37	0.28	0.57

\*25% of General disabilities are assumed to be accidental

\*\*70% of Public Safety disabilities are assumed to be accidental

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
**ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS**

**Retirement**

*General*

Age	<i>Hired On or After July 1, 2018</i>			
	Hired Before 7/1/2018	Social Security NRA 65	Social Security NRA 66	Social Security NRA 67
50	10.00 %	10.00 %	10.00 %	10.00 %
51	10.00	10.00	10.00	10.00
52	10.00	10.00	10.00	10.00
53	10.00	10.00	10.00	10.00
54	10.00	10.00	10.00	10.00
55	10.00	10.00	10.00	10.00
56	10.00	10.00	10.00	10.00
57	10.00	10.00	10.00	10.00
58	10.00	10.00	10.00	10.00
59	10.00	10.00	10.00	10.00
60	22.50	12.50	12.50	12.50
61	22.50	12.50	12.50	12.50
62	30.00	12.50	12.50	12.50
63	22.50	12.50	12.50	12.50
64	25.00	15.00	15.00	15.00
65	35.00	35.00	15.00	15.00
66	35.00	35.00	35.00	15.00
67	35.00	35.00	35.00	35.00
68	25.00	25.00	25.00	25.00
69	25.00	25.00	25.00	25.00
70	100.00	100.00	100.00	100.00

For those hired before July 1, 2018, the retirement rates at ages before 60 are 10% higher than those shown above if the participant has at least 30 years of service. For those hired on or after July 1, 2018, the retirement rate is 10% higher than shown above at ages before Social Security Normal Retirement Age (SSNRA) if the participant is eligible for an unreduced benefit under the “Rule of 90.”

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK  
ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS**

*Public Safety*

Service	Rate of Retirement*
20	5.00%
21	7.50
22	7.50
23	10.00
24	30.00
25	30.00
26	30.00
27 and up	20.00

*\* In lieu of the rates above, any active participant at least age 65 is assumed to retire immediately.*

**Terminated Vested Retirement Age**

Terminated vested participants are assumed to retire at the later of their normal retirement date and the valuation date.

**Future Expenses**

Administrative expenses are assumed to be \$1,100,000 payable at the beginning of the year, increasing 3% annually. The assumed interest rate is net of anticipated investment expenses.

**Loading or Contingency Reserves**

A load of 1.00% for General Employees and 1.15% for Public Safety is applied to retirement benefits for active employees to account for unused sick leave balances at retirement.

**Marital Status**

For active members, 65% of Public Safety and 55% of General Employees are assumed to be married, with males three years older than females.

For inactive participants, those with “unknown” marital status were updated to use data from the prior year.

**Form of Payment Election**

For retirees with a specified optional form of payment, the raw data was used. For all other retirees and beneficiaries, the form of payment is determined by marital status. Those with a marital status of “married” are assumed to receive their benefit as a 50% Joint & Survivor, and all unmarried participants are assumed to receive a Single Life Annuity.

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK  
ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS**

**DROP Election**

70% of members that have reached the maximum pensionable service (26 years for Public Safety, 35 years for General) and 30% of members with less than the maximum pensionable service are assumed to elect to enter DROP in lieu of immediate retirement.

**Rationale for Economic and Demographic Assumptions**

Assumptions were set by the Board of Trustees on the basis of recommendations made by Cheiron as a result of an experience study covering the period from July 1, 2016 through June 30, 2021.

The combined effect of the assumptions in aggregate is expected to have no significant bias.

**Changes in Assumptions**

The administrative expense assumption was updated to \$1.1 million to better reflect recent experience.

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK  
ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS**

## **B. Actuarial Methods**

### **Actuarial Cost Method**

Entry Age Normal Cost Method. The unfunded actuarial liability (UAL) as of June 30, 2017, is being amortized over a closed 20-year period. Subsequent annual changes in the UAL are amortized over their own closed 20-year periods calculated as follows: The UAL is adjusted for one year, by increasing it at the assumed interest rate and reducing it by the portion of the City's scheduled contribution not attributable to the value of additional benefits earned (i.e., normal cost) or administrative expenses. The resulting projected UAL is then amortized over a 20-year period using a level-dollar amortization.

City contributions are assumed to occur on the July 1 following the valuation date to be made on the basis of the amounts developed in this valuation.

