CONSULTING GROUP

ACTUARIAL VALUATION REPORT

JULY 1, 2024

TOWN OF BERLIN RETIREMENT PLAN

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Executive Summary

	July 1, 2024	July 1, 2023
Number of members		
Active employees	3	3
Terminated vested members	0	1
Retired, disabled and beneficiaries	12	12
Total	15	16
Covered employee payroll	362,057	355,868
Average plan salary	120,686	118,623
Actuarial present value of future benefits	3,030,245	3,168,455
Actuarial accrued liability	2,975,693	3,147,713
Plan assets		
Market value of assets	2,540,360	1,990,519
Actuarial value of assets	2,540,360	1,990,519
Unfunded accrued liability	435,333	1,157,194
Funded ratio	85.4%	63.2%
Actuarially determined employer contribution (ADEC)		
Fiscal year ending	2026	2025
ADEC	295,618	652,688

Valuation Results and Highlights

Purpose of the Valuation

The purpose of the valuation is to develop the Actuarially Determined Employer Contribution (ADEC).
The ultimate cost of a pension plan is based primarily on the level of benefits promised by the plan. The pension fund's investment earnings serve to reduce the cost of plan benefits and expenses. Thus,

> Ultimate cost = Benefits Paid + Expenses Incurred – Investment Return – Employee Contributions

The actuarial cost method distributes this ultimate cost over the working lifetime of current plan participants. By means of this budgeting process, costs are allocated to both past and future years, and a cost is assigned to the current year. The current year's allocated cost, or normal cost, is the building block upon which the actuarially determined employer contribution is developed. The July 1, 2024 valuation produces the contribution for the fiscal year ending 2026.

Information Available in the Valuation Report

The Executive Summary is intended to emphasize the notable results of the valuation from the perspective of the Plan Sponsor. Supporting technical detail is documented in Results of the Valuation, Supporting Exhibits and Description of Actuarial Methods and Assumptions. A concise summary of the principal provisions of the Plan is outlined in Summary of Plan Provisions.

Changes Reflected in the Valuation

Assumption changes are noted in the Assumption section of the report.

Cash Contribution for Fiscal Year Ending 2026

	2026 Fiscal Year
The Town cost is:	$295,618

Liability Experience During Period Under Review

The plan experienced a net actuarial loss on liabilities of $238,698 since the prior valuation.

Asset Experience During Period Under Review

The plan's assets provided the following rate of return during the past fiscal year:

	2024 Fiscal Year
Market Value Basis	0.4%

The Market Value of assets is used to determine plan contributions.

Assessment and Measurement of Risks

Financial Significance of Plan

It is important to understand the size of the pension plan compared to the size of the sponsor of that plan. Additional pension contributions may be required at inopportune times for the plan sponsor. In general, a plan sponsor with assets or revenue that are much larger than the liabilities in its pension plans will be better able to withstand increases in required pension contributions.

Plan Maturity Measurements

	July 1, 2024	July 1, 2023
Actuarial accrued liability for members currently in pay status as a percentage of the total actuarial accrued liability	39.9%	38.5%

• A lower percentage results in greater volatility as the investment return assumption changes.

• A higher percentage results in greater demand on cash due to a proportionately higher percentage of benefits being in pay status.

	July 1, 2024
Duration of benefit payments using an investment rate of return of 3.50%	10.2 years

• A higher duration will occur if the plan's percentage of members in pay status decreases. A plan with a higher duration will have a liability that is more sensitive to changes in the investment return assumption.

	July 1, 2024	July 1, 2023
Ratio of market value of assets to covered payroll	7.0	5.6

• A higher ratio is more typical of relatively mature plans with a larger percentage of inactive members and may cause more potential contribution volatility as pension fund assets fluctuate.

	July 1, 2024
Ratio of market value of assets to expected benefit payments	17.0

• A plan with a high percentage of members in pay status can have a low ratio. As the ratio decreases, liquidity risk increases, and may indicate the need to review (and potentially adjust) the plan sponsor's funding policy contribution.

Risks to Assess

Overriding Minimum Contribution

	Fiscal Year Ending 2026
Actuarially determined employer contribution (ADEC)	295,618
Overriding minimum contribution (OMC)*	80,112
Surplus (deficit) - ADEC vs. OMC	215,506

• A deficit suggests that a plan's current funding policy contribution approach may result in little to no progress being made towards: (1) reducing the plan's unfunded liability; and (2) increasing the plan's funded ratio in the near-term.

