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# Town of Elsmere Police Pension Plan

Actuarial Valuation Report For the Year Ending December 31, 2023

Issued October 2023





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October 17, 2023

Personal and Confidential

Town Pension Committee c/o Town of Elsmere 11 Poplar Avenue Elsmere, DE 19805

Dear Committee:

We have performed an actuarial valuation of the Town of Elsmere Police Pension Plan as of January 1, 2023. The purposes of the valuation are to review the experience of the plan during the year that ended December 31, 2022 and to determine the employer cash contribution amount for the year that began January 1, 2023 and ends on December 31, 2023. The employee data and financial information used in this valuation were provided by the Town of Elsmere and by the Trustee and were not audited by us, but were reviewed by us for reasonableness.

This report has been prepared in accordance with generally accepted actuarial principles and practices, and fairly reflects the current actuarial position of the plan. In our opinion, each of the actuarial assumptions used is reasonable and represents our best estimate of expected long-term trends.

In accordance with regulations prescribed for qualified pension plans, this valuation reflects the 2023 Internal Revenue Code Section 415 annual benefit limitation of \$265,000 and the 2023 Internal Revenue Code Section 401(a)(17) limit of \$330,000 on annual compensation for purposes of determining pension benefits.

This report contains a development of the 2023 Actuarially Determined Contribution (ADC) as described in Governmental Accounting Standards Board Statement No. 68 (GASB 68), as well as various disclosures required under GASB 67 and GASB 68.



Paragraph 4 of Section I of this report presents an overview of the GASB contribution and annual expense standards.

The basic valuation results for the year beginning January 1, 2023 and ending December 31, 2023 are as follows:

(1)	Actuarially Determined Contribution (ADC) per GASB 68 for year ending December 31, 2023	\$	230,699
(2)	Market Value of Plan Assets as of January 1, 2023, as reported (including accrued contribution)		2,239,020
(3)	Actuarial Present Value of Accumulated Plan Benefits (ongoing plan basis, 8.00% interest rate), as of January 1, 202	23	4,213,680

We refer you to Section I of this report for a detailed summary and commentary on the results of the valuation and a comparison with the prior valuation. Section II is a summary of the plan provisions, and Section III describes the actuarial cost method and assumptions. Calculation details, supporting data and disclosures are provided in Exhibits A through G.

We will be pleased to answer any questions that you may have regarding this actuarial valuation report.

Very truly yours,

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Parker E. Elmore, EA, ASA, MAAA, FCA Associate, Society of Actuaries

Enclosure



### SECTION I

### PRINCIPAL RESULTS OF THE VALUATION

				January 1, 2023	January 1, 2022
A.	Comp	oarativ	e Summary		
	1.	Actu	arial Accrued Liability	4,213,680	3,980,295
	2.	Actu	arial Value of Assets	<u>2,239,020</u>	<u>2,884,919</u>
	3.	Unfu	nded Actuarial Accrued Liability	1,974,660	1,095,376
	4. Employer Normal Cost		Employer Normal Cost		0
	5.	Actu	arially Determined Contribution ("ADC") per GASB 68	230,699	127,972
	6.	Infor (a)	mation on Plan Members Number of Plan Members (i) Active (ii) Retired (iii) Terminated Vested (iv) Total	0 7 <u>0</u> 7	0 7 <u>0</u> 7
		(b)	<ul> <li>Active Plan Member Data</li> <li>(i) Total Annual Reported Compensation</li> <li>(ii) Average Annual Reported Compensation</li> <li>(iii) Average Attained Age</li> <li>(iv) Average Past Service</li> </ul>	N/A N/A N/A N/A	N/A N/A N/A



### SECTION I

### PRINCIPAL RESULTS OF THE VALUATION

(continued)