In accordance with the pension funding policy, City contributions in the first year after the issuance of pension obligation bonds (POB) will be based on the actuarially determined contribution. With the most recent POB issuance on June 29, 2021, the July 1, 2022 contribution amount was set through the actuarial process. For all subsequent fiscal years, City contributions cannot be less than the preceding year until the System reaches 100% funding. In this determination, no consideration is given for Section 115 Trust contributions or any additional one-time City contributions from the prior fiscal year. Other conditions that would provide consideration to adjust the contribution amount would be if the total contribution exceeds a 6% increase from the preceding year or if the total contribution exceeds \$80 million.

### **Asset Valuation Method**

The actuarial value of assets is determined by first calculating the expected actuarial value of assets based on last year's valuation interest rate, last year's actuarial value of assets, and the net cash flow (contributions less benefit payments and assumed administrative expenses) of the System over the year prior to the valuation. One-third of the market value of assets less the expected actuarial value of assets is then added to the expected actuarial value of assets to determine the valuation assets.

### **Valuation Software**

Cheiron utilizes ProVal, an actuarial valuation software leased from Winklevoss Technologies (WinTech) to calculate liabilities and project 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.

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK  
ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS**

**Projection Software**

Projected expected results of future valuations in this valuation were developed using P-Scan, our proprietary tool for the intended purpose of developing projections. As part of the review process for this valuation, we have performed several tests to verify that the results are reasonable and appropriate. We are not aware of any material inconsistencies, unreasonable output resulting from the aggregation of assumptions, material limitations, or known weaknesses that would affect this valuation and the projections contained within.

**Changes in Actuarial Methods**

None.

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK  
ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**APPENDIX C – SUMMARY OF PLAN PROVISIONS**

The following is intended to summarize the key benefits valued in this valuation. Members of the System and other parties should not rely on this summary as a substitute for or interpretation of the laws and ordinances of the Norfolk City Code covering this retirement plan.

**1. Membership**

Any permanent regular full-time employee entering the service of the City of Norfolk prior to January 1, 2022 is required to become a member of the Retirement System. Upon entering the System, members are classified according to their occupational group, either as General Employees, Firefighters, Police Officers, or Paramedics.

Paramedics, formerly members of the General Employees Group, were reclassified as members of Public Safety effective June 9, 1992. City Council members on or after July 1, 2001, are classified as members of Public Safety.

For each full calendar year beginning on or after January 1, 1997, any permanent part-time employees shall be members of and entitled to benefits in proportion to which their annual hours bear to those of full-time employees.

A member, who was a Norfolk Community Services Board employee on June 30, 2012, who became a City employee on July 1, 2012, began participating in this retirement plan on such date. Prior service for these employees was credited towards benefit eligibility only. Lastly, these employees were exempt from the member's mandatory contributions applicable to anyone hired on or after October 5, 2010 until January 8, 2015.

**2. Normal Service Retirement Allowance**

**Eligibility**

*Employees Hired Before July 1, 2018*

For General Employees, the earlier of age 60 or 30 years of creditable service.

For Firefighters, Police Officers, and Paramedics, the earlier of age 55 or 25 years of creditable service. Mandatory retirement is age 65 for Firefighters and Police Officers.

*Employees Hired On or After July 1, 2018*

For General Employees, the earlier of the retirement age as defined under the Social Security Act (42 U.S.C §416) or the age at which the combination of a participant's age and service sums to at least 90.

For Firefighters, Police Officers, and Paramedics, the earlier of age 60 or age 50 with 25 years of creditable service. Mandatory retirement is age 65 for Firefighters and Police Officers.

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK  
ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**APPENDIX C – SUMMARY OF PLAN PROVISIONS**

**Amount**

*Employees Hired Before July 1, 1980*

For General Employees, the pension earned is 2% of average final compensation for each year of creditable service.

Effective January 1, 1997 for General Employees, the maximum number of years of creditable service is the greater of 35 years or the number of years of service as of December 31, 1996.

For Firefighters, Police Officers, and Paramedics, the pension earned is 2.5% of average final compensation for each year of creditable service up to a maximum of 65% of average final compensation.

*Employees Hired Between July 1, 1980 and June 30, 2018*

For General Employees, the pension earned is 1.75% of average final compensation for each year of creditable service up to a maximum of 35 years.

For Firefighters, Police Officers, and Paramedics, the pension earned is 2.5% of average final compensation for each year of creditable service up to a maximum of 65% of average final compensation.

“Average Final Compensation” means the average annual earnable compensation for the three years of creditable service which produces the highest average. Creditable service consists of membership service plus 100% of accumulated unused sick leave for all employees except Firefighters. For Firefighters, 46% of unused sick leave accumulated prior to July 1, 1985 and 100% of unused sick leave accumulated on and after July 1, 1985 is included.