** As defined in "Public Pension Plan Funding Policy" (Society of Actuaries, 2010).*

Estimated Impact of a 5% Reduction in Market Value of Assets

	Fiscal Year Ending 2026
Increase in actuarially determined employer contribution (ADEC)	69,202

• Plans would generally be subject to a larger amortization payment if the market value of assets were 5% smaller. As a result, the ADEC would generally be higher for up to 2 years.

Each of these additional contributions will continue for up to 2 years.

Low-Default-Risk Obligation Measure

	July 1, 2024
Low-default-risk obligation measure (LDROM)*	3,131,515
Total actuarial accrued liability (AAL) for all members**	2,975,693
Difference between LDROM and AAL	155,822

• This exhibit illustrates the impact on the ongoing funding liability if the plan decided to invest completely in low-default-risk securities.

** The LDROM discount rate is 3.93%. The discount rate used for this purpose is equal to the published Bond Buyer GO 20-Bond Municipal Index effective as of June 30, 2024. Other than the discount rate, the assumptions and methods are consistent with those used in the actuarial valuation. The disclosure of the LDROM is for illustrative purposes and does not necessarily imply that the associated discount rate should be used for funding purposes.*

*** The discount rate used in the valuation is 3.50%/4.45%.*

Historical Results

Valuation Year Beginning	Investment Return Assumption	Annual Effective Rate of Return on Market Value of Assets	Market Value of Assets as a % of Actuarial Accrued Liability	Benefit Payments as a % of Market Value of Assets
2024	3.50%	N/A	85.4%	N/A
2023	3.50%	0.4%	63.2%	10.3%
2022	3.50%	1.7%	74.7%	51.3%
2021	3.50%	1.2%	21.6%	202.3%
2020	3.50%	2.3%	21.6%	111.6%

Implications of Contribution Allocation Procedure or Funding Policy

I have assessed the impact of the funding policy on the anticipated employer contributions and the plan's funded status. The funding policy is described in the Description of Actuarial Methods section of this report.

I have estimated the approximate length of time before the unfunded accrued liability, if any, will become fully amortized. The period is estimated to be 2 years. Subsequent to the end of this period, the future anticipated employer contributions will be the corresponding annual normal costs.

I have assessed whether the funding policy will be sufficient to cover future benefit payments and administrative expenses. The current funding policy is anticipated to cover these costs indefinitely.

Certification

This report presents the results of the July 1, 2024 Actuarial Valuation for Town of Berlin Retirement Plan (the Plan) for the purpose of estimating the funded status of the Plan and determining the Actuarially Determined Employer Contribution (ADEC) for the fiscal year ending June 30, 2026. This report may not be appropriate for any other purpose.

The valuation has been performed in accordance with generally accepted actuarial principles and practices. It is intended to comply with all applicable Actuarial Standards of Practice.

I certify that the actuarial assumptions and methods that were selected by me and represent my best estimate of anticipated actuarial experience under the Plan. The combined effect of the actuarial assumptions and methods is not expected to contain significant bias, meaning it is not overly optimistic or pessimistic.

In preparing this valuation, I have relied on employee data provided by the Plan Sponsor, and on asset and contribution information provided by the Trustee. I have audited neither the employee data nor the financial information, although I have reviewed them for reasonableness.

The results in this valuation report are based on the Plan as summarized in the *Summary of Plan Provisions* section of this report and the actuarial assumptions and methods detailed in the *Description of Actuarial Methods and Assumptions* section of this report.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to factors such as, but not limited to, the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the Plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of this report, an analysis of the potential range of such future measurements has not been performed.

I have no relationship with the employer or the Plan that would impair, or appear to impair, my objectivity in performing the work presented in this report. I am a member of the American Academy of Actuaries and meet its Qualification Standards to render the actuarial opinion contained herein.