			January 1, 2023	January 1, 2022
Α.	A. Comparative Summary (cont'd)			
	7. Acco	untant's Information		
	(a)	Actuarial Present Value of Vested Accumulated Plan Benefits	4,213,680	3,980,295
	(b)	Actuarial Present Value of Non-Vested Accumulated Plan Benefits	<u>0</u>	<u>0</u>
	(c)	Actuarial Present Value of All Accumulated Plan Benefits (ongoing basis): (a) + (b)	4,213,680	3,980,295
	(d)	Market Value of Plan Assets, as reported (including accrued contributions if applicable)	2,239,020	2,884,919
	(e)	Plan Assets / Accumulated Benefit Liability Ratio (ongoing basis): (d)/(c)	53.13%	72.48%

### B. <u>Commentary on Plan Experience and Contribution Amounts</u>

- (1) Plan experience was, in aggregate, less favorable than anticipated during the year ending December 31, 2022. The significant actuarial experience factors occurring during the year were as follows:
  - (a) The estimated annual rate of return on plan assets during 2022 was approximately -16.94% on a market value basis. The actuarial value basis rate of return during 2022 was less than the assumed long-term rate of return of 8.00% per year, thereby resulting in an actuarial loss of approximately \$ 698,114 from this source alone.
  - (b) Plan experience related to participant liabilities were less favorable than expected. The plan saw a loss of \$ 206,727 from this source alone.



### SECTION I

#### PRINCIPAL RESULTS OF THE VALUATION (continued)

### B. <u>Commentary on Plan Experience and Contribution Amounts (cont'd)</u>

(2) The January 1, 2023 market value of plan assets of \$2,239,020 was less than the actuarial present value of all accumulated plan benefits of \$4,213,680 determined on an ongoing plan basis as of January 1, 2023.

The ratio of plan assets to the actuarial present value of accumulated plan benefits (ongoing plan basis) was 53.13% as of January 1, 2023.

(3) This actuarial valuation contains plan book expense and cash contribution standards, as well as certain disclosure information reflecting the requirements set forth in Statements 67 and 68 of the Governmental Accounting Standards Board (GASB).

One of the key features of GASB 68 is the establishment of a benchmark annual cash contribution amount, the so-called "Actuarially Determined Contribution" (ADC). Although plan sponsors are not required to contribute an amount equal to the ADC each year, variations between the ADC and the companion book expense amount (the "Annual Pension Cost") will give rise to a positive or negative Contribution Deficiency / (Excess), which is a measure of the cumulative difference between the theoretical annual expense of the plan, as determined under GASB rules and the "standard" cash contribution level, again determined under GASB rules.

The basic elements used in the calculation of the ADC include (a) the plan's employer "normal" cost for current benefit accruals (as actuarially defined) and (b) a level dollar amortization amount (over 15 years) based on the plan's unfunded actuarial accrued liability.



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### SECTION II

### SUMMARY OF PLAN PROVISIONS

Effective Date	Originally effective June 27, 1966.
<u>Plan Year</u>	July 1 to June 30.
<u>Eligibility</u>	A full-time police officer of the Town shall begin to participate in the Plan on his date of employment with the Employer, provided the Eligible Employee makes an application to the Employer for participation in the Plan and agrees to make mandatory Employee Contributions to the Plan. All officers employed as of June 30, 2012 were moved to the State Retirement Plan and no one hired after that date shall be eligible to participate in the Plan.
<u>Service</u>	Service means the number of years and completed months of employment with the Employer as an Eligible Employee.
Compensation	A Participant's regular salary and wages paid by the Employer for a Plan Year, and excluding overtime, commissions, and discretionary bonuses. Amounts contributed by the Employer under the Plan and any other nontaxable fringe benefits shall not be considered Compensation. "Lump Sum" payments made for accrued sick leave and vacation pay shall also not be considered as Compensation. The compensation cannot exceed the maximum amount specified by IRC Section 401 (\$330,000 for 2023). Note: For benefit calculation purposes, compensation also includes mandatory pre-tax member contributions "picked up" by the employer
	under the terms of the plan in accordance with Internal Revenue Code Section 414(h).