*Employees Hired On or After July 1, 2018*

For General Employees, the pension earned is 1.75% of average final compensation for each year of creditable service up to a maximum of 35 years.

For Firefighters, Police Officers, and Paramedics, the pension earned is 2.5% of average final compensation for each year of creditable service up to a maximum of 65% of average final compensation.

“Average Final Compensation” means the average annual earnable compensation for the five years of creditable service which produces the highest average. Creditable service consists of membership service plus 100% of accumulated unused sick leave for all employees except Firefighters. For Firefighters, 46% of unused sick leave accumulated prior to July 1, 1985 and 100% of unused sick leave accumulated on and after July 1, 1985 is included.

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK  
ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**APPENDIX C – SUMMARY OF PLAN PROVISIONS**

**3. Early Service Retirement Allowance**

**Eligibility**

Within five years of eligibility for normal service retirement.

**Amount**

Accrued service retirement allowance deferred to normal service retirement age. A member may elect to receive an immediate benefit equal to the accrued service retirement allowance reduced by  $\frac{1}{4}$  of 1% for each month commencement date precedes the normal retirement date for General Employees, and  $\frac{1}{2}$  of 1% for each month commencement date precedes the normal retirement date for firefighters, police officers, and paramedics.

**4. Vested Allowance**

**Eligibility**

Five years of creditable service.

**Amount**

Accrued service retirement allowance deferred to normal retirement age. If not eligible for retirement, a member may elect to leave their contributions made prior to July 1, 1972 with interest, if any, in the System until normal service retirement date.

**5. Ordinary Disability Retirement Allowance**

**Eligibility**

Five years of creditable service and total and permanent disability not due to an accident in the performance of duty.

**Amount**

Accrued service retirement allowance with a minimum of 25% of average final compensation. The minimum cannot exceed the normal service retirement allowance based on average final compensation and creditable service projected to normal service retirement date.

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK  
ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**APPENDIX C – SUMMARY OF PLAN PROVISIONS**

**6. Accidental Disability Retirement Allowance**

**Eligibility**

Total and permanent disability as a result of an accident in the performance of duty, regardless of length of service. Applications must be filed within six years from the date of accident.

The disability of a firefighter, police officer, sheriff, or deputy sheriff caused by hypertension, heart disease, or respiratory disease is presumed to have been suffered in the line of duty unless the contrary is shown by medical evidence.

**Amount**

The amount payable is 66 $\frac{2}{3}$ % of average final compensation.

**7. Ordinary Death Benefit**

**Eligibility**

Death in active service due to causes not the result of an accident in the performance of duty. Benefits are paid to a designated beneficiary or estate.

**Amount**

If the deceased member was not vested, mandatory contributions made after October 5, 2010, prior to vesting, together with such interest, if any, made by the member with not less than one-half of the interest credited are paid to the nominated beneficiary, otherwise the estate. Any employee who becomes a member of the system on or after July 1, 1979 that attained five (5) or more years of creditable service in the system a lump-sum benefit equal to 50% of their earnable compensation during the year immediately preceding their death is payable to the nominated beneficiary. If a member dies in service on or after July 1, 1974 and the member was eligible for early or normal service retirement, and if the person nominated was their spouse, the spouse may elect to receive, in lieu of a lump sum benefit, a monthly benefit is equal to one-half of the retirement allowance that would have been payable to the member had the member retired and immediately commenced payment. If the spouse dies or remarries before the youngest unmarried child attains age 18, the pension shall continue to the unmarried children to the date that all the children have died, married, or attained age 18, whichever occurs first. If the spouse was receiving benefits on or before June 30, 1978, payments shall continue after remarriage with no further payments after death.

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK  
ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**APPENDIX C – SUMMARY OF PLAN PROVISIONS**

**8. Accidental Death Benefit**

**Eligibility**

Death in active service resulting from an accident in the performance of duty within six years from the date of the accident. The death of a firefighter, police officer, sheriff, or deputy sheriff caused by hypertension, heart disease, or respiratory disease in the case of firefighters is presumed to have been suffered in the line of duty unless the contrary is shown by medical evidence.

**Amount**

If the deceased member was not vested, mandatory contributions made after October 5, 2010, prior to vesting, together with such interest, if any, made by the member with not less than one-half of the interest credited are paid to nominated beneficiary, otherwise the estate. A pension, one-half of the average final compensation, is payable to the spouse until death or remarriage. If there is no spouse or if the spouse dies or remarries, the benefit is payable to children under age 18 or if there are no children under the age of 18, then the member's living parents.