Richard S. Sych, FSA, FCA, MAAA
Enrolled Actuary 23-05065

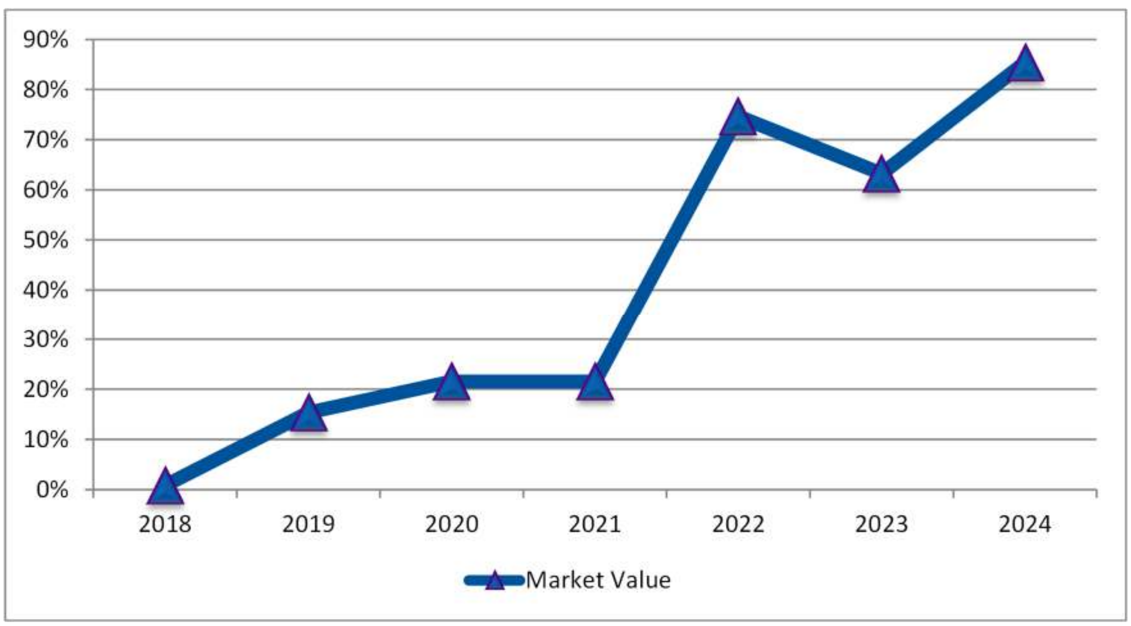
November 13, 2024

Development of Unfunded Accrued Liability and Funded Ratio

	July 1, 2024	July 1, 2023
Actuarial accrued liability for inactive members		
Retired, disabled and beneficiaries	$1,186,322	$1,210,915
Terminated vested members	0	39,086
Total	1,186,322	1,250,001
Actuarial accrued liability for active employees	1,789,371	1,897,712
Total actuarial accrued liability	2,975,693	3,147,713
Actuarial value of assets	2,540,360	1,990,519
Unfunded accrued liability	435,333	1,157,194
Funded ratio	85.4%	63.2%