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### SECTION II

# SUMMARY OF PLAN PROVISIONS (continued)

<u>Final Pay</u>	A Participant's Final Pay is the average Compensation (determined on a monthly basis) of the highest 12 consecutive months out of the last three years of employment.	
Normal Retirement Date	<ul> <li>A Participant's Normal Retirement Date is the first day of the month coincident with or following completion of 20 Years of Service, but</li> <li>In the case of a Participant who has 10 or more Years of Service as of September 1, 2003, not later than the Participant's 62<sup>nd</sup> birthday; or</li> <li>In the case of any other Participant, not earlier than the Participant's 50<sup>th</sup> birthday nor later than the Participant's 62<sup>nd</sup> birthday;</li> <li>However, any Participant who terminates employment prior to the completion of 12 Years of Service will not be entitled to a retirement benefit, regardless of his age at termination.</li> </ul>	
<u>Normal Retirement Benefit</u>	The amount of monthly retirement benefit provided to a Participant who retires on his Normal Retirement Date will equal 50% of Final Pay multiplied by a fraction, not greate than one (1), the numerator of which equals Year of Service completed at his Normal Retirement Date and the denominator of wh is 20.	



### SECTION II

## SUMMARY OF PLAN PROVISIONS

(continued)

<u>Normal Form of Annuity</u>	In the case of a Participant who has 10 or more Years of Service as of September 1, 2003, their Normal Form of Annuity is a Joint & 100% Survivor Annuity. All other Participants shall have a Joint & 50% Annuity as their Normal Form of Annuity.
Early Retirement	The first day of the month coincident with or following the completion of 18 Years of Service.
	The amount of monthly retirement benefit provided to a Participant who retires on his Early Retirement Date, <b>payable at his Normal</b> <b>Retirement Date</b> , is equal to 50% of Final Pay at termination of employment multiplied by a fraction, not to exceed one (1), the numerator of which equals the Years of Service completed at termination of employment and the denominator of

which is 20.



### SECTION II

### SUMMARY OF PLAN PROVISIONS

(continued)

**Deferred Retirement** 

In the case of a Participant whose vesting percentage applicable to his Accrued Benefit derived from Employer Contributions is greater than 0%, the amount of monthly retirement benefit, **payable at his Normal Retirement Date**, is equal to 50% of Final Pay at termination of employment multiplied by a fraction, not to exceed one (1), the numerator of which equals the Years of Service completed at termination and the denominator of which is 20.

In the case of a Participant whose vesting percentage applicable to his Accrued Benefit derived from Employer Contributions is equal to 0%, the Participant shall forfeit his non-vested portion of his Accrued Benefit derived from Employer Contributions and shall be paid the value of his Employee Contribution Benefit in a single sum, upon written request. The value of his Employee Contribution Benefit shall equal his Employee Contributions accumulated with interest computed at the rate of 5.0% per annum, simple interest, compounded annually, assuming all contributions are made in the middle of the year.



### SECTION II

### SUMMARY OF PLAN PROVISIONS

(continued)

Pre-Retirement Death Benefit

Upon the death of an active Participant who had 10 or more Years of Service as of September 1, 2003, the Beneficiary shall be entitled to benefits equal to those payable as if the date of death was the Normal Retirement Date, but based on Final Pay as of the date of death.

Upon the death of any other active Participant whose vesting percentage applicable to his Accrued Benefit derived from Employer Contributions is greater than 0%, the Beneficiary shall be entitled to benefits equal to 50% of those payable as if the date of death was the Normal Retirement Date, but based on Final Pay as of the date of death.

Notwithstanding the above, the total amount of benefits payable from the plan with respect to a member in the event of the death of such member, *regardless of marital status or length of service at date of death*, will not be less than the amount standing to the credit of the member in his Mandatory Contribution Account as of the earlier of (a) the date of such members' death or (b) the date benefit payments originally commenced.

Employee ContributionsEach Participant shall contribute six percent (6%) of<br/>his Compensation to the Trust. A record of such<br/>Mandatory Contributions shall be maintained<br/>along with interest credited thereto. A plan<br/>member is fully vested in the amount standing to<br/>his credit in his Mandatory Member Contribution<br/>Account as of any date.