**Offset on Account of Workers' Compensation**

All benefits paid under the provisions of any workers' compensation act or any similar law to any member or beneficiary, or to the dependents of any member or beneficiary on account of any disability or death are in such manner as the Board determines, offset against any benefits provided from City contributions to the Employees' Retirement System.

**9. Death Benefit After Retirement**

**Eligibility**

Death of a retiree who became a member between July 1, 1979 and June 30, 2016, completed five years of creditable service, and was receiving retirement allowance payments; or of a spouse receiving an accidental death benefit.

**Amount**

*Lump sum death benefit.* Lump sum equal to one-half of the average final compensation on which the retirement allowance of the deceased retired member or spouse was based. The lump sum is payable to the surviving spouse, to unmarried children under age 18, or unmarried children over age 18 who are physically or mentally unable to make a living based on the form of payment elected by the member at retirement.

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK**  
**ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**APPENDIX C – SUMMARY OF PLAN PROVISIONS**

*Survivor continuance.* Designated beneficiaries may also be eligible for a full or partial continuance of the member's monthly retirement allowance. The following table details the optional forms of payment available to members at retirement, specifies their corresponding continuance amounts, and indicates the options that are entitled to the lump sum death benefit described above. Reductions to the member benefit for the optional forms of payment are made on an actuarial equivalent basis.

<b>Option</b>	<b>Survivor Continuance</b>	<b>Lump Sum Death Benefit</b>
No Option	For persons who became members before July 1, 2016 who have not made an optional allowance election, an unreduced pension with the provision that at death, 50% of the unreduced pension will be continued through the life of the surviving spouse; or, if there is no surviving spouse, then to a surviving unmarried child or children under age eighteen (18) at the date of death, or to a surviving unmarried child or children over age eighteen (18), if the medical board shall certify that such unmarried child or children are physically or mentally unable to make a living.	Eligible for members hired before July 1, 2016; at election of the survivor, the lump sum death benefit would be payable in lieu of the Survivor Continuance
	For members hired on or after July 1, 2016, an unreduced pension is payable for the life of the member.	
	This benefit would payable in lieu of the lump sum death benefit.	
Option A	For members hired before July 1, 2016, A reduced pension with the provision that at death, 100% of the reduced pension will be continued throughout the life of the designated beneficiary.	Eligible
Option B	For members hired before July 1, 2016, A reduced pension with the provision that at death, 50% of the reduced pension will be continued throughout the life of the designated beneficiary.	Eligible
Option C	For members hired before July 1, 2016, a reduced pension with the provision that at death some other benefit approved by the Board of Trustees will be payable.	Eligible
Option D	A reduced pension with the provision that at death, 50% of the reduced pension will be continued throughout the life of the designated beneficiary. Upon divorce or death of the designated beneficiary, members are permitted to file only one (1) petition to name an alternative beneficiary under limited circumstances.	Ineligible

**THE EMPLOYEES' RETIREMENT SYSTEM FOR THE CITY OF NORFOLK  
ACTUARIAL VALUATION AS OF JUNE 30, 2023**

**APPENDIX C – SUMMARY OF PLAN PROVISIONS**

**10. Return of Contributions**

**Eligibility**

Termination of non-vested membership prior to death.

**Amount**

If not eligible for a retirement allowance, all contributions with interest credited.

**11. Contributions**

By Members	5% of earnable compensation for anyone hired on or after October 5, 2010. Effective January 8, 2015, all members (except City Council members hired before October 5, 2010) will be required to contribute 5% of earnable compensation.
By City	Annual contributions actuarially computed to be required to cover the cost of benefits of the System.

**12. Deferred Retirement Option Program (DROP)**

**Eligibility**

Any active member of the System who reaches Normal Retirement age may elect to participate.

**Amount**

The DROP period may be elected by the member but shall not exceed the earlier of five years or mandatory retirement age for Public Safety officers. During the DROP period, 70% of the participant's monthly retirement allowance shall be paid to the DROP account. No interest shall accrue on this account during the DROP period. At the end of the DROP period, the participant will receive a lump sum payment of the DROP account and shall begin receiving his or her full monthly benefit payment as a retired member.

**13. Changes in Plan Provisions**

Effective October 1, 2022, the maximum permissible DROP duration was extended from four to five years, subject to Public Safety officer age restrictions.

Retirees who were receiving a retirement benefit on or before June 30, 2022, and had a minimum of 20 years of creditable service are eligible to receive a one-time supplemental payment of \$660 in their July 2023 pension.