Actuarial Accrued Liability vs. Market Value of Assets

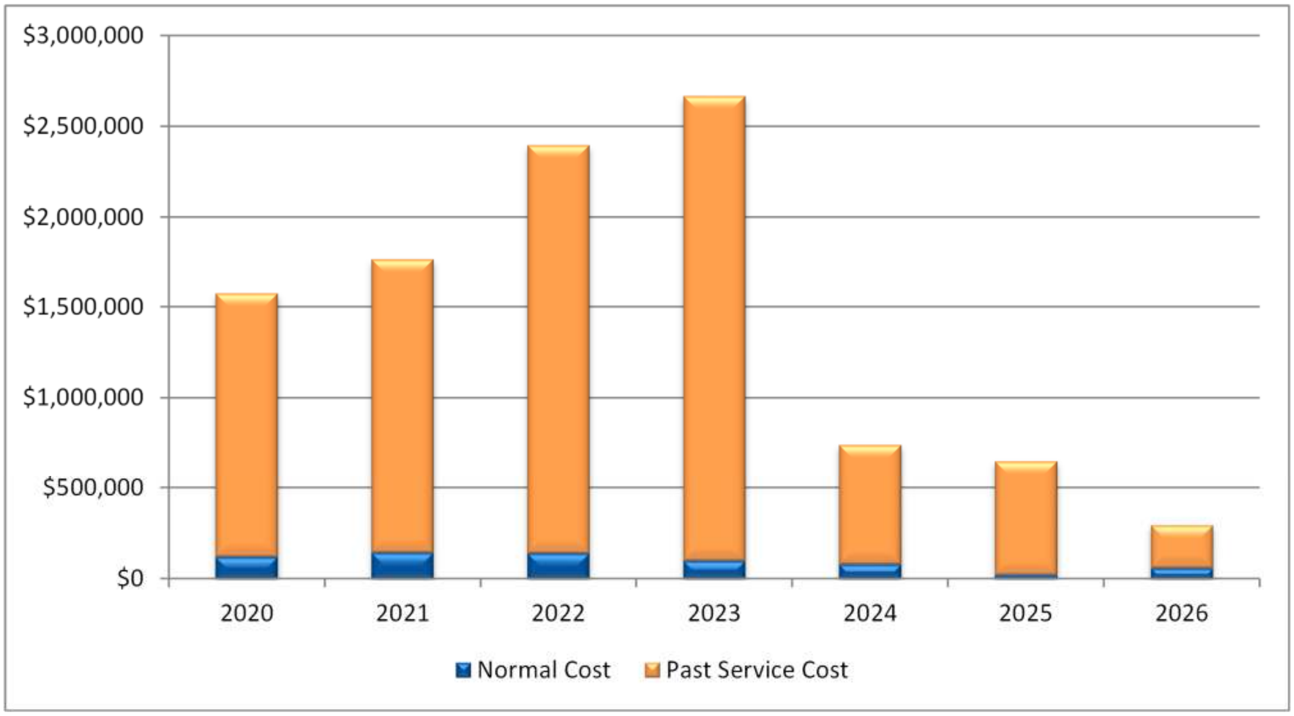
Funded Ratio



Determination of Normal Cost and Actuarially Determined Employer Contribution

	July 1, 2024		July 1, 2023	
	Cost	**Percent of payroll**	**Cost**	**Percent of payroll**
Town's normal cost	$54,552	15.1%	$20,743	5.8%
Amortization of unfunded accrued liability	221,410	61.1%	588,548	165.4%
Contribution before adjustment as of the valuation date	275,962	76.2%	609,291	171.2%
Estimated valuation year payroll for actives not yet at 100% assumed retirement age	362,057		355,868	
Fiscal year ending	2026		2025	
Adjustment for interest	19,656		43,397	
Actuarially determined employer contribution	295,618		652,688	

Actuarially Determined Employer Contribution



Determination of Actuarial Gain/Loss

The Actuarial Gain/Loss is the difference between the expected unfunded accrued liability and the actual unfunded accrued liability, without regard to any changes in actuarial methods, actuarial assumptions or plan provisions. This can also be referred to an Experience Gain/Loss, since it reflects the difference between what was expected and what was actually experienced.