The plan is funded by a combination of Employer and Participant contributions.

### Funding



### SECTION III

### ACTUARIAL COST METHOD, ASSET VALUATION METHOD AND ACTUARIAL ASSUMPTIONS

### A. <u>Actuarial Cost Method</u>

For purposes of calculating ERISA funding contribution amounts, the actuarial cost method used to calculate the costs and liabilities of the plan is the <u>Entry Age Normal</u> <u>Method</u>. A method under which the actuarial present value of the projected benefits of each individual included in the actuarial valuation is allocated on a level basis over the service of the individual between entry age and assumed exit ages. The portion of this actuarial present value allocated to a valuation year is called the normal cost. The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future normal costs is called the actuarial liability. The portion of the actuarial liability exceeding the actuarial value of the assets is called the unfunded actuarial liability. Under this method the following occur:

- (i) Individual Entry Age Normal Costs and Actuarial Liabilities are added together to form the total Entry Age Normal Cost and Actuarial Liability.
- (ii) The entry age for a participant is established as the individual's age on the first valuation date the participant was eligible to enter the Plan.
- (iii) The actuarial gains (losses), Plan amendments and changes in actuarial assumptions, as they occur, reduce (increase) the existing unfunded actuarial liability.

Actuarial gains and losses are calculated each year and amortized over the minimum and maximum periods allowed by law from the year of such gain or loss.

All employees who are plan participants on a valuation date are included in the actuarial valuation

### B. <u>Asset Valuation Method</u>

The actuarial value of plan assets as of a valuation date is equal to the market value of plan assets on the valuation date, as reported by the Trustee, plus any receivable contributions.



### SECTION III

### ACTUARIAL COST METHOD, ASSET VALUATION METHOD AND ACTUARIAL ASSUMPTIONS (continued)

#### C. Actuarial Assumptions Pre- and Postretirement Mortality The 1983 Group Annuity Mortality Table (sex distinct rates) Investment Return 8.00% per year, net of expenses. **Employee** Termination None assumed Compensation Increases N/A Retirement Age Age 50 or Normal Retirement Date, if later. Calculated Pre-Retirement Death Benefit using aforementioned mortality, interest and termination assumptions and on the assumption that 100% of plan members have spouses. It has been assumed that cost-of-living Cost-of-Living Adjustments adjustments will increase benefits by 2.85% per year. For those Participants were not who yet vested on September 1, 2003, this amount will be limited to 2.00%. **Expenses** Investment return is assumed be net of plan expenses paid from the trust fund.



### EXHIBIT A

### Development of Actuarial (Gain) or Loss

Actuarial (gains) or losses occurring during the preceding year are determined as of each valuation date. Both the magnitude and sources of (gains) or losses are monitored over time in order to assess the reasonableness of actuarial assumptions.

#### A. Actuarial (Gain) or Loss for the Year Ending December 31, 2022

(1)	Unfunded Liability as of January 1, 2022	1,095,376
(2)	Employer Normal Cost for year beginning January 1, 2022	0
(3)	Net Interest through December 31, 2022	87,630
(4)	Employer Contribution for year ending December 31, 2022	108,834
(5)	Interest on contributions through December 31, 2022	<u>4,270</u>
(6)	Expected Unfunded Liability as of December 31, 2022: (1) + (2) + (3) - (4) - (5)	1,069,902
(7)	Actual Unfunded Liability as of January 1, 2023	1,974,660
(8)	Actuarial (gain) or loss for year ending December 31, 2022: (7) - (6)	904,758