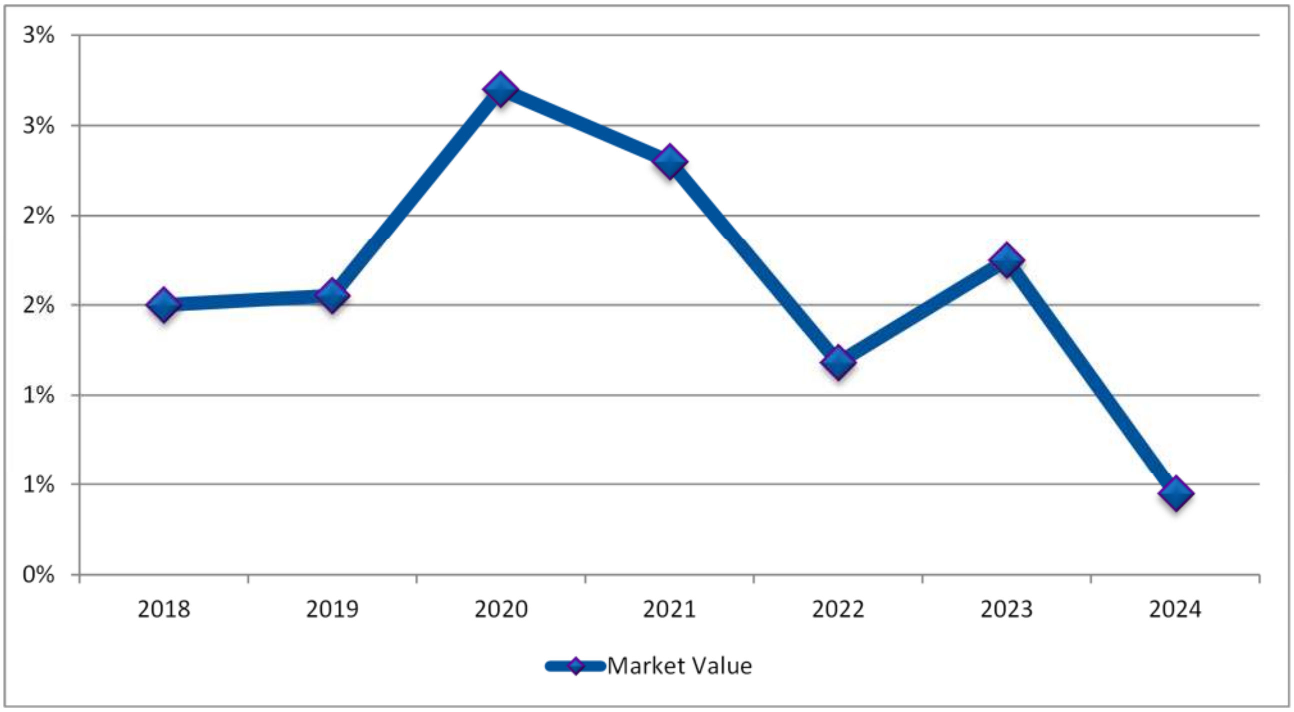
Actuarial Gain / Loss		
Expected unfunded accrued liability July 1, 2024		
Expected unfunded accrued liability July 1, 2024		
Unfunded accrued liability July 1, 2023	$1,157,194	
Gross normal cost July 1, 2023	20,743	
Town and employee contributions for 2023-2024	(742,609)	
Interest at 3.50% to July 1, 2024	15,381	
Expected unfunded accrued liability July 1, 2024	450,709	
Actuarial (gain) / loss July 1, 2024	319,249	
Actual unfunded accrued liability July 1, 2024, prior to plan provision, assumption and method changes		769,958
Sources of (gain) / loss		
Assets	80,551	
Liabilities	238,698	
Total (gain) / loss	319,249	
Assumption and method changes since prior valuation		(334,625)
Actual unfunded accrued liability July 1, 2024, after plan provision, assumption and method changes		435,333

Development of Asset Values

Summary of Fund Activity	
1. Beginning market value of assets July 1, 2023	
Trust assets	$1,990,519
2. Contributions	
Town contributions during year	742,609
Employee contributions during year	0
Total for plan year	742,609
3. Disbursements	
Benefit payments during year	204,648
Administrative expenses during year	0
Total for plan year	204,648
4. Net investment return	
Interest and dividends	0
Realized and unrealized gain / (loss)	11,880
Investment-related expenses	0
Total for plan year	11,880
5. Ending market value of assets July 1, 2024	
Trust assets: (1) + (2) - (3) + (4)	2,540,360
6. Approximate rate of return	0.4%

Rate of Return on Market Value of Assets				
Period Ending June 30	Average Annual Effective Rate of Return			
	1 Year	3 Years	5 Years	10 Years
2015	1.9%	2.3%	N/A	N/A
2016	2.6%	2.1%	N/A	N/A
2017	1.9%	2.1%	2.3%	N/A
2018	1.5%	2.0%	2.0%	N/A
2019	1.6%	1.7%	1.9%	N/A
2020	2.7%	1.9%	2.0%	N/A
2021	2.3%	2.2%	2.0%	N/A
2022	1.2%	2.1%	1.8%	2.1%
2023	1.7%	1.7%	1.9%	1.9%
2024	0.4%	1.1%	1.7%	1.8%

Actual Rate of Return on Assets



Target Allocation and Expected Rate of Return
July 1, 2024

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return*	Weighting
Guaranteed Deposit Account	100.00%	1.08%	1.08%
Short Term Fixed Income	0.00%	2.98%	0.00%
Core Fixed Income	0.00%	3.28%	0.00%
Global Fixed Income	0.00%	3.18%	0.00%
Domestic Large Cap Equity	0.00%	4.08%	0.00%
Domestic Small Cap Equity	0.00%	3.58%	0.00%
International Equity	0.00%	5.78%	0.00%
Emerging Markets Equity	0.00%	7.68%	0.00%
Broad Real Assets	0.00%	5.08%	0.00%
	100.00%		1.08%
Long-Term Inflation Expectation			2.40%
Long-Term Expected Nominal Return			3.48%

**Long-Term Real Returns are provided by Fiducient Advisors. The returns are geometric means.*

The long-term expected rate of return on pension plan investments was determined using a building block method in which best-estimate ranges of expected future real rates of return are developed. Best estimates of the real rates of return for each major asset class are included in the pension plan's target asset allocation.

The information above is based on geometric means and does not reflect additional returns through investment selection, asset allocation and rebalancing. An expected rate of return of 3.50% was used.

Amortization of Unfunded Liability

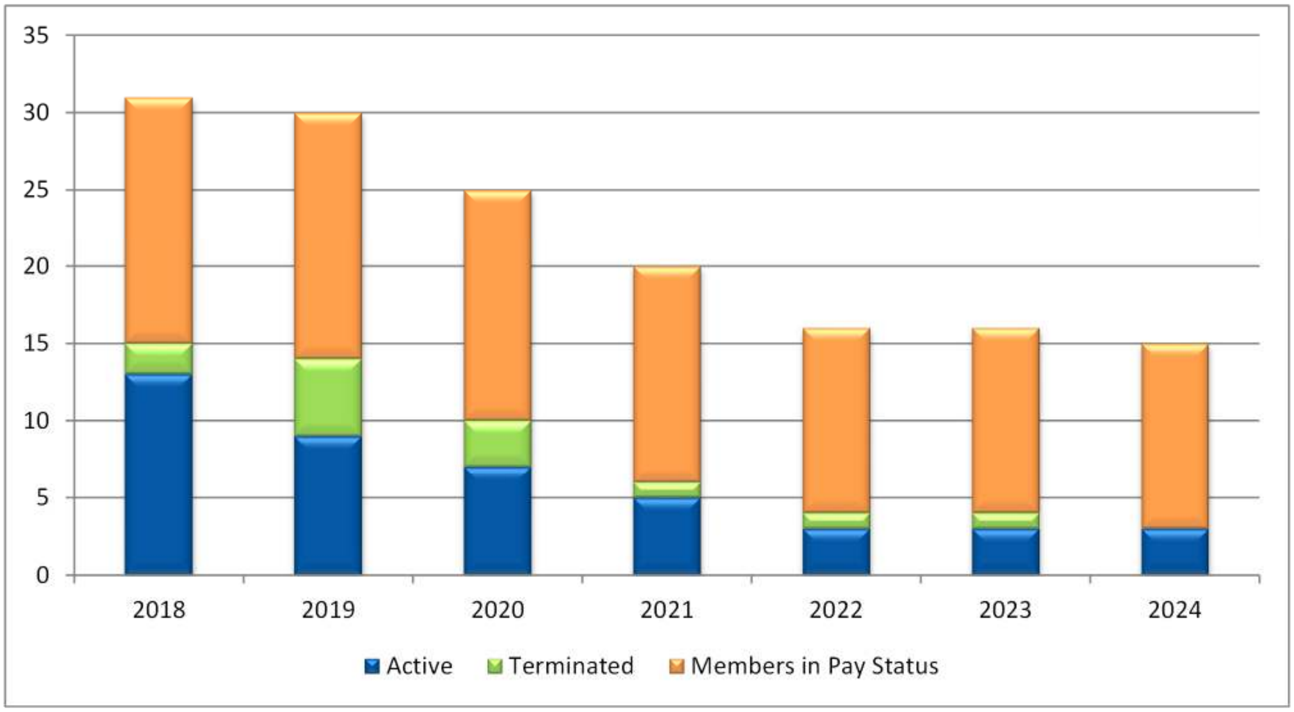
Schedule of Amortization Bases				
	Date established	**Amortization installment**	**Years remaining**	**Present value of remaining installments as of July 1, 2024**
2024 base	July 1, 2024	221,410	2	435,333

Member Data

The data reported by the Plan Sponsor for this valuation includes 3 active employees who met the Plan's minimum age and service requirements as of July 1, 2024.

Member Data				
	Active	Terminated vested	Members in pay status	Total
Total members July 1, 2023	3	1	12	16
Adjustments	0	0	0	0
Retirements	0	0	0	0
Disabilities	0	N/A	0	0
Terminations				
Vested	0	0	N/A	0
Lump Sum payments	0	-1	N/A	-1
Deaths				
With death benefit	0	0	0	0
Without death benefit	0	0	0	0
Transfers	0	0	N/A	0
Rehires	0	0	N/A	0
New beneficiaries	N/A	N/A	0	0
New entrants	0	N/A	N/A	0
Total members July 1, 2024	3	0	12	15

Member Counts by Status



Member Data			
	Active	**Terminated vested**	**Members in pay status**
Average age			
July 1, 2023	57.3	70.4	87.4
July 1, 2024	58.3	N/A	88.4
Average service			
July 1, 2023	30.7	N/A	N/A
July 1, 2024	31.7	N/A	N/A
Covered employee payroll			
July 1, 2023	$355,868	N/A	N/A
July 1, 2024	362,057	N/A	N/A
Total annual benefits			
July 1, 2023	N/A	$3,200	$155,075
July 1, 2024	N/A	N/A	155,075

Description of Actuarial Methods

Asset Valuation Method

Plan Assets equal the Market Value of assets.

Actuarial Cost Method

Description of Current Actuarial Cost Method: Entry Age Normal (level percentage of salary)

Normal Cost: Under this method, the total normal cost is the sum of amounts necessary to fund each active member's normal retirement benefit if paid annually from entry age to assumed retirement age. Entry age is the age at which the employee would have been first eligible for the plan, if it had always been in effect. The normal cost for each participant is expected to remain a level percentage of the employee's salary. The normal cost for the plan is the difference between the total normal cost for the year and the anticipated member contributions for that year.

Past Service Liability: The present value of future benefits that relates to service before the valuation date is the total past service liability. The unfunded past service liability is the difference between the total past service liability and any assets (including accumulated member contributions). This amount is amortized over 2 years.

Experience Gains and Losses: All experience gains and losses (the financial effect of the difference between the actual experience during the prior period and the result expected by the actuarial assumptions for that prior period) appear directly in the past service liability and are amortized at the same rate the plan is amortizing the remaining unfunded past service liability.

Description of Actuarial Assumptions

Changes in Actuarial Assumptions

The valuation reflects changes in the actuarial assumptions listed below. (The assumptions used before and after these changes are more fully described in the next section.)

- Investment rate of return
- Retirement

The assumptions indicated were changed to represent the Enrolled Actuary's current best estimate of anticipated experience of the plan.

Investment rate of return (net of investment-related and administrative expenses)

3.50% pre-retirement and 4.45% post-retirement.

(Prior: 3.50% pre-retirement and 3.86% post-retirement.)

Rate of compensation increase (including inflation)

3.25% per year for Police and 2.75% for all others.

The plan does not have statistically credible data on which to form a rate of compensation increase assumption. The assumption is based on input from the plan sponsor regarding future expectations, as well as knowledge that police generally earn higher annual percentage increases than all other employees.

Inflation

2.40%.

This assumption is consistent with the Social Security Administration's current best estimate of the ultimate long-term (75-year horizon) annual percentage increase in CPI, as published in the 2024 OASDI Trustees Report.

Mortality

Pub-2010 Public Retirement Plans Amount-Weighted Mortality Tables (with separate tables for General Employees, Public Safety and Teachers), projected to the valuation date with Scale MP-2021.

Post-retirement: IRS 2024 Applicable Mortality Table for 417(e) dynamic.

(Prior: IRS 2023 Applicable Mortality Table for 417(e) dynamic.)

The assumption was changed to better reflect actual experience. The change in assumption decreased liabilities by about 1%.

Mortality Improvement

Projected to date of decrement using Scale MP-2021 (generational).

We have selected this mortality assumption because it is based on a recently published public retirement mortality study released by the Society of Actuaries.

Retirement age

Current Police: In addition to the below table, no earlier than valuation date plus one year.

Prior Police: Only the below table.

Years of Service	Rate
25	10%
26	10%
27	10%
28	10%
29	10%
30+	100%

All others: 100% at age 65.

The actuarial assumption in regards to rates of retirement shown above are based on standard tables modified for certain plan features such as eligibility for full and early retirement where applicable and input from the plan sponsor. The plan does not have sufficiently credible data on which to perform an experience study, however we reviewed the available experience and reflected it in the assumptions.