### EXHIBIT B

### Development of Pension Contribution Amount

Α.	<u>Empl</u>	oyer Normal Cost as of January 1, 2023		
в.	<u>Unfu</u>	nded Actuarial Accrued Liability as of January 1, 2023		0
	(1)	Actuarial Accrued Liability		
		<ul> <li>(a) Active Plan Members</li> <li>(b) Retirees &amp; Beneficiaries Plan Members</li> <li>(c) Terminated Vested Plan Members</li> <li>(d) Total</li> </ul>	0 4,213,680 <u>0</u>	4,213,680
	(2)	Actuarial Value of Plan Assets		<u>2,239,020</u>
	(3)	Unfunded Actuarial Accrued Liability as of January 1, 2023: (1(d) - (2)		1,974,660
C.		tuarially Determined Contribution (ADC) per GASB Itement No. 68, For Year Ending December 31, 2023		
	(1)	Employer Normal Cost from (A.)		0
	(2)	Level Dollar Amortization of the January 1, 2023 unfun accrued liability over 15 years	ded actuarial	213,610
	(3)	Interest at 8.00% on [(1) + (2)] through December 31, 2	2023	17,089
	(4)	Amortization of contribution deficiency / (excess)		<u>0</u>
	(5)	ADC for 2023: (1) + (2) + (3) + (4)		230,699



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### EXHIBIT C

### Statement of Assets

Based upon information furnished by the Trustee, and by the Town of Elsmere, the assets of the plan as of December 31, 2022 are summarized as follows:

#### A. Summary of the Pension Fund

First State Trust Company	2,239,020
Accrued Contribution	<u>0</u>
Assets as of December 31, 2022, as reported	2,239,020
Summary of Transactions of the Pension Fund	
Market Value of Assets as of December 31, 2021	2,884,919
Receipts:	
Employer Contribution for the 2022 plan year Accrued Employer Contribution for the 2022 plan year Employee Contributions - mandatory Total Contributions Net Interest Dividends Change in Accrued Income Change in Unrealized Gain Realized Gain Total Investment Income	108,834 0 <u>0</u> 108,834 (461,125) 0 0 0 0 0 (461,125) (352,291)
Disbursements	
Benefit Distributions Fees and Expenses	280,544 <u>13,064</u>
Total Disbursements	293,608
Market Value of Assets as of December 31, 2022	2,239,020



### EXHIBIT C

### Beginning & ending Balances of Pension Plan Investments For the plan year ending December 31, 2022

	Plan Investments / Net External Cash Flows	Periods Invested	Period Weight	
Beginning value - January 1, 2022	2,884,919	12	1.0000	2,412,847
Monthly net external cash flows:				
January	(22,996)	11	0.9167	(19,521)
February	(22,996)	10	0.8333	(19,814)
March	10,518	9	0.7500	9,199
April	(24,696)	8	0.6667	(21,922)
May	10,977	7	0.5833	9,891
June	18,455	6	0.5000	16,878
July	(26,977)	5	0.4167	(25,041)
August	(23,601)	4	0.3333	(22,236)
September	(23,601)	3	0.2500	(22,570)
October	(23,601)	2	0.1667	(22,908)
November	(32,123)	1	0.0833	(31,648)
December	(24,135)	0	0.0000	(24,135)
Ending value - December 31, 2022	2,239,020			108,834
Money Weighted Rate of Return	-16.36%			
Asset Value - December 31, 2022	2,239,020			



### EXHIBIT C

### Investment Target Allocation & Expected Long Term Real Rates of Return For the plan year ending December 31, 2022

#### Investment Target Allocation & Expected Long-Term Real Rate of Return

			Long-Term Expected
Asset Class	Target Allocation *	Asset Class	Real Rate of Return
Domestic Equity	31.00%	Domestic Equity	5.50%
International Equity	14.00%	International Equity	6.50%
Domestic Fixed Income	22.00%	Domestic Fixed Income	2.50%
International Fixed Income	1.00%	International Fixed Income	3.50%
Alternative Investments	25.00%	Alternative Investments	7.50%
Cash	<u>7.00%</u>	Cash	<u>1.00%</u>
Total	100.00%	Total	5.15%
		Assumed Inflation	<u>2.75%</u>
		Nominal Rate of Return	7.90%

\* Based on DEL-RIP portfolio as of June 30, 2018 (https://auditor.delaware.gov/wp-

content/uploads/sites/40/2018/12/Delaware-Public-Employees-Retirement-System-Financial-Statement-Audit-June-30-2018.pdf)