The assumption was changed to better reflect anticipated experience. The change in assumption decreased liabilities by about 2%.

Termination prior to retirement

None.

Disability

None.

Form of payment

100% of actives are assumed to elect a lump sum and 0% a life annuity. For terminated vested employees, 100% are assumed to elect a lump sum and 0% a life annuity.

This assumption is based on a review of actual experience during recent years.

Administrative expenses

None. (It is assumed expenses will be paid directly by the Town.)

Cost of living increases

None.

Percent of active employees married

85%.

Spouse’s age

Husbands are assumed to be 3 years older than wives.

Summary of Plan Provisions

This exhibit summarizes the major provisions of the Plan. It is not intended to be, nor should it be interpreted as a complete statement of all plan provisions. To the extent that this summary does not accurately reflect the plan provisions, then the results of this valuation may not be accurate.

Plan identification

Single-employer pension plan.

Effective Date

Original: October 1, 1961

Latest restatement: July 1, 2000

Plan year

July 1st to June 30th

Eligibility

Police officers who are members of AFSCME Local 1318, Council 15 and were hired prior to July 1, 2000, were eligible to participate on the first day of the month coincident with or next following date of hire providing the employee is under age 50 when hired. For all other employees, membership is limited to employees who were participants on March 18, 1987. Employees who have elected to self-direct the investment of their plan contributions are not eligible for this plan.

Benefit Service

All years and completed months of service rounded to the nearest 1/12th.

Credited Service (for benefit accrual)

All years of service where participant made contributions plus any years service may have been bought back (if applicable). No period of service is counted toward credited service for any periods where employee contributions were refunded. Credited Service is rounded to the nearest 1/12th.

Earnings

Basic compensation by the town excluding overtime, commissions, bonuses, and additional compensation as of January 1st.

Final Earnings

Highest average rate of Earnings on January 1st of any five (effective July 1, 1992, three for Police) consecutive calendar years during the last ten years before Normal Retirement.

Normal Retirement

Eligibility:

Police: First day of the month coincident or next following age 55 or completes 25 years of service (may elect to continue to work until completion of 30 years of service or age 65, whichever is earlier).
All Others: The first day of the month coincident or next following age 65.

Benefit: (A) times (B) minus (C) where:

(A) 2.0% (2.125% for Police) times Final Earnings times years of Benefit Service [max 25 years (30 for Police)] at Normal Retirement.

(B) Ratio of Credited Service to Benefit Service at Normal Retirement.

(C) Non-self-directed DC account balance (Employee plus Employer Match accounts only).

Termination benefit

Return of employee contributions with interest (if less than 10 years of service at termination). If at least 10 years of service, benefit is equal to Normal Retirement Benefit with accrued service and earnings to date of termination.

Normal Form of Benefit

Modified Cash Refund

Optional Forms

100%, 66 2/3%, and 50% joint and survivor annuity, life annuity guaranteed for the first ten years, or lump sum.

Actuarial Equivalence for optional forms

Interest: 6%.

Mortality: 71 GAM Male, set back 2 years.

Early Retirement

Age 55 (age 45 for Police) and 10 years of Credited Service.

Benefit: Actuarially reduced normal retirement benefit to reflect early retirement.

Late Retirement

Actuarially increased normal retirement benefit to reflect late retirement.

Death Benefit

The refund of employee contributions plus interest, reduced by any annuity payments made (if applicable) provided 10 year certain and life option not elected.

Disability

Eligibility: Police – permanently disabled in the line of duty and not eligible for retirement

All others – approved by the Town and not eligible for retirement.

Benefit: 60% of Rate of Earnings as of date of disability reduced by worker's compensation and any other disability benefits received. This benefit is payable until Normal retirement date or until ceases to be disabled.

Employee Contributions

Police: 6% of earnings (4% prior to 07/01/1992).

All Others: 5% of earnings (4% prior to 07/01/2004).

Beginning July 1, 2000 for Police and April 1, 1988 for all others, contributions are made to the Employee Match Account under the non-self-directed DC account.

Credited Interest

After July, 1, 2000, interest is credited based on the earnings/losses credited under the total non-self-directed DC plan.

Vesting

100% after 5 years of credited service.