### EXHIBIT C

### <u>Changes in Net Pension Liability</u> For the plan year ending December 31, 2022

#### **Changes in Net Pension Liability**

		Increase (Decrease)		
	Total Pension	Plan Fiduciary	Net Pension	
	Liability	Net Position	Liability	
Balances at December 31, 2021	3,980,295	2,884,919	1,095,376	
Changes for the year:				
Service Cost	0		0	
Interest	307,202		307,202	
Changes in Benefit terms	0		0	
Changes in Assumptions			0	
Differences between actual and expected experience	206,727		206,727	
Contributions - employer		108,834	(108,834)	
Contributions - member		0	0	
Net Investment Income		(461,125)	461,125	
Benefit payments, including refunds of member contributions	(280,544)	(280,544)	0	
Administrative expense		(13,064)	13,064	
Other Charges		0	0	
Net Changes	233,385	(645,899)	879,284	
Balances at December 31, 2022	4,213,680	2,239,020	1,974,660	

#### Impact of a 1% Change in the Discount Rate

	Discount Rate	Net Pension Liability
Current Rate	8.00%	1,974,660
1% Decrease	7.00%	2,431,603
1% Increase	9.00%	1,589,013



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### EXHIBIT D

### Reconciliation of Plan Membership

A.	Active	Plan	Members

As of January 1, 2022		0
+	New Entrants	0
+	Rehires	0
-	Terminations with Vesting	0
-	Terminations without Vesting	0
-	Retirees	0
-	Deaths	0
-	Lump Sum Paid	<u>0</u>
=	Active Plan Members as of January 1, 2023	0

#### B. Retired Plan Members

As of January 1, 2022 + New Retirees - Deaths + New Beneficiaries

- +Alternate Payee pursuant to a QDRO0=Retired Plan Members and Beneficiaries as of January 1, 20237
- C. Terminated Vested Plan Members

As of January 1, 2022	0
+ New Terminated Vested	0
- Rehire	0
- Retirees	0
- Lump Sum Paid	0
- Deaths	<u>0</u>
= Terminated Vested Plan Members as of January 1, 2023	0

D. Total Number of Plan Members

As of January 1, 2023



### EXHIBIT E

### <u>Value of Accumulated Plan Benefits and</u> <u>Pension Benefit Obligation as of January 1, 2023</u>

Α.	<u>Value of Accumulated Plan Benefits</u> (Ongoing Plan Basis, 8.00% interest rate)			
	(1)	Participants currently receiving payments		4,213,680
	(2)	Other Vested Benefits		
		<ul><li>(a) Active Participants</li><li>(b) Terminated Vested Participants</li><li>(c) Subtotal</li></ul>	0 <u>0</u>	<u>0</u>
	(3)	Total Value of Vested Benefits: (1) + (2)(c)		4,213,680
	(4)	Non-Vested Benefits		<u>0</u>
	(5)	Total Actuarial Present Value of Accumulated Plan Benefits as of January 1, 2023 (Ongoing Plan Basis, 8.00% interest rate): (3) + (4)		4,213,680
		turnial account value of account data data have of the above in (F) have been ealer.	lated has	and an event

 The actuarial present value of accumulated plan benefits shown in (5) has been calculated based on a net investment earnings assumption of 8.00% per year. The actuarial present value of accumulated plan benefits would be greater than the amount shown above if determined using a lower investment earnings assumption.

#### B. Changes in the Value of Accumulated Plan Benefits

(1)	Actuarial Present Value of Accumulated Plan Benefits as of January 1, 2022	3,980,295
(2)	Changes During the Year	
	(a) Increase for Interest due to the decrease in the discount period	307,202
	(b) Benefit payments (including lump sum distributions)	(280,544)
	(c) Assumption Changes	0
	(d) Benefits Accumulated	<u>206,727</u>
	(e) Net Changes	233,385
(3)	Total Actuarial Present Value of Accumulated Plan Benefits as of January	4,213,680

(3) 1, 2023 (Ongoing Plan Basis, 8.00% interest rate): (1) + (2)(e) 4,